

# Experiencing VET in Europe

## Insights Into the Learning Experiences of 17 and 18 Year Old VET Students in 7 EU Countries

*Result from an International Survey*

**Editors:**

Samo Pavlin and Julian Stanley

**Coordinator:**

Vasja Vehovar

**Authors:**

Genoveva Brandstetter, Barbara N. Brečko, Marek Fuchs, Božidar Grigić, Günter Hefler, Tereza Karpathiotaki, Simon Laub, Lea Lebar, Virginija Limanauskiene, Jörg Markowitsch, Andrew McCoshan, Samo Pavlin, Nikolaos Sakkas, Vjaceslavs Sitikovs, Julian Stanley, Silvia Zimmer

Experiencing VET in Europe – Insights into the Learning Experiences of 17- and 18-Year-Old VET Students in 7 EU Countries (Results of an International Survey)

Editors: Samo Pavlin and Julian Stanley

Coordinator: Vasja Vehovar

Authors: Genoveva Brandstetter, Barbara N. Brečko, Marek Fuchs, Božidar Grigić, Günter Hefler, Tereza Karpathiotaki, Simon Laub, Lea Lebar, Virginija Limanauskiene, Jörg Markowitsch, Andrew McCoshan, Samo Pavlin, Nikolaos Sakkas, Vjaceslavs Sitikovs, Julian Stanley and Silvia Zimmer

Publisher:

Copyright©FDV, 2012.

Photocopying and reproduction in parts and in whole is prohibited. All rights reserved.

Language editing by: Murray Bales

Technical editing: Tine Jerman, Peter Cimprič, Aida Handanović

Cover design: Peter Cimprič

Cover photo: Božidar Grigić

This project has been funded with support from the European Commission. This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

# TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>3</b>
<b>LIST OF TABLES</b> .....	<b>8</b>
<b>LIST OF CHARTS</b> .....	<b>12</b>
<b>1 INTRODUCTION</b> .....	<b>17</b>
1.1 Background.....	17
1.2 Theoretical and Conceptual Framework.....	19
1.3 Purpose and goals of the study .....	26
1.4 Structure of the report.....	27
<b>2 POLICY CONTEXT</b> .....	<b>29</b>
2.1 Introduction .....	29
2.2 Evolution of EU policy.....	29
2.2.1 An overview of the last 10 years.....	29
2.2.2 EU VET policy goals .....	<b>Error! Bookmark not defined.</b>
2.3 Policy goals and measures within the 7 EU VET countries.....	<b>Error! Bookmark not defined.</b>
2.3.1 An overview of the 7 EU VET countries .....	<b>Error! Bookmark not defined.</b>
2.3.2 Austria.....	<b>Error! Bookmark not defined.</b>
2.3.3 United Kingdom (England).....	<b>Error! Bookmark not defined.</b>
2.3.4 Germany .....	<b>Error! Bookmark not defined.</b>
2.3.5 Greece .....	<b>Error! Bookmark not defined.</b>
2.3.6 Latvia .....	<b>Error! Bookmark not defined.</b>
2.3.7 Lithuania .....	<b>Error! Bookmark not defined.</b>
2.3.8 Slovenia .....	<b>Error! Bookmark not defined.</b>
2.4 Policy Context Conclusions .....	<b>Error! Bookmark not defined.</b>
2.4.1 Quality and attractiveness .....	<b>Error! Bookmark not defined.</b>
2.4.2 Labour market relevance .....	<b>Error! Bookmark not defined.</b>
2.4.3 Pathways and progression .....	<b>Error! Bookmark not defined.</b>
2.4.4 Internationalisation.....	<b>Error! Bookmark not defined.</b>
2.4.5 Disadvantage and equality .....	<b>Error! Bookmark not defined.</b>
2.4.6 Applying the policy context .....	<b>Error! Bookmark not defined.</b>
<b>3 METHODOLOGY OF THE LARGE-SCALE SURVEY</b> .....	<b>47</b>
3.1 Approach of the study.....	47
3.2 Target Population and Sample Design.....	48
3.2.1 Target population.....	48
3.2.2 Sample design .....	49
3.2.3 Sampling framework.....	49

3.2.4	Exclusion rules.....	49
3.2.5	Measure of size .....	50
3.2.6	Sample size estimation.....	50
3.2.7	Sampling of classes.....	52
3.2.8	Replacement schools .....	52
3.3	Survey Mode and Instrument Development.....	52
3.3.1	Mode of data collection.....	52
3.3.2	Questionnaire design, translation and pretesting .....	54
3.4	Data collection and the field phase.....	55
3.4.1	Data collection .....	56
3.4.2	Monitoring, progress reports and quality control back-checks .....	56
3.4.3	Data Entry and Quality Assurance .....	57
3.4.4	Participation rates and sampling weights .....	57
3.5	Response Rate .....	58
3.5.1	Weighting.....	59
3.5.2	Design Effects.....	60
3.5.3	Effective sample size.....	62
3.6	Harmonisation.....	62
3.7	Methodology Conclusions .....	67
<b>4</b>	<b>UNDERSTANDING NATIONAL VET SYSTEMS.....</b>	<b>69</b>
4.1	Introduction .....	69
4.2	Lithuania .....	70
4.2.1	General Educational System Characteristics .....	70
4.2.2	Fundamental principles and legislative framework.....	71
4.2.3	Socio-demographic Characteristics and Transition to IVET – Comparative Aspects of VET Structures .....	72
4.2.4	Vocational Curricula in Lithuania. Teaching Learning and Success in School .....	80
4.2.5	Career Guidance and the Progression of IVET Graduates .....	93
4.2.6	Conclusion .....	101
4.3	Latvia .....	104
4.3.1	General Education System Characteristics .....	104
4.3.2	Fundamental principles and legislative framework.....	105
4.3.3	Socio-demographic Characteristics of VET learners and the Transition to IVET.....	106
4.3.4	Vocational Curricula, Teaching Learning and School Success.....	111
4.3.5	Career Guidance and the Progression of IVET Graduates .....	120
4.3.6	Conclusion .....	133
4.4	Germany.....	134

4.4.1	General Education System Characteristics .....	134
4.4.2	Fundamental principles and legislative framework.....	136
4.4.3	Socio-demographic Characteristics and the Transition to IVET – Comparative Aspects of VET Structures .....	137
4.4.4	Vocational Curricula, Teaching Learning and School Success – Results from the Large-Scale Survey 142	
4.4.5	Career Guidance and the Future Career Aspects of IVET Graduates .....	150
4.4.6	Conclusion .....	153
4.5	United Kingdom .....	154
4.5.1	General Education System Characteristics .....	154
4.5.2	Fundamental principles and legislative framework.....	155
4.5.3	Socio-demographic Characteristics and the Transition to IVET – Comparative Aspects of VET Structures .....	159
4.5.4	Vocational Curricula, Teaching Learning and Success in School .....	165
4.5.5	Career Guidance and Progression of IVET Graduates .....	176
4.5.6	Conclusion .....	180
4.6	Slovenia .....	183
4.6.1	General Education System Characteristics .....	183
4.6.2	Fundamental characteristics of VET System .....	184
4.6.3	Socio-demographic Characteristics and Transition to VET .....	186
4.6.4	Vocational Curricula in Slovenia .....	191
4.6.5	Career Guidance and the Progression of IVET Graduates .....	204
4.6.6	Conclusion .....	211
4.7	Austria.....	212
4.7.1	General Education System Characteristics .....	212
4.7.2	Fundamental principles and legislative framework.....	214
4.7.3	Socio-demographic Characteristics and the Transition to IVET – Comparative Aspects of VET Structures .....	216
4.7.4	Excursion – Horizontal Stratification in IVET: The Case of Austria.....	223
4.7.5	Pathways into IVET, vocational curricular and students’ assessments of their programmes	229
4.7.6	Vocational Curricula in Austria .....	238
4.7.7	Careers and Progression of IVET Graduates .....	249
4.7.8	Conclusion .....	255
4.8	Greece .....	258
4.8.1	General Education System Characteristics .....	258
4.8.2	Fundamental principles and objectives .....	260
4.8.3	Socio-demographic Characteristics and Transition to IVET – Comparative Aspects of VET Structures .....	262

4.8.4	Vocational Curricula, Teaching Learning and School Success – Results from the Large-Scale Survey	265
4.8.5	Career Guidance and Progression of IVET Graduates .....	277
4.8.6	Conclusion .....	285
<b>5</b>	<b>DIFFERENCES AND SIMILARITIES OF VET SYSTEMS IN 7 EU COUNTRIES.....</b>	<b>287</b>
5.1	Sociodemographic Characteristics in 7EU VET Countries.....	287
5.1.1	Starting points for considering similarities and differences of VET systems are related to multiple aspects such as are adult involvement in lifelong learning, ration of graduates between VET graduates and graduates of general education.....	<b>Error! Bookmark not defined.</b>
5.1.2	Place of living and country of origin .....	295
5.1.3	Gender and programme sector orientation.....	295
5.1.4	Parents education and socio-economic status .....	298
5.1.5	Conclusions and starting points.....	301
5.2	Transition from Earlier Education to Vocational Education and Training .....	302
5.2.1	Perceived Status of Vocational Education and Training in the 27EU Countries .....	302
5.2.2	Which factors affected the decision making of learners with respect to VET programmes?	305
5.2.3	How learners judge the importance of different information sources in relation to choosing their VET programmes? .....	310
5.2.4	Choosing a VET programme – how wide is the choice, and why? .....	316
5.2.5	Conclusions .....	319
5.3	Learning, Perception and Satisfaction with VET Programmes .....	319
5.3.1	Learning, free time activities and working .....	320
5.3.2	Students perception of VET programmes .....	332
5.3.3	Satisfaction with the programme .....	336
5.3.4	Conclusions .....	341
5.4	School Success and Acquired Competencies.....	342
5.4.1	School Success, and its determinants.....	342
5.4.2	Acquired Competencies.....	345
5.4.3	Relation between school success and other acquired competencies.....	354
5.4.4	Conclusions .....	356
5.5	ICT skills, attitudes and use.....	357
5.5.1	ICT skills .....	357
5.5.2	Presentation of data for individual countries.....	359
5.5.3	The importance of ICT in everyday life.....	363
5.5.4	ICT Use for school work by students and by teachers .....	365
5.5.5	ICT use by teachers.....	368
5.6	Future Career Aspirations and Further Education.....	369
5.6.1	The Context .....	369

5.6.2	What drives VET students towards their professional career?.....	378
5.6.3	Which employment sectors do learners aspire to work in? .....	380
5.6.4	Further education.....	383
5.6.5	Conclusions .....	390
<b>6</b>	<b>CONCLUSIONS AND IMPLICATIONS FOR THE DEVELOPMENT OF vet POLICIES .....</b>	<b>392</b>
6.1	General Conclusions .....	392
6.2	Interpretation of survey findings in a policy context.....	401
6.3	Methodological Reflections and Conclusions.....	405
	<b>REFERENCES .....</b>	<b>406</b>

## LIST OF TABLES

Table 3.1: Estimation of the gross sample size for each participating country (without England) .....	51
Table 3.2: Number of classes sampled in countries conducting as a census on the school level.....	51
Table 3.3: Survey mode .....	53
Table 3.4: Survey collection period .....	55
Table 3.5: Partial/Completed questionnaires and break-offs of participating countries .....	57
Table 3.6: Gross samples of participating countries .....	58
Table 3.7: Non-response on the school, class and pupil levels .....	59
Table 3.8: Distribution of the design-weights per country (except England) .....	59
Table 3.9: Distribution of the nonresponse weights per country .....	60
Table 3.10: Design effect for selected variables .....	61
Table 3.11: Mean design effect for 32 variables .....	61
Table 3.12: Effective net sample size.....	62
Table 3.13: Grading in England.....	63
Table 3.14: Nationally specific grading schemes .....	63
Table 3.15: Vocational school types.....	65
Table 3.16: Highest level of education achieved.....	66
Table 3.17: Wealth items.....	67
Table 4.1: Vocational school students by the level of ISCED; academic year 2008-2009 .....	74
Table 4.2: Enrolment statistics of VET Lithuania. As at the start of the academic year.....	74
Table 4.3: Students entering vocational schools by graduated educational establishment and beginning of academic year, Lithuania.....	75
Table 4.4: Students' learning incentives by VET structures & School Success (in percent) .....	88
Table 4.5: Drivers of VET students' professional development by VET structures & gender (in percent)..	96
Table 4.6: Drivers of VET students' professional development by VET structures & School Success (in percent).....	97
Table 4.7: Sectors students would like to work in by VET structures & programme orientation (in percent) .....	98
Table 4.8: Sectors students would like to work in by VET structures and residency (in percent).....	99
Table 4.9: Sectors students would like to work in by VET structures and gender (in percent) .....	100
Table 4.10: Brief summary of the participants' socio-biographic characteristics (in percent) .....	107
Table 4.11: Pupils stating that their parents suggested they enrol in the programme (in percent).....	108
Table 4.12: Pupils mentioning the reputation of the programme and the distance from home (in percent) .....	108
Table 4.13: Pupils mentioning job prospects and previous grades (in percent) .....	109
Table 4.14: Pupils who mentioned related occupation and friends' suggestions (in percent) .....	109
Table 4.15: Information sources identified by pupils as influencing their decision (in percent) .....	110
Table 4.16: Alternation during the decision on the current programme (%) .....	111
Table 4.17: Pupils satisfied by their programme and classes (in percent).....	115
Table 4.18: Pupils considering that teachers are well prepared (in percent) .....	116
Table 4.19: Pupils considering that teachers are helping to learn (in percent) .....	116
Table 4.20: Pupils satisfied by their school's learning materials and facilities (in percent).....	116
Table 4.21: Pupils satisfied by computers and information regarding career (in percent) .....	117
Table 4.22: Influence of gender and grades on study behaviour (in percent).....	118
Table 4.23: Pupils' ratings of the amount of practical training within the programme (in percent) .....	118
Table 4.24: Working and non-working pupils (in percent).....	119
Table 4.25: Pupils working only during the holidays (in percent) .....	120
Table 4.26: Similarity of tasks within and outside the programme (in percent).....	120

Table 4.27: Pupils' professional and life goals (in percent) .....	122
Table 4.28: Pupils' professional and life goals (in percent) – continued .....	122
Table 4.29: Pupils' professional and life goals (in percent) – end .....	122
Table 4.30: Preference for trade and agriculture (in percent) .....	123
Table 4.31: Preference for industry and services (in percent) .....	123
Table 4.32: Other options (in percent) .....	124
Table 4.33: Pupils reporting they are most likely to continue education (in percent) .....	124
Table 4.34: Pupils reporting they will definitely continue education (in percent) .....	125
Table 4.35: Pupils' preferences for different pathways (in percent) .....	126
Table 4.36: Pupils considering exchange programmes and parents expectations (in percent) .....	127
Table 4.37: Pupils considering a good qualification and a high income (in percent) .....	127
Table 4.38: Pupils considering career options and starting full-time work (in percent) .....	127
Table 4.39: Pupils considering professional interest and becoming an expert (in percent) .....	128
Table 4.40: Pupils who participated in an international exchange at vocational or general schools (in percent) .....	129
Table 4.41: Pupils considering that organising an international exchange is too laborious (in percent) ..	129
Table 4.42: Pupils' perceptions of managing occupational tasks independently (in percent) .....	130
Table 4.43: Pupils' perceptions of their ability to quickly familiarise themselves with new tasks related to job occupations (in percent) .....	131
Table 4.44: Pupils' perceptions of the ability to communicate ideas and suggestions to others clearly (in percent) .....	131
Table 4.45: Pupils' perceptions of other skills and abilities (in percent) .....	131
Table 4.46: Pupils who appreciate their programmes (in percent) .....	132
Table 4.47: Pupils not appreciating their programmes (in percent) .....	133
Table 4.48: Factors influencing programme choice by vocational school type & gender (in percent) .....	141
Table 4.49: Mean time spent at school by gender, economic sector & school type .....	143
Table 4.50: Time per week spent studying outside school by school type (in percent) .....	144
Table 4.51: Students spending more than two hours studying outside school by school type & gender (in percent) .....	145
Table 4.52: Students' motivation for studying by school type & gender (in percent) .....	146
Table 4.53: Students' motivation for studying by school type & school success (in percent) .....	147
Table 4.54: Students' satisfaction with their respective programme by school type & school success (in percent) .....	148
Table 4.55: Students' self assessment on the ability to work independently by gender (in percent) .....	149
Table 4.56: Students' perceived quality of preparation for working independently by economic sector (in percent) .....	150
Table 4.57: Participation in full-time education of 16–18 year olds by highest qualification aim and institution type, and work-based learning, England, 1985 onwards .....	160
Table 4.58: Learners' goals in relation to work by institution and gender (in percent) .....	180
Table 4.59: Numbers of enrolled students in programmes on secondary level .....	186
Table 4.60: Permeability from secondary to tertiary education: 2000 and 2007 (in numbers) .....	186
Table 4.61: Students' learning incentives, by VET structures & school success (in percent) .....	199
Table 4.62: Drivers of VET students' professional development, by VET structure & gender (in percent) .....	206
Table 4.63: Drivers of VET students' professional development, by VET structures & school success (in percent) .....	207
Table 4.64: Sectors students would like to work in, by VET structures & programme orientation (in percent) .....	209
Table 4.65: Sectors students would like to work in, by VET structures and gender (in percent) .....	210
Table 4.66: Overview - Assessment of the 10 groups of IVET programmes .....	225

Table 4.67: Overview - Indicators of the vertical and horizontal stratification of the sample included in the Austrian data set.....	228
Table 4.68: Overview - Basic characteristics of VET curricula.....	238
Table 4.69: Factors influencing students' programme choice by VET structures & gender (in percent) ..	264
Table 4.70: Students' learning objectives by VET programme & grade (in percent) .....	272
Table 4.71: Drivers of VET students' professional development by programme type and grade (in percent) .....	281
Table 4.72: Sector students would like to work in by VET structures & programme orientation (in percent) .....	283
Table 4.73: Sectors students would like to work in by VET structures and gender (in percent) .....	284
Table 5.1: Adult participation in lifelong learning (in percent) .....	288
Table 5.2: Percentage of youth education attainment level, by country .....	290
Table 5.3: Percentage of students participating in general and vocational education, by country (in percent).....	292
Table 5.4: Percentage of of the population (aged 18 to 24) with at most lower secondary education without further education or training, by country .....	294
Table 5.5: Settlement of students, by country (in percent).....	295
Table 5.6: Students' place of birth, by country (in percent) .....	295
Table 5.7: Factors influencing students' choice of their vocational pathway (in percent) .....	306
Table 5.8: Factors affecting students' decision making about the programme, by countries (in percent) .....	308
Table 5.9: Percentage of VET students reporting strong relevance of selected information sources in the process of enrolling into the VET programmes, by countries. ....	312
Table 5.10: Effects of selected characteristics on considering alternatives to enrollment into current VET .....	318
Table 5.11: Students spending time learning outside school (C4), by country in hours per week (in percent).....	324
Table 5.12: Students spending time learning outside school (C4), by country and gender in hours per week (in percent).....	325
Table 5.13: Students spending time learning outside school (C4), by country and school success in hours per week (in percent) .....	326
Table 5.14: Students' incentives towards learning, by countries (in percent) .....	327
Table 5.15: Students' incentives towards learning, by countries & gender (in percent) .....	327
Table 5.16: Students' incentives towards learning, by countries & school success (in percent) .....	328
Table 5.17: Students spending time outside education, by countries (in percent).....	329
Table 5.18: Students' perception of school programmes, by countries (in percent) .....	334
Table 5.19: Students' perception of school programmes, by country and school success (in percent) ...	335
Table 5.20: Percentage of VET students who highly assess certain aspects of school, by country and school success .....	336
Table 5.21: Effects of selected characteristics on overall satisfaction with the programme, by 7EU countries .....	339
Table 5.22: Effects of selected characteristics on students' grades, by 7EU countries .....	343
Table 5.23: Percentage of VET students who acquired selected generic competence to a large extent, by country .....	349
Table 5.24: Percentage of VET students who acquired certain competence to a large extent, by country and gender.....	349
Table 5.25: Percentage of VET students who acquired certain competence to a large extent, by country and sector of the programme .....	350
Table 5.26: Effects of selected characteristics on attainment of the competence: »being able to manage occupational tasks independently«, by 7EU countries .....	351

Table 5.27: Effects of selected characteristics on attainment of the competence: »being able to work as a team member«, by 7EU countries .....	353
Table 5.28: Percentage of VET students who acquired certain competence to a large extent, by country and school success .....	354
Table 5.29: Computer skills according to the complexity of programmes by country .....	359
Table 5.30: Internet skills by country (valid percent) .....	360
Table 5.31: Internet knowledge by complexity of programmes (by country) .....	361
Table 5.32: Importance of ICT in everyday life by country (mean) .....	364
Table 5.33: ICT: The ability to use a computer is very important for my future employment (mean) .....	364
Table 5.34: The ability to use a computer is very important for my future employment according to school affiliation and gender (in percent) .....	365
Table 5.35: ICT use by countries (arithmetic means).....	366
Table 5.36: To find, acquire and use information according to school affiliation and background information (in percent).....	366
Table 5.37: To use information for educational purposes using existing material according to school affiliation and background information (in percent) .....	368
Table 5.38: Teachers using computers and other technologies in their lessons by country (in percent) .....	368
Table 5.39: How often do your teachers use computers and other technologies in their lessons? (in percent).....	369
Table 5.40: Drivers of VET students for professional development, by country (in percent) .....	378
Table 5.41: Drivers of VET students for professional development, by country and gender (in percent) .....	380
Table 5.42: Students' preferences towards working in major employment areas, by country (in percent).....	381
Table 5.43: Students' preferences towards working in major employment areas, by country and sector (in percent).....	381
Table 5.44: Students' main drivers for continuing education, by countries (in percent).....	386
Table 5.45: Students' main drivers for continuing education, by countries and gender (in percent) .....	387
Table 5.46: Students' main drivers for continuing education, by countries and school success (in percent) .....	388
Table 5.47: Effects of selected characteristics on students' plans to continue schooling, by 7EU countries .....	389

## LIST OF CHARTS

Chart 1.1: Conceptual model of the report .....	25
Chart 4.1: Further education of pupils who graduated from general upper secondary education (in percent) .....	75
Chart 4.2: Factors influencing students' programme choice by programme type (in percent) .....	77
Chart 4.3: Factors influencing students' programme choice by gender (in percent).....	78
Chart 4.4: Percentage of student also considering other alternative programmes by VET structures & gender.....	79
Chart 4.5: Percentage of student also considering other alternative programmes by VET structures & employment sector .....	80
Chart 4.6: Students spending time in school by VET structures .....	82
Chart 4.7: Hours students spend learning outside school by VET structures (in percent).....	83
Chart 4.8: Hours students spend learning outside school by VET structures & programme orientation (in percent).....	84
Chart 4.9: Hours students spend learning outside school by VET structures & gender (in percent) .....	85
Chart 4.10: Hours students spend learning outside school by VET structures & School Success (in percent).....	86
Chart 4.11: Students' learning incentives for learning by VET structures (in percent).....	87
Chart 4.12: Students doing paid work by VET structures .....	89
Chart 4.13: Students doing paid work by VET structures & programme orientation (in percent) .....	89
Chart 4.14: Satisfaction with the current programme by VET structures & gender (in percent) .....	90
Chart 4.15: Students' overall satisfaction with the programme by VET structures & School Success (in percent).....	91
Chart 4.16: Percentage of VET students who have acquired selected generic competence to a large extent by VET structures .....	92
Chart 4.17: Percentage of VET students who acquired competencies overall to a large extent by VET structures & School Success.....	93
Chart 4.18: Drivers of VET students' professional development by VET structures (in percent) .....	95
Chart 4.19: Sectors students would like to work in by VET structures (in percent) .....	98
Chart 4.20: Percentage of VET students who intend to continue schooling by VET structures .....	101
Chart 4.21: Factors influencing the decision on the current programme (in percent) .....	108
Chart 4.22: Information sources influencing the decision on the current programme (in percent) .....	110
Chart 4.23: Alternation during the decision on the current programme (in percent) .....	111
Chart 4.24: Pupils' views on their programme (in percent) .....	114
Chart 4.25: Pupils' satisfaction with school (in percent).....	115
Chart 4.26: Pupils' study behaviour (in percent) .....	117
Chart 4.27: Paid job that is not part of the programme (in percent) .....	119
Chart 4.28: Pupils' professional and life goals(in percent) .....	121
Chart 4.29: Sector in which pupils would like to work in the future .....	123
Chart 4.30: Pupils' intentions to continue education (in percent) .....	124
Chart 4.31: Pupils' choice of further education (in percent) .....	125
Chart 4.32: Pupils' opinions regarding what further education enables them to do (in percent) .....	126
Chart 4.33: Pupils' participation in an international exchange programme (in percent).....	128
Chart 4.34: Pupils' perceptions that the acquired skills and abilities enable them to.....	130
Chart 4.35: Pupils' perceptions of the development of soft skills by current programme (in percent) .....	132
Chart 4.36: Factors influencing programme choice by vocational school type (in percent).....	140
Chart 4.37: Students' propensity for further education after programme completion by school type (in percent).....	151

Chart 4.38: Students' propensity for further education after programme completion by school type & gender (in percent) .....	152
Chart 4.39: Students' propensity for further education after programme completion by school type & school success (in percentage) .....	153
Chart 4.40: Factors influencing programme choice by programme length (in percent) .....	161
Chart 4.41: The importance of choice factors for students attending different kinds of institutions (in percent).....	163
Chart 4.42: Would you choose the same programme again? By institution type (in percent) .....	164
Chart 4.43: Reflections on current programme in relation to institution type (in percent) .....	165
Chart 4.44: Study behaviour of students by institution type (in percent) .....	167
Chart 4.45: Study outside of school/college by duration of programme (in percent) .....	168
Chart 4.46: Experience of paid employment by duration of programme (in percent) .....	169
Chart 4.47: How do students rate the amount of practical training by type of institution (in percent) .....	170
Chart 4.48: How do students rate the amount of practical training by duration of programme (in percent) .....	171
Chart 4.49: Satisfaction levels by institution type (in percent).....	172
Chart 4.50: Satisfaction in relation to perceived performance by institution (in percent) .....	173
Chart 4.51: Share of VET students who reported high skills in a selected competence by institution – being able to manage occupational tasks independently (in percent) .....	174
Chart 4.52: Perception of the extent to which programme contributes to the development of competencies in relation to perceived grades by institution (in percent) .....	175
Chart 4.53: Perceptions of the value and status of programmes by institution (in percent).....	176
Chart 4.54: Intention to continue education in relation to perceived achievement by institution (in percent) .....	178
Chart 4.55: Which programmes do learners intend to follow in the future? By current institution (in percent) .....	179
Chart 4.56: Factors influencing students' programme choices, by gender (in percent).....	188
Chart 4.57: Factors influencing students' programme choices by VET structures (in percent) .....	189
Chart 4.58: Share of students considering alternative programmes, by VET structures & gender (in percent).....	190
Chart 4.59: Share of students considering alternative programmes, by VET structures & programme-employment sector (in percent) .....	191
Chart 4.60: Students spending time in school, by VET structures in hours .....	193
Chart 4.61: Hours students spend learning outside school, by VET structures (in percent).....	194
Chart 4.62: Hours students spend learning outside school, by VET structures & programme orientation (in percent).....	195
Chart 4.63: Hours students spend learning outside school, by VET structures & gender (in percent) .....	196
Chart 4.64: Hours students spend learning outside school, by VET structures & school success (in percent).....	197
Chart 4.65: Students' learning incentives towards learning, by VET structures (in percent) .....	198
Chart 4.66: Students doing paid work, by VET structures (in percent) .....	200
Chart 4.67: Students doing paid work, by VET structures & programme orientation (in percent) .....	200
Chart 4.68: Satisfaction with the current programme, by VET structures & gender (in percent) .....	201
Chart 4.69: Students' overall satisfaction with the programme, by VET structures & school success (in percent).....	202
Chart 4.70: Share of VET students who acquired a selected generic competence to a large extent, by VET structures (in percent).....	203
Chart 4.71: Share of VET students who acquired competencies to a large extent, by VET structure & school success (in percent) .....	204
Chart 4.72: Drivers of VET students' professional development, by VET structure (in percent) .....	205

Chart 4.73: Sectors students would like to work in, by VET structures (in percent) .....	208
Chart 4.74: Share of VET students who intend to continue schooling, by VET structures (in percent) ....	211
Chart 4.75: Educational tracking and student flows (10- to 16-year-olds) in Austria; 2005/2006 .....	219
Chart 4.76: Development of the main layers of the Austrian System – 15- to 19-year-old students (in percent).....	221
Chart 4.77: Vertical and horizontal dimensions of the VET system .....	226
Chart 4.78: Factors influencing students' programme choices by VET structures (in percent) .....	231
Chart 4.79: Sources of information for students' programme choices for selected programme types – four sources with the largest differences (in percent) .....	232
Chart 4.80: Type of programme attended before entering the current VET programme by type of/field of VET education (all age groups) (in percent).....	233
Chart 4.81: Choices reflected by level of programmes (in percent) .....	234
Chart 4.82: Reported reasons for choosing a programme – 17/18-year-olds only (in percent).....	236
Chart 4.83: Reported reasons for choosing current programme (A4_5) and perception of the current programme (B4_5) – further education – Austrian sub-groups of VET programmes, all age groups (in percent).....	237
Chart 4.84: Reported reasons for choosing the current programme – Austrian sub-groups of VET programmes – all age groups (in percent) .....	238
Chart 4.85: Hours spent per school week on study outside school – Austrian sub-groups of VET programmes (in percent) .....	242
Chart 4.86: Career-related assessment of the current programme – 17/18-year-olds (in percent) .....	243
Chart 4.87: 'Would you choose the same programme again' – 17/18-year-olds (in percent).....	244
Chart 4.88: Intention to leave the current programme – Austrian sub-groups of VET programmes (in percent).....	245
Chart 4.89: Reported reasons for drop-out intentions – All age groups (in percent) .....	246
Chart 4.90: Reasons for drop-out intentions – Austrian sub-groups of VET programmes, All age groups (in percent).....	247
Chart 4.91: Paid work of 17/18-year-old IVET students for groups of programme (in percent).....	249
Chart 4.92: Intention for further education – gender – Austrian sub-groups of VET programmes (in percent).....	251
Chart 4.93: Intention to access higher education – VET students (all ages groups), male & female (in percent).....	253
Chart 4.94: Age 30 –version – anticipated job position (in percent).....	254
Chart 4.95: Relationship between present programmes' typical destinations and expressed 'age 30' visions by group of programmes and gender (in percent).....	255
Chart 4.96: Factors influencing students' programme choice by VET structures (in percent) .....	263
Chart 4.97: Percentage of students also considering alternative programmes by VET structures & gender .....	265
Chart 4.98: Students spending of time in school by VET structures .....	266
Chart 4.99: Hours students spend learning outside school by VET structures (in percent).....	267
Chart 4.100: Hours students spend learning outside school by VET structures & programme orientation (in percent).....	268
Chart 4.101: Hours students spend learning outside school by VET structures & gender (in percent) ....	269
Chart 4.102: Hours students spend learning outside school by VET structures & school success (in percent).....	270
Chart 4.103: Students' learning incentives towards learning by VET structures (in percent) .....	271
Chart 4.104: Students doing paid work by VET structures (in percent) .....	273
Chart 4.105: Students doing paid work by VET structures & programme orientation (in percent) .....	273
Chart 4.106: Satisfaction with the current programme by VET structures & gender (in percent) .....	274

Chart 4.107: Students' overall satisfaction with the programme by VET structures & school success (in percent).....	275
Chart 4.108: Percentage of VET students who acquired selected competencies by type of programme (in percent).....	276
Chart 4.109: Percentage of VET students who believe they have acquired overall competencies by programme and grade (in percent).....	277
Chart 4.110: Drivers of VET students' professional development by programme type (in percent) .....	279
Chart 4.111: Sectors students would like to work in by VET structures (in percent) .....	282
Chart 4.112: Percentage of VET students who intend to continue schooling by VET structures (in percent) .....	285
Chart 5.1: Students' gender distribution, by country( in percent) .....	296
Chart 5.2: Type of programme students are enrolled in, by country (in percent).....	297
Chart 5.3: Percentage of gender distribution between industry and service, by country .....	298
Chart 5.4: Parents' level of schooling, by country (in percent).....	299
Chart 5.5: The level of family's income, by country (in percent) .....	300
Chart 5.6: Parents' Employment Status, by country (in percent) .....	301
Chart 5.7: Perception of the image of vocational education and training (in percent) .....	303
Chart 5.8: Percentage of students who agree that VET positively contributes to the economy of their country .....	304
Chart 5.9: Importance of ' The programme offered good job prospects' , by country and socioeconomic status (in percent) .....	309
Chart 5.10: Importance of 'The programme provides good foundation for further education, by socioeconomic status and country (in percent) .....	310
Chart 5.11: Students' opinion about the statement that young people in their country receive enough advice concerning their learning and career opportunities from schools and employment services (in percent).....	311
Chart 5.12: Importance of 'Informative days', by country and type of programme (in percent) .....	313
Chart 5.13: Importance of 'friends and classmates', by country and type of programme (in percent) .....	314
Chart 5.14: Importance of 'informative days', by country and programme sector (in percent).....	315
Chart 5.15: Importance of 'online information', by country and programme sector (in percent) .....	316
Chart 5.16: Percentage of VET students considering more than one alternative when selecting programme, by country.....	317
Chart 5.17: Percentage of citizens agreeing with the statement "Vocational educational and training offers high quality learning" .....	321
Chart 5.18: Percentage of citizens agreeing with the statement "Teachers and trainers in vocational education and training are competent" .....	322
Chart 5.19: Students spending time in school, by country in hours per week .....	323
Chart 5.20: Percentage of students conducting paid work, by country .....	331
Chart 5.21: Percentage of citizens agreeing with the statement "Vocational education and training leads to jobs which are well paid" .....	333
Chart 5.22: Percentage of VET students who highly assess satisfaction with the current programme, by country .....	338
Chart 5.23: Percentage of students that would likely choose the same programme again, by country and school success .....	341
Chart 5.24: Percentage of citizens agreeing with the statement: "People in vocational education and training learn skills that are needed by employer" .....	346
Chart 5.25: Percentage of citizens agreeing with the statement: "Vocational education and training does not prepare people to set up their own business" .....	347
Chart 5.26: Percentage of VET students who acquired competences overall to a large extent, by country and students success .....	355

Chart 5.27: Computer skills in individual countries (absolute deviation from average).....	358
Chart 5.28: Internet skills in individual countries (absolute deviation from average) .....	361
Chart 5.29: Individual level of computer skills across EU countries .....	363
Chart 5.30: Transition from formal education to the labour market for medium-level VET graduate by type of VET, 20-34 olds, EU-27+, 2009 (in percent) .....	370
Chart 5.31: Minimum duration of periods without employment after leaving formal education for the last ime for medium-level VET graduate by type of VET and age, EU-27+, 2009 (in percent) .....	370
Chart 5.32: Employed medium-level graduates by orientation and sector of activity, 15-34 year-olds, EU-27+, 2009 (in percent) .....	371
Chart 5.33: Percentage of citizens' belief, whether are people who completed vocational education and	373
Chart 5.34: Percentage of citizens agreeing with statement: "Vocational education and training enables people to continue with university studies afterwards" .....	375
Chart 5.35: Percentage of people agreeing with statement: "Vocational education and training enables people to continue with university studies afterwards" by percentages of people believing VET graduates are more like to find a job compared to graduates of general education .....	377
Chart 5.36: Percentage of VET students who consider to continue schooling, by country.....	383
Chart 5.37: Percentage of VET students who consider to continue schooling, by country and gender ...	384
Chart 5.38: Percentage of VET students who consider to continue schooling, by country and school success.....	385

# 1 INTRODUCTION

## 1.1 Background

Over the last few years, research into the development of vocational education and training (VET) systems in both Europe has addressed two main objectives: *first*, contributing to competitiveness and economic growth by providing specific and generic competencies and, *second*, promoting social inclusiveness. These two objectives are becoming increasingly interrelated.

Empirical evidence regarding the differences and similarities of VET students' career aspirations, school success in relation to acquired competencies and their socio-demographic characteristics is indispensable for adjusting VET curricula to learners and employers. One of the key reasons highlighting the need to strengthen research into VET students' learning processes and careers is the persisting magnitude of profiles in the labour market that gravitate towards VET-related occupational structures. The incentives for this are related to the complementarities between formal qualifications and acquired skills, occupational regulations, employment protection, training focus and the implementation of dual and apprentice systems.

In the context of an economic downturn and the growing flexibilisation of the economy, qualification processes are also influenced by demographic pressures, including migration and the problem of the social inclusiveness of the deprived population which increasingly embraces young people. In this context, European policy developments in the area of VET in Europe<sup>1</sup> address the following four main categories:

*Curricular developments.* Modernisation of the VET system is understood in many countries as programme modularisation and implementation of the learning outcome approach. However, in many cases this is accompanied by the question of whether systems are based on the proper number of programmes. In the event there are too many programmes for too few pupils, on what basis can the programmes be integrated? The question of VET's fusion with general education is particularly sensitive. To some extent, this is also related to the system permeability between VET schools and HE.

*Stakeholders' positioning and functions.* There is a lot of discussion on how VET can raise its status and reputation. This is linked to the question of the falling enrolments in VET institutions. The problem targets all groups of VET stakeholders such as employers, social partners, deprived groups, immigrants and adults, and seeks answers to how the system can better match their needs.

*Implementation of policy tools.* The key EU tools currently on the agenda in the EU are the European qualification framework (EQF), the European credit system for VET (ECVET), the European quality assurance framework for VET (EQAVET), and Europass. They aim to support the quality<sup>2</sup> and attractiveness of VET.

---

<sup>1</sup> As summarised in CEDEFOP 2009 (p. 21), The Helsinki communiqué set four priorities as from 2007:

(a) policy focused on improving the attractiveness and quality of VET; (b) development of common instruments and tools to enhance a European area of VET and a European labour market; (c) strengthening learning from others; and (d) taking all stakeholders on board. Priority 1 refers to policy focused on improving the attractiveness and quality of VET (European Commission, 2006, p. 5), which includes links between VET and working life, better counselling and information in preparation for working life, permeability between VET systems and other structures of education, excellence in skill development.

<sup>2</sup> See, for example, Parsons et al., 2009: 90-94 for an overview of qualification requirements (entry, and post-qualification work experience, continuous professional development).

*Other issues* involve problems and challenges arising in interrelated areas. Examples encompass credentialism and social protection, over-qualification, vertical and horizontal mismatches, along with various problems of employment and employability.

Phenomena related to these issues are already being studied by different employability measures such as educational level attainment, the participation of marginal groups or drop outs. In addition, over the last few years several researchers have been conducting studies on skill anticipation and striving to understand the relations between acquired key competencies and employers' requirements. Yet the sustainability of indicators is difficult since they occur in the context of flexibilisation and the types of constant uncertainties that have emerged. Béduwé et al. (2009: 35-40), for example, present a wide overview that contextualises the current system development of VET. Examples include shorter timeframes for choices and actions in the labour market and education, legislative durability related to employment and training, qualification development and the uncertainty of defining job profiles. These changes imply a need to shift from narrow towards broader qualifications and require accreditations of different forms of learning.

The trend of broadening vocational qualifications is not isolated from other unresolved questions. CEDEFOP (2010a), for example, reports that the system should encourage: a) a *gradualist* approach via an individual time perspective; b) follow the principles of transparency, stability and predictability in a way that supports their signalling power; and c) improve the development of qualification bodies. Areas for the development of indicators would thereby comprehend a social partnership model as the norm for VET policies and decisions (Bouder & Kirsch, 2009: 133-135).

There are several ways to approach the question of how to construct the most important 'reference-comparison' points for surveying the VET system and learners on the EU level. We mention three of them here. *The first approach* encompasses *comparisons from within*. This approach explores the internal characteristics of a broad domain-specific VET cohort in one country. The elements of comparison are the socio-demographic characteristics of VET students and programme types referring to duration and permeability paths and their sectorial orientation. *The second* is a *comparison from above*. Clearly the VET population can be compared with the population in general education, and only in some respects with the population in primary education, the labour market and other post-secondary educational structures.

*The third group* encompasses *country comparisons* from the viewpoint of the variety of VET systems. This issue is particularly sensitive since the VET system relates to both education but also various aspects of the world of work. However, some conceptual frameworks have already been developed. One of them is the CATEWE consortium<sup>3</sup> that explored variations and particularities of different national education systems. Some of the consortium's recommendations on country comparisons are related to (CATEWE General Results, 2011-): (a) economic developments and labour market characteristics where national value systems play an important role; (b) tensions between standardisation and differentiation which includes (inter)national vs. local governance or general vs. vocational orientations; (c) vocationalism in education which is predetermined by historical developments, dynamic relationships and labour market regulations. The extent to which VET related characteristics can be compared across nations varies to a large extent and in relation to other comparative reference points, including several aspects such as (CEDEFOP, 2009) the recognition of personal growth through learning engagement, preparations for further learning or subject areas, confirming occupational competencies and licensing for practice and updating and continuous professional development.

## 1.2 Theoretical and Conceptual Framework

When considering a broad overview of developments in VET, the list of disciplines and theories that can contribute to designing the conceptual and interpretative frame goes far beyond the concerns presented in the earlier section. In addition to methodological theories and approaches, some of the entry points we considered during the 7EU VET project and preparation of this report include: (a) studies on pedagogy that in particular focus on VET teachers and the learning modes of VET students; (b) sociological perspectives studying the overall role of education, labour market dynamics, gender and migration issues; (c) psychological perspectives with studies on individual learning, decision-making processes and motivation that bring particularly important contributions to surveying careers and the determinants of professional success and to the development of the guidance and counselling domain; and (d) in the last year strong interdisciplinary approaches have emerged focusing on competency modelling and work process analyses which is related to establishing the European and national qualification frameworks.

Some of these approaches have referred to the social mobility triangle principle, the so-called Origin, Education and Destination (OED), that is widely accepted by sociologists (e.g. Jackson et al., 2009). It explores causalities among origins, education and professional destinations. The model questions the relative impact of education in comparison to family background and other factors, namely issues widely addressed by several projects and communities (e.g. DECOWE, 2011-), since it addresses one of the basic theoretical questions on how much education really matters, and why (Wolbers and Velden, 2002).

The OECD's Network B, for example, developed a framework for transition systems defined as "the social institutions and processes through which a society provides its members to make the transition from the education system to the employment system" (van der Velden, Wolbers, 2008: 13), focusing on proportions of school-level completion, the level of acquired competencies, the share of school leavers and quality of employment, to mention just a few. Other studies concentrate more on educational processes and school success. The key hypotheses and findings, segmented by countries, sectors or educational institutions are well-established (e.g. Breen et al., 2004). Models study how different influencing factors determine the career success of particular individuals and social groups. In this context, and in relation to VET, Iannelli and Raffe (2007), for example, coined the term "vocational success" with which they consider "the effect on the individual education to work transitions of taking vocational programmes in upper-secondary education".

One of the more elaborated holistic developmental models distinguishes between individual success factors and subjective concepts in terms of individual contexts related to career factors. In this way, it studies how career success is influenced by four main components, namely the *context of origin* which refers to a person's cultural, social, class and educational background as well as their work history, the *context of education* referring chiefly to teaching and learning modes and organisational characteristics, the *context of work experiences* encompassing different issues of work characteristics, and positions and the *context of society and culture* that involves societal and biographical data. The model has been designed in line with the theoretical premises of Mayrhofer *et al.* (2007).

Related to these developments, the report considered various contributions classified by different subject areas. Below we briefly describe only the most generic ones – those that provided a common theoretical understanding for the more than 15 authors of this report who come from different research areas.

### *Socio-demographic characteristics of VET students*

Surveying the socio-demographic characteristics of the VET population in broad terms relates to its gender, age, habits and values. These characteristics are related to so-called *neighbourhood determinants* (Duncan, 1994; Kauppinen, 2008; Gunz & Peiperl, 2007) starting with parents' education, occupation, other employability determinants and income material and residential status, along with household density and tenure. These issues importantly impact behavioural and social aspects of VET students, placing concepts such as "the family stress model", "parental investments" or "environmental toxins" highly up on the research agenda (Brooks-Gunn et al., 2007: 414).

These concepts are on a more general level widely framed by studies of *social stratification* (differentiating social groups by material, occupational and educational status) and *social mobility* (processes that determine social shifts within and among generations) studies and thus offers a great contribution to understanding the social inclusiveness and functions of VET systems and their status. A special focal point in this area relates to *social cohesion and inclusion*.

In relation to the VET process, this area poses several research challenges which we will not be able to address in very much detail. Some of them are discrimination, ethnic and racial stereotypes, religious and cultural differences, ethnic identity formation, assimilation processes and identity development (Graham & Hudley, 2007: 392).

#### *Career Perspectives and Professional Choice*

The term "career" is often defined as a sequence of positions and roles the individual occupies during their lifespan (Super, 1957). Key issues in the domain are (Gunz and Peiperl; 2007: 55-56): (a) the link between personality and career success<sup>4</sup> based on the so-called big 5 model<sup>5</sup>; (b) complementary and supplementary approaches to occupational choice between individuals' own perspectives and the environment, including the decision-making process; (c) career counselling development; and (d) the relationship between subjective and objective career success<sup>6</sup>; and (e) its intersection with social marginalisation. These issues are addressed by four key approaches: a) Holland's (1973) person-environment typology fit approach; b) various economic perspectives; c) developmental career theories; and d) studies on decision-making processes. In this short overview we limit ourselves only to the approaches relevant to our study.

The paradigm of *traits and environment* is conceptualised on the idea of fitting the right candidates to proper vocational paths, and was designed already in the early 20th century by Parson (1907). The author stressed the fact that in order to make a proper vocational choice one needs to: a) have knowledge of one's own self, capabilities and interests, (...); b) requirements and conditions of success in work and education related to a certain vocational domain; and c) there should be an established link between both. At that time this approach was contradictory to Taylor's views (1911) that focused solely on improving workers' efficiency.

Person-environment approaches were further developed by Holland's (1973) career theory on vocational personalities. This theory establishes the link between personal fit and vocational types: realistic, investigative, artistic, social, enterprising and conventional. On this basis (ibid: 81), one can elaborate further theoretical and practical developments, namely, *personal approach* (the person and environment provide what others want) and *supplementary* (resemblances between the individual and the environment), which can be interrelated to different extents.

---

<sup>4</sup> The basic observation on careers distinguishes between objective and subjective career dimensions (Gunz & Peiperl, 2007). Yet it can be argued that the difference between objective and subjective dimensions is in fact methodological: individuals' success can always be viewed as subjective, while objective success has more to do with the issue of aggregation and comparison. Whatever position towards the objectivity of careers one takes, following Mayrhofer et al. (2007) professional success is always relational, referring to person-related aspects of a career, a person's social origin, work and societal and cultural dimensions.

<sup>5</sup> Key concepts are emotional stability, extroversion, openness to experience, agreeableness, and conscientiousness.

<sup>6</sup> For individuals, the meaning of careers and success vary as they progress between life stages and contexts.

Many models address career stages and the links among them. Super (1975), for example, explains how the first exploration stage (birth to adolescence; 0–16) relates to personality formulation, and the development of capacities, interests and attitudes and the broad, second stage (exploratory stage, 15–24) is important for the development of professional interest, early work experiences and hobbies and the third “establishment” stage (25–44) of the implementation of professional expertise and stabilisation<sup>7</sup>. Crocitto & Sullivan's (2007: 283) overview is much broader. It integrates a further four core theories of career development, two theories of moral development and, in addition, the context of the understanding of career development.

While each of these overviews and models introduce distinctive approaches and a number of career development stages, they all agree that the age cohort of 17–18 is still in the exploratory phase. However, there is a large difference between the VET and the general populations. While the population in general education mostly still has time to decide what vocational and career path to follow, the VET population is to some extent determined, at least by a broad professional field, despite the increasingly varied possibilities offered in continuous professional development.

Lastly, it is important to mention that the early stage of vocational identity formation starts already in the family and on this basis continues on the secondary level of vocational education, or post-secondary educational levels. In these stages, students begins with early socialisation and indoctrination into an occupation, which is related to developing vocationally related values, norms and behavioural patterns of a future working environment. These 'vocational' identities are to various extents linked with the future occupational identity. For this reason it is important to be aware that early socialisation into an occupation in the family and school builds the foundation of work motivation, good results and work commitment (Marhuenda, 2001).

#### *Decision-Making Processes and Factors of Occupational Choice*

While the approaches mentioned in the previous section focus on congruency between the person, the environment, and career developmental stages, other approaches stress occupational choice and stages of decision-making processes. The known conception comprehends four phases: orientation, exploration, implementation through to stabilisation (Savickas, 2007: 89). These stages can be observed either within various positions of an individual career or throughout one's whole career. In our case, the context of career decisions will be limited to the studied population and their particularities related to puberty and biological changes, cognitive changes (the development of abstract thinking), changes in social relations, and the gradual transition towards the labour market (Wagner & Wigfield, 2007: 222). In the processes described above the role of parents' inclusion plays a very central role. The time and ways they spend with children impact autonomy, achievement motivation and value creation (Grolnick et al., 2007: 259). Another important factor characterising this developmental stage is peers as they gradually take over the parents' role and represent an important reference point.

These theoretical foundations eventually lead towards identification of the determinants that impact vocational decisions. Approaches to this vary. Thurow (1975), for example, claims that the prevailing logic for the selection of an educational and vocational path gravitates towards economic dimensions: the probability of getting employment and expected earnings in the first place. Other authors (for example Holland, 1973/1999; Miller, 1984; Thomas and Thomas, 2002) stress personal predispositions and interests are a prime motive. Velden and Wolbers (2004) focus on both, and in addition strongly stress past educational and work experiences.

---

<sup>7</sup> Other stages that follow are the 'maintenance' stage (45–64) of adjustments and improving, and the last stage involving retirement and decline.

Another holistic approach to conceptualising the factors of vocational choice has been developed by Grubb (2002). It is, in addition, very much aware of socio-economic trends and accidental events of a certain moment. Author pool of factors includes: the economic component of children, the relative scope of alternatives, personal estimation of the future success of a certain career path, the 'presence' of various events in the decision-making process, and the absence of knowledge which the individual should have been interested in in order to make a proper decision. In addition, the author indicates factors such as the availability of proper information, a network of family and friends, adolescent difficulties in identity formation etc.

Other authors such as for example Gerrits (1985) or Lucas (1997) primarily concentrate on the social environment and reference peers. They both have a crucial impact on the intellectual, social and emotional components of personal development. The aspirations and motives of parents can also be negative as parents often (Pregelj-Arčon, Skrt-Leban, 1998): project their own aspirations on to their children, instil too high ambitions in children or limit children with their own limited knowledge of the employment and work situation. These issues are particularly critical in instances where pupils want to act outside the family tradition.

#### *Theories on motivation*

Motivational theories that explain learners' behaviour are best classified in two broad groups. *Content theories*, that study the typology of individual motives and needs, and *process theories* that focus on external factors reinforcing individual behaviours. Hence, the first group studies the personal motivation system and the second environmental factors.

Maslow's (1982) theory on hierarchical needs assumes that all individual needs can be classified in a hierarchical system of physical needs, needs for security and protection, belonging, self-respect and self-realisation – the last is on the top of the hierarchy. It is important to stress that Maslow never claimed that a person always satisfy their lower needs first and then needs of a higher order, only that higher needs cannot be satisfied when lower ones are not realised to a minimum extent (Kline and Ule, 1996: 163). Aldefefer's three-level hierarchical theory (1969) is similar but reduces the categories to three, namely needs for existence, relatedness, and growth, while McClelland's differentiation is between achievement, affiliation and the need for power.

Comparable to Maslow's and Aldefefer's theories is Herzberg's (1968) two factors theory which states that the behaviour of all individuals abides by the principles of satisfaction and dissatisfaction. Following Herzberg, satisfaction and dissatisfaction represent two distinct paradigms which are mutually independent, hence the opposite of satisfaction is the absence of satisfaction. Satisfaction is dependent on true motivations, labelled intrinsic motivations, while dissatisfaction depends on extrinsic hygienic factors. According to the author, the first group depends on the school and work environment, while the second on the content of work. An important conclusion is therefore that the absence of hygienic factors does not imply a higher motivation (at least not in the longer term), while they can decrease motivation.

Another author in the content theories group is McClelland (1988), with his theory of acquired needs. In contrast to Maslow, Aldefefer and Herzberg, the author claims that, rather than individual factors of motivation, there are distinct types of individuals with inherently embedded motivational systems. The three basic types or affiliations are related to achievements, social ties and power.

One of the best known *process theories* is Vroom's expectancy theory (Vroom, 1995). With this theory the author explains behaviour within organisations. Following Vroom, three key processes that complement each other are expectancy, instrumentality and valence. Valence can be positive, negative or indifferent towards an individual's behaviour or role in general. In this way, an individual follows positive situations

and avoids negative ones. In this, he estimates the possibility of how well a given task can be accomplished. Instrumentality is the relationship between personal expectations of a proper reward and opinions on the fairness of the rewards. Other authors in this theoretical stream include Locke (1991) with the goal theory and feedback process, and Adam (1963) with equity in which the key focus is on reference points (e.g. the school grades of one's peers).

In the report and project we have related these theories to the development of indicators for satisfaction, and in relation to learning.

### *Theories on Learning*

In this report we consider learning from information process and situation perspectives. *Information process learning theories* best describe how learning takes place in the classroom, at home and during assessment processes so, put simply, it explains very well the encoding of external information along with the storage and recall of such information. Encoding relates to the processes of perception and interpretation which are vital for transforming external stimuli into cognitive perceptions. Learning solely based on external stimulation can be explained as the »bottom-up« principle, while learning that is a result of external stimulation and previous knowledge can be explained as the »top-down« principle (Anderson, 1995).

The described topics have a long tradition in cognitive psychology. Among the best known, it is worth mentioning Cyert and March (1963) who concentrated on the »acquiring of information from the environment«, the »distribution of information in the organisation«, the »condensation of outgoing information« and on the different modes of the »transmission of reshaped information from the organisation«. The connection between the abovementioned elements was later studied by several other authors (for instance, Hedberg, 1981; Huber, 1991; Lundberg, 1989 and Nonaka, 1992). Recent psychological approaches (for example, Larson and Cristensen, 1993; Hinsz and others, 1997) have continued this tradition. They focus on studying the optimising of the systems of decoding, memorising, recalling and utilisation of information in various learning situations.

Information process learning is a successful approach in simple contexts where the change of learned behaviour is obvious and consistent. However, in everyday life people often find themselves in situations with no obvious connection between cause and effect or where the reason is unknown. Learning in such contexts is more effectively explained by situation learning theories. In the case of this kind of learning, the key question is how people establish causal connections in new situations via experiences and general rules.

*The situation learning theories* are based on learning via observation (Bandura, 1969), unlike classical and instrumental conditioning. If the individual recognises that a certain way of behaving is rewarded, he will most likely imitate that behaviour. The level at which this phenomenon unravels can be individual or in a group of people. However, the crucial factor is experience that is often gained in a spontaneous way.

Such an experience exchange often happens in various situations: between the master and the apprentice, between parents and their children, among adolescent peers (classmates), soldiers in the army etc. That is why learning is often connected to the problem of »forgetting« (Friedrich and Mandl, 1992) which is most obvious when the individual tries to replace the knowledge he has gained over a longer time in the past.

The basic communication of this theoretical paradigm says that situation learning most often happens in a non-formal way, possibly as an integrated part of some other activity (Kolb, 1976, 1984; Revans 1980). In this sense, Wenger (1999) and Grosjean (2003) draw attention to the difference between »knowing the practice« and »knowledge about the practice«. Within this spirit, Maier and others (2003: 24-25) state that

learning is not always intentional, individuals imitate the behaviour of those like them, preliminary knowledge is always important (either as an accelerator or inhibitor of learning), learning is formed on the basis of causal connections, and learning is a motivated form of behaviour.

The concept of so-called knowledge management models (Pavlin, 2007) that link both approaches – information process learning and social learning – hold important implications for our research: they state that the development of occupational competencies is a simultaneous result of information process learning and situation learning. Gherardi and Nikolini (2003) claim that situation learning is distinctively connected to the process of participation in the way an individual becomes a member of the environment. Contrary to the concept of participation, the complementary concept of reflection separates the subject of knowledge and the object of this knowledge: the individual is aware of his knowledge which means he is closer to information process learning. It is only the combination of both learning methods that represents what can be called occupational or professional knowledge.

We can thus conclude that the quality of learning and working depends greatly on suitable learning combinations. Even though the models overlap each other to some extent, each brings a somewhat different stress on the contents.

### *Competencies and School Success*

Studying the determinants of competencies and school knowledge and success represents a focal point of this study. In this way we define *competencies* as the generators of potential for an individual's performance, personal characteristics (traits) as physical characteristics and methods of an individual's response to a situation, self-concept in the sense of habits, values and knowledge in the sense of information that someone has in specific areas (Spencer and Spencer, 1993: 9-10). This definition mostly describes individually acquired competencies, while employers' expectations are labelled required competences<sup>8</sup>. Since the modernisation processes in education in line with the lifelong learning policy principles, competencies have been introduced into education processes.

For individuals, the meaning of *professional success* moves along their career and life stages (Hall, 2002 cf. Demeter, 2010) and encompasses a sharp distinction when it shifts from education to the world of work. However, in both contexts the basic observation of careers distinguishes between objective and subjective career dimensions (Gunz & Peiperl, 2007). Following Mayrhofer et al. (2007), professional success is always relational, referring to person-related aspects of a career, the individual's social origin, work and societal and cultural dimensions (Pavlin, 2011). However, there is a clear distinction between success attained at school and success in the labour market. Several authors believe that the theoretical background gained in formal education only has a minor connection with the real work situation (e.g. Svensson, 1990: 52-56). This report focuses in particular on differences and similarities between school grades and perceived acquired competencies during the education process.

We should stress that on the most general level our survey seeks to explore what determines school success in relation to acquired competencies. On the conceptual level, it tries to understand how school success, acquired competencies (vocational expertise, foreign languages, ICT and some generic competencies) and school satisfaction are interrelated.

### *Conceptual Model*

School and career success are generally attracting growing attention in VET research because they impact on individuals' social and employability capacities. Accordingly, evidence about this is vital for design-

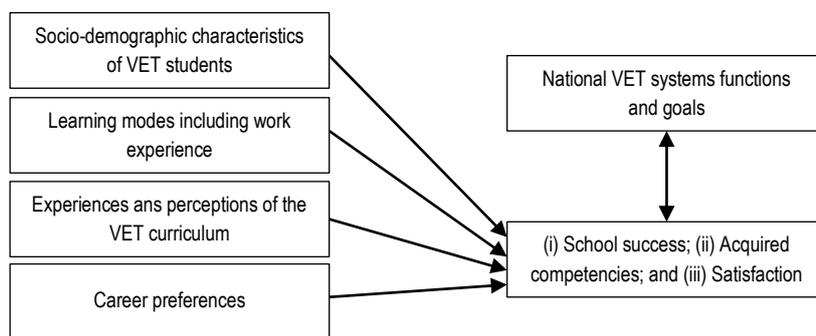
---

<sup>8</sup> The definition of required competences is therefore closer to the definition of Kanfer and Ackerman (2005: 336), which labels work competence as organisationally valued tasks and performance. We should underline the fact that there is always a bias between acquired and required competencies when comparing individual occupational employees with selected job settings, and also when comparing employers' needs with educational programmes.

ing VET curricula in terms of their labour market orientations, congruency with industrial sectors, and further education and occupational segments. In addition, the concept of school and career success fits well into the policy development debate which seeks to improve skill development, social inclusiveness, to change access to different educational structures and the labour market, to raise the general status of VET and recognition of prior learning as a competitive system to VET and to orient more towards student-centred teaching principles.

It was on these bases that the research consortium accepted the model (see chart 1.1) which explores how the four main dimensions, namely: a) socio-demographic characteristics; b) learning modes including work experience; c) experiences and perceptions of the VET curriculum; and d) career preferences impact the three (*questionably*) interrelated components of school success, acquired competencies and satisfaction.

Chart 1.1: Conceptual model of the report



In line with the model, in the report we further develop research questions by looking at varieties and complementarities between the VET subsystem levels considering country-based similarities or differences. However, this attempt is subject to several limitations that needed to be considered when comparing the results on cross-country bases. Some of the most important examples are related to differences in (Stanley, 2012):

- *high and low vocational countries*: Germany, Austria and Slovenia, for example, have high proportions of cohorts taking vocational programmes at the ISCED 3 level, while proportions are low in other countries;
- *tracking*: tracking starts early in Austria and Germany – at age 10. (In Lithuania and Latvia there are vocational lower secondary programmes);
- *apprenticeships*: the dual system programmes in Germany, Austria and training provider programmes in the UK have a highly work-based component, while in other countries they are much more school-based;
- *types of programme*, which is related to the difference between duration, degree of specialisation or VET providers;
- the role of transitional programmes for young people who cannot progress directly into ISCED 3 vocational programmes;
- *diversity and accessibility of vocational institutions and diversity of vocational programmes*; and
- *permeability between VET and higher education*.

In the next section we operationalise the key objectives.

## 1.3 Purpose and goals of the study

The initial scientific and research goals of this report were related to questions regarding: (a) perceptions of young people about VET systems and how they see their future possibilities relating to employment, career building and mobility; (b) the efficacy and successfulness of systems in advising and informing; and (c) similarities and differences across countries in the way they should react to the emerging social challenges. Due to recent economic and policy priorities in the EU, ICT tools warranted special attention.

The study's overarching purpose, as developed in the course of the project, is to explore in a country-comparative fashion the determinants of VET students' school success relative to their acquired competencies, the fulfilment of their career aspirations and vocational satisfaction during learning process. In this way, the report generates a knowledge platform about the comparability, flexibility and development of VET systems across seven EU countries, and follows recent policy and educational challenges such as, for example, the learning outcomes approach.

The project entitled "Detailed Methodological Approach to Understanding Vocational Education and Training", which represents the formal basis of this report, stresses the fact that all findings and recommendations are based on very well elaborated empirical steps, in particular the development of the research instrument and implementation of the large-scale survey in seven EU countries<sup>9</sup> (see Chapter 3 for more details), which are supported by a secondary sources review (legislation, organisation of VET programmes, employment possibilities and permeability with higher education), focus groups, workshops and interviews among VET students, teachers, headmasters and policy makers. Hence, the project uses an innovative methodological approach to answer research questions using both quantitative and qualitative research. This allows an analysis of contextual factors as well as a deeper understanding of the different national contexts of the various education systems. In line with these premises, the following key research goals have been identified, relative to particular research areas, exploring country differences and similarities:

### *The Transition from Previous Education to VET*

- Which are the main drivers of enrolment in VET? How much in fact is the decision to select a particular VET programme predetermined, and in particular what is the impact of socio-demographic characteristics? Do students strive for material rewards or do they respond to intrinsic motives of professionalism?
- What is the relative freedom of VET students in selecting further education in relation to school success, family determination and personal characteristics?
- What is the role of career guidance services and other formal channels in supporting VET students' career choices?

### *Learning, Perception of the VET Curriculum and Satisfaction*

- Which are VET students' motives and aptitudes for school learning, and how do they acquire knowledge after school?
- How much time do they learn at school and afterwards? How do VET learners spend their free time?
- How do VET students perceive teaching modes and the work of teachers and trainers? Which are the differences between learning in the classroom and in training environments?
- How do they perceive school facilities and learning materials?
- How does international mobility impact on learning and satisfaction with programmes?

---

<sup>9</sup> 7 EU countries: Austria, Germany, Greece, Latvia, Lithuania, Slovenia and the UK

- How are learning and teaching modes related to overall satisfaction and motivation with VET curricula?
- Do VET learners start working for money already during their secondary education?
- How central is the role of ICT in VET programmes?

#### *School Success and Acquired Competencies*

- Which teaching and learning modes impact VET students' school success in relation to acquired competencies?
- How well do VET students acquire generic competencies, and to what extent do curricula contribute to their development?
- How are school success and acquired competencies interrelated?

#### *Future Career and Further Education*

- Which are VET students' career aspirations? How are they related to types of programmes and their sectoral orientation?
- In which sectors would they like to work? How are these aspirations related to the sectoral orientation of their VET programmes?
- How do VET students see their employability prospects and how do they perceive further education permeability paths?
- How many of them experience international exchange programmes, and what are their experiences?

#### *General Issues*

The report explores how gender, parents' education and other socio-demographic characteristics characterise VET systems and their programmes. On the most general level, it explores what determines school success in relation to acquired competencies, and school satisfaction. In particular, it looks for varieties and complementarities between subsystem levels and similarities and differences across countries. This issue is explored on the levels of VET students, schools, national subsystems, and internationally.

## **1.4 Structure of the report**

This report comprises six main chapters. In **Chapter 2** we first provide an overview of the main policy issues in each of the seven countries under observation and on the EU level. This chapter is highly central to the report because the questionnaire has largely been designed in such a way as to provide evidence and answers these questions in later chapters and in the conclusions.

**Chapter 3** first presents the approach taken by the study. Second, it describes the target population and sample design where the gross sample size is provided for each country under observation. Third, it gives information about the survey mode (paper-and-pencil, web or mixed mode) for each country and the questionnaire development, including translation and pretesting. Fourth, it explains how the data were collected and gives further details of the research in the field phase. This includes progress monitoring, quality control back-checks, data entry and participation rates. Fifth, it provides information on the response rate, weighting procedures and estimation of the design effect. Lastly, it describes how certain variables were harmonised.

**Chapter 4** compares differences and similarities between VET programme types and VET students within each of the seven countries. Contributions in each country have been prepared on the basis of a second-

ary sources review, interviews and a survey analysis. Even though there are structural variations in each of these chapters based on the systems and the finding of particularities, they follow a general framework composed of: (a) socio-demographic characteristics, transition to VET and career guidance; (b) issues related to curricula, teaching learning and school success; and (c) the future career aspects of VET graduates. The section on Austria differs from all the other countries because it provides results not only for 17- and 18-year-olds, which is the focus in all other parts of the report and countries, but also for different age groups.

**Chapter 5** presents differences and similarities of the VET systems in a country-comparative fashion and in its structure it largely matches the structure of Chapter 4 by paying less attention to programme differences. Chapter 5 is mainly based on the survey results from the 7EU VET study, although in some cases it contextualises results from our own survey with Eurobarometer EU-27 data. First, it presents socio-demographic characteristics in the 7EU VET countries. Second, it looks at the transition from earlier education to VET, including the factors affecting the decision-making process of learners. In the third section it explores the learning, free-time activities and work of VET students, incentives for learning, students' perceptions of the VET programmes and their related satisfaction. The fourth section describes school success and acquired competencies, while the fifth considers information and communication technology. The last section of the report looks at particularities in the perceptions of VET learners' future careers and further education. Conclusions and policy recommendations are presented in **Chapter 6**.

## **2 POLICY CONTEXT**

### **2.1 Introduction**

The purpose of this chapter is to provide an understanding of the policy context surrounding and informing the 7EU-VET project. It examines policy and policy tools at two levels. Firstly, it describes how EU policy in vocational education and training has developed over the last 10 years. Secondly, it examines the policies developed and implemented within each of the countries in the project. This provides an essential foundation for understanding the findings from the project. In addition, an understanding of EU policy has been critical to informing the developments of the survey tool deployed. As a result, it has been possible to gather students' perspectives across a wide range of issues which link in both direct and indirect ways to the major policy imperatives being pursued across Europe. Collectively, this enables us, at the end of the report, to draw conclusions and recommendations regarding the potential direction of future policy, increasing the added value of the project.

### **2.2 Evolution of EU policy**

#### **2.2.1 An overview of the last 10 years**

EU policy in vocational education and training is driven by the Copenhagen Process, supported by the European Commission, which began in 2002. It is the means by which Member States can set goals and monitor progress collectively (it is the vehicle for the Open Method of Coordination in vocational education and training). It was started in response to the Lisbon Agenda which identified vocational education and training as being vital to achieving the goal of Europe becoming “the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion”.

The Copenhagen Process has been the vehicle through which a substantial body of policy on VET has been built up over the last 10 years. Although a number of key themes have been present from the start, policy has not been static but has shifted and developed over time. During the first five years or so, there was a focus on developing ways of monitoring progress and on making the first steps towards the development of the common tools to open the borders between different VET systems through a shared qualification framework and credit transfer system, and to establish common principles for quality assurance. These tools were launched in 2008 and 2009. By chance, this coincided with the sudden and traumatic end of the period of economic growth in which the Copenhagen Process had been initiated. The onset of the economic crisis radically altered the context for policy with some important consequences, as we shall see below.

At the same time, a review of progress against the work programme linked to the Lisbon Strategy in 2010 and the development of Europe 2020 showed that most of the benchmarks of 2010 would not be met in time and that progress was still required across all the objectives (European Council and Commission, 2010; European Commission, 2010). Together, these two factors (economic crisis and slow progress in implementing reforms) have reinforced the urgency of bringing about the required changes.

Progress on all of the goals of EU policy has been highly variable across the EU, and much remains to be achieved in the vast majority of countries. As the latest strategic document, *Rethinking Education*, states: “European education and training systems continue to fall short in providing the right skills for employability, and are not working adequately with business or employers to bring the learning experience closer to the reality of the working environment... The scope and pace of reforms needs to be scaled up so high quality skills can support both growth and jobs” (European Commission, 2012, p. 2). Further, it calls for greater coherence between tools (recognition and transparency, validation of non-formal/informal learning, lifelong guidance etc.) so that they are offered in a more coordinated way (op. cit., p. 8). All the goals put in place in the early years of the Copenhagen Process therefore remain relevant to our analysis.

## 2.2.2 EU VET policy goals

The broad framework for policy is set by the recognition that VET plays a vital role both economically and socially. On the economic side, it delivers the skills Europe needs for growth, whilst on the social side it can provide opportunities for learning and routes into the labour market for the low skilled and most socially disadvantaged. However, while some of Europe's VET systems are recognised to be “world-class” – Germany, Austria, Denmark and the Netherlands (European Commission, 2012) – many lag behind and even the best systems require reform in certain areas.

Policy has been focused on a number of areas. It should be noted that all of these areas overlap to some degree or other and the complexity of the policy field inevitably means that any form of thematic classification is somewhat arbitrary. Here we distinguish between:

- Quality and attractiveness
- Labour market relevance
- Pathways and progression
- Internationalisation
- Disadvantage and equality.

### 2.2.2.1 Quality and attractiveness

There is enormous variation across Europe in the percentage of students taking VET courses. At upper-secondary level it ranges from less than 15% in Cyprus to over 75% in Austria. This variation is due to a variety of factors, some socio-cultural which accord a higher status to general academic education, but others due to the quality and attractiveness of vocational education and training itself. Many systems have weak links to the labour market and into higher education and these factors help to reinforce a negative view of vocational education and training (see below). In many countries this situation feeds high youth unemployment. But there are also problems with the availability of up-to-date technical equipment, teaching materials and infrastructures, and a lack of innovation in teaching and learning to introduce modern, student-centred methods. Making better use of ICT-supported learning has also featured in the Copenhagen Process, but not in a prominent manner. Interestingly, it is only with the most recent strategy document, *Rethinking Education*, that clear priority has been identified for Member States to scale up the use of ICT-supported learning and ensure access to high-quality Open Educational Resources.

Issues of pedagogy are, of course, linked to the quality of professional preparation for teaching, which has been a concern of the Copenhagen Process since the very beginning. Teaching staff in the sector suffer from problems of status which reflect how vocational education and training is regarded in general, reinforced by poorly developed systems of teacher education and professional certification.

The lack of well-developed quality assurance systems in many countries has led to the development of the European Quality Assurance Reference Framework (EQARF) which was adopted by the European Parliament in 2009 with the expectation that Member States would have development plans in place by mid-2011, and national level quality assurance frameworks for VET providers by the end of 2015.

Despite the introduction of the EQARF, the review of progress against the goals set in respect of quality found that “while the importance of quality assurance is generally recognised, the establishment of a quality assurance policy and of a ‘quality culture’ in VET appears not to be achieved yet” (European Commission, 2010).

#### 2.2.2.2 *Relevance to labour market needs*

As noted, despite its orientation to the world of work a major systemic issue for vocational education and training in most of Europe is the weakness of its links to the labour market. Apart from those systems with dual training, countries tend to be deficient in respect of partnerships between education and business. Advocating the development of these partnerships – at both national (social dialogue) and local levels – has been a goal of policy since the start of the Copenhagen Process but remains a critical issue and has been sharpened in recent years in a number of ways. Most recently, it has been stated: “partnerships present an opportunity to develop skills agendas in a targeted, innovative and sustainable way... For education and training, a reinforced partnership approach means becoming more active in the development of skill strategies, rather than being just a ‘supplier’. To be sustainable, partnerships need to be built on clear objectives and should be a systematic part of the policy approach” (European Commission, 2012, p. 13). Such partnerships are also critical to the development of effective forward planning tools to match skills and jobs. Member States have also agreed in the last few years to reinforce the relevance of provision through the introduction of outcomes-based approaches in qualifications and curricula. Such approaches involve employers and other social partners in defining the competencies they need, for example through occupational standards.

Other notable features of the last two years have been the recognition of the need for more work-based learning, and of the need for key and transversal competencies to be more solidly articulated in curricula, assessment and qualifications. Whilst key competencies were for a long time part of policy, they tended not to be prominent and, when they were mentioned, this tended to be either as a ‘prerequisite’ for VET (Bordeaux Communiqué, 2008<sup>10</sup>) or in a lifelong learning or social equity context (Maastricht, 2004, Bordeaux, 2008 and Bruges, 2010 Communiqués – it was not mentioned in Helsinki, 2006). In 2010, however, a focus on key competencies was seen as “becoming an urgent priority” (European Commission, 2010, p. 7). *Rethinking Education* links “transversal and basic skills” closely to the labour market: it calls for the strengthening of “provision of transversal skills that increase employability such as entrepreneurial initiative, digital skills and foreign languages” (European Commission, 2012, p. 15).

Similarly, it was only with the Bruges Communiqué that work-based learning emerged as a key priority on the agenda when it was recognised as contributing “substantially to developing a professional identity” and “boost(ing) the self-esteem of those who might otherwise see themselves as failures” (p. 3). Henceforth, the Communiqué continued, it should be a feature of all IVET. *Rethinking Education* calls for improvements in work-based learning to be “accelerated” and for it to be a “central pillar of VET systems across Europe” (European Commission, 2012, p. 7).

#### 2.2.2.3 *Pathways and progression*

As noted, the lack of linkages between VET and higher education has been seen as an important factor in the relatively low attractiveness of VET. Accordingly, Member States have taken various steps to remove the obstacles between different parts of their education and training systems. In 2008, a European Com-

---

<sup>10</sup> Communiqués are produced every two years as part of the Copenhagen process.

mission report (McCoshan et al., 2008) found that in most systems there were opportunities to move between VET and higher education, but it was often difficult for students to use these routes on account of the nature of the qualifying pathways (which often have heavy workloads) or the changes in teaching methods and environments between VET and general education. More proactive approaches were therefore recommended for enabling students to use these pathways and remain in them successfully. In 2010 it was concluded that “while increasing attention is being paid to opening up pathways from VET to higher education, faster progress is needed. Learners enrolled in VET still need more attractive qualification perspectives and mobility opportunities, and better support through guidance...” (European Council and Commission, 2010, paragraph 4.2). As we can see, a key role is envisaged for guidance services, and indeed this has been part of policy since 2002. Naturally, these services are also an important aspect of smooth school to work transitions and in helping to enhance the labour market relevance of provision.

Member States have also sought to develop systematic approaches to improving the clarity of pathways and ensuring that progression opportunities are open through the development of common European tools in the form of the European Qualifications Framework (EQF) and the European Credit System for Vocational Education and Training (ECVET). These tools are being progressively implemented. Some countries, like Germany, have faced significant challenges in implementing these tools on account of the underpinning values of their systems, and as a result progress has been variable. Other countries have faced challenges in incorporating both vocational education and training and higher education into one qualifications framework. In the UK, for example, VET and higher education have separate qualifications frameworks. More generally, there are issues about streamlining credit transfer between VET and higher education since higher education has its own European tool in the form of the European Credit Transfer and Accumulation System (ECTS).

#### *2.2.2.4 Internationalisation*

It is not surprising that the European and wider international aspects of vocational education and training have always been a feature of EU policy. The major concerns have been a lack of transparency and recognition between different countries' systems and a lack of mobility of individual students. Both of these act as constraints on the movement of people and hence on economic development as well as the development of wider transversal skills, self-confidence and adaptability and cultural understanding to support the wider development of shared European identity. The European Qualifications Framework and the European credit system were both envisaged as essential tools to provide common reference points in order that qualifications (or parts of qualifications) obtained in one country could be carried by an individual into another country and still be recognised. Although the tools were adopted in 2009 by the European Parliament, implementation in individual countries takes time and currently only four countries (including one of the 7EU-VET countries, the UK) have referenced their national qualifications frameworks against the EQF. Other tools include Europass, which encompasses five documents designed to make skills and qualifications more easily understood when individuals cross borders including a common CV format.

Regarding student mobility, this was given additional impetus in policy from about 2005 onwards as it was evident that VET providers and policymakers were being slow to open up opportunities for mobility compared to their counterparts in higher education, the latter of whom had for many years benefited from the Erasmus programme. Hence, a separate mobility scheme was launched for VET as part of the 2007–13 Leonardo da Vinci programme, and this will be incorporated into the forthcoming Erasmus for All programme.

Concerns remain, however, about the scale of mobility and the speed of progress regarding implementation of tools. In 2010 it was noted that there was “an urgent need to strengthen transnational mobility for learning purposes in the area of VET, in particular in initial vocational training including apprentices” (European Commission, 2010, p. 5). It was proposed that periods of study or training in other countries need-

ed to become a normal part of vocational training pathways, and that efficient and sustainable financing tools and schemes were needed to enable individuals to take up opportunities for mobility. These propositions are reinforced in *Rethinking Education* which calls for the creation of a “European Area for Skills and Qualifications” to promote stronger convergence between EU transparency and recognition tools.

#### 2.2.2.5 *Disadvantage and equality*

As noted above, VET is seen in EU policy as having a double objective: to contribute to economic growth whilst also promoting social cohesion. At the same time, the current poor economic climate has arguably led to a playing down of the social goals related to VET. As *Rethinking Education* states:

“The broad mission of education and training encompasses objectives such as active citizenship, personal development and well-being. While these go hand-in-hand with the need to upgrade skills for employability, against the backdrop of sluggish economic growth and a shrinking workforce due to demographic ageing, the most pressing challenges for Member States are to address the needs of the economy and focus on solutions to tackle fast rising youth unemployment” (p. 2).

Nonetheless, a number of policy threads and measures still exist in respect of the role of VET in addressing social disadvantage. VET can make a contribution to tackling the problem of early school leaving, which is particularly acute in certain countries. The pedagogies and learning environments of VET can appeal to learners who have become disengaged from general education at lower-secondary level. Considerable encouragement has been given to developing ways of making VET more attractive to such learners, such as through the introduction of flexible pathways and modularised curricula which learners can study piece by piece. In addition, methods to validate non-formal and informal learning have been promoted, shared and developed in order to provide routes back into education and training. Further, developing excellence in VET and opening up progression opportunities to higher education can provide pathways for upward social mobility. Accessible and targeted guidance services are seen as having a vital role to play in this, including for disadvantaged people with disabilities and from migrant backgrounds. Integration of key competencies like social and civic competencies into VET curricula has an important role to play in the promotion of equity by developing active citizenship and social capital. Finally, the advent of outcomes-based VET opens up the possibility of a wide range of pathways to qualifications to be developed that are suited to individuals or communities facing particular difficulties with respect to engaging in education and training.

## 2.3 Policy goals and measures within the 7EU-VET countries

### 2.3.1 An overview of the 7EU-VET countries

The previous section set the overall scene in terms of European policy. The issue to which we now turn is how these policies play out within the countries in the study. We begin by providing an overview of these countries’ current positions, before looking in more detail at each country individually.

The European policy goals and measures described above have been conceived and developed to deal with broad common issues facing EU Member States. All of the issues they attempt to deal with related to improving the functioning of vocational education and training systems are apparent in one form or another, and to greater or lesser degrees in every EU country. However, the precise form of these problems and the resulting mixture of policies and tools shows considerable variation.

Delineating and accounting for these differences is a highly complex matter. However, one clear way to begin this process is to consider the proportion of students who take vocational courses. There is enormous variation on this indicator across the EU, as we saw above. These differences are due to a wide range of interconnected factors including socio-cultural traditions and perceptions, differences in the structures of education and training systems and of the economy and labour market, differences in reforms undertaken to date and their success, the extent of involvement of employers and trades unions, as well as the preferences of individuals.

It is a risky business to attempt to characterise each country in terms of such factors as the evidence available is patchy and often contested. However, it will assist interpretation if we at least sketch out some of the principal similarities and contrasts between the 7EU-VET countries. Taking as our starting point the variation in the popularity of vocational provision, our sample includes three countries above the EU average (Austria, Germany and Slovenia) and four below (UK, Greece, Latvia, and Lithuania).

Starting with Austria and Germany, both these countries have vocational systems which are highly regarded worldwide for their quality, attractiveness and labour market relevance. Their dual training provision in particular is widely praised. Social partner involvement is strong and institutionalised into the system. The labour market structure in these countries has been characterised as 'occupational' with entry to professions being strongly controlled through qualifications obtained in initial vocational education and training. To achieve this, young people are tracked early into a variety of general and vocational provision which helps to stratify people into occupational categories well before they enter the labour market. However, in the past this structure has come at a price in terms of its lack of flexibility and weakness of provision for disadvantaged people.

With regard to Slovenia, education and training is generally regarded as performing well. In contrast to many other Central and Eastern European Member States, it has not been subject to major structural weaknesses, and has sought to make necessary reforms and modifications from an early stage. As a result, there is a well-developed body of policy which has developed quality and the attractiveness and permeability between educational tracks is regarded as good. Compared to many other 7EU-VET countries, it appears to be advanced in its thinking with regard to internationalisation.

Turning to the countries where enrolments in vocational education and training are below the EU average, our sample covers an extremely broad range of systems. Latvia and Lithuania face major challenges in tackling their legacies of Soviet communism. Structural and systemic changes are needed to modernise their systems. Vocational provision has had to be constructed afresh as a free-market system has developed. Previous underinvestment remains a problem, as does the low status of vocational training linked in the immediate post-Communist period to declining industries. Social dialogue mechanisms are still in their infancy, and hence employer involvement in vocational training is an important development imperative. At the same time, the countries have been on different tracks and so it is important not to overemphasise their similarities. As we see below, they are currently in different positions with respect to the impact of the current economic downturn and to policy implementation.

Of all the 7EU-VET countries, Greece may arguably face the greatest structural difficulties. It has long been recognised that its vocational provision is very weak and has a low status. Vocational programmes have low labour market relevance. Social partner involvement is underdeveloped. The current economic crisis is exacerbating difficulties in implementing the raft of policies developed before the financial crash.

It is self-evident that the UK is in a very different position to the other countries with low proportions of students in vocational provision. Whilst there are the same difficulties with the low status of vocational education and training, the essential characteristics of the system are different and there is no consensus

about the need for deep-rooted structural reform. The chief distinguishing features are: strong decentralisation to providers, a laissez-faire approach to the involvement of employers (leading to strong variations between sectors in the extent to which they engage in collective action), the existence of a large number of 'awarding organisations' which are responsible for developing qualifications and as a result of which there are many hundreds of vocational qualifications and even more programmes; and an underlying instability in policy related to a 'first past the post' electoral system which leads to constant changes in policy (in contrast to the political systems of other countries which support more consensual politics). UK labour markets are typically characterised as being highly flexible, and the result of this in respect of training is that employers carry most of the burden of training themselves, although competition and a lack of collective action means that the 'poaching' of trained staff continues to be a major disincentive to offer training.

Despite these variations, it is interesting to note that the bulk of policy that has been developed addresses three of the five policy areas discussed in the preceding section: quality and attractiveness; pathways and progression; and labour market relevance. The two areas where, in general, there remains scope for action are internationalisation and disadvantage/equality. Very few countries have adopted comprehensive and strategic approaches to these topics. Indeed, in relation to the question of internationalisation, strategic approaches appear to be rare indeed and evidence is unclear. Hence in the following sections we do not report country by country on this topic.

### **2.3.2 Austria**

The European Commission has described the Austrian and German VET systems as "world-class", citing their built-in mechanisms to adapt to current and future skills needs which makes training more demand-driven (European Commission, 2012, p. 5). This leads to fewer problems with skills mismatches and low unemployment rates for young people. The dual system and the high proportion of learning that is work-based are key to their success.

Austria appears to have adopted a wide panoply of policies and measures to cope with the challenges it faces. It took comparatively early action to deal with questions of permeability in a highly institutionalised education and training system (McCoshan et al., 2008) and continues to take steps in this area. It has also made progress in adopting the outcomes-based principles that underpin EQF and ECVET; and placing the learner at the centre of education and training is one of the five principles of its lifelong learning strategy. It has also looked to develop greater quality in VET, and to tackle some of the issues related to the complexity of its administrative structures including increasing the autonomy of schools. Issues remain regarding effective guidance services and measures to assist people from disadvantaged backgrounds.

With regard to quality, a large number of projects and pilot schemes underpinned by a broad public debate, have taken place since the 1990s and have helped to establish quality development and quality assurance as key policy objectives in school-based VET. The main focus has been to shift from the control of process to control of output, and to establish a quality and feedback culture in all levels of the school system. Quality developments in VET schools and colleges have been supported by the VET Quality Initiative since 2005/2006. New VET standards are in the pilot phase with a new examination model to be introduced in VET secondary schools in 2015/16. The decentralisation of responsibilities to schools and a new focus on learning outcomes are intended to help boost quality, inter alia, as well as helping to adjust local VET curricula better to local economic needs.

Although there is a high level of relevance of provision to labour market needs, the development of further opportunities for transition into the labour market for young people is one of the action lines of the Austrian lifelong learning strategy, along with the recognition of non-formal and informal learning. There is also an ongoing debate regarding the extent to which initial VET should be specialised or whether qualifications

should be broader, and regarding the form and function of the learning outcomes and competence-based curricula and qualifications that are being developed. With regard to the introduction of a national qualifications framework, this is still being debated. A particular issue is whether the framework should simply be a transparency and orientation instrument or be used to initiate wider national reforms. Guidelines for competence-based teaching are being developed.

Further, at present a weakness is that forecasts and qualification research undertaken under the auspices of the Public Employment Service are not taken into account in school-based VET and so cannot be used in curriculum development. However, in future surveys on the use of competencies taught in school in the labour market will be carried out as part of the education standards initiative.

Improving permeability continues to be an important issue in the Austrian system where there is early differentiation of VET paths. The qualifications that have been introduced to replace/substitute for the school leaving certificate are reported to have gained currency quickly; and the strongly expanding VET college sector now prepares students well for higher education. But some issues remain. The quality of the workplace in vocational training can be vital for determining if young people study further. Weaker students in vocational schools or the dual system are likely to end up with poorer quality employers and are more likely to drop out. This is causing a widening gulf between high and low performing students in VET.

The question of disadvantage within the system is still a prominent one. Issues of social inclusion underpin debates regarding the age at which tracking takes place. Although there is some agreement that tracking is too early, important disagreements also remain among stakeholders. Social inclusion has provided a backdrop to reforms in the last 20 years and has perhaps most notably led to the introduction of a “training guarantee” up to the age of 18 which guarantees a vocational training place for anyone who cannot get a place in upper-secondary vocational education or the dual system. Participants in this scheme are placed in a “training workshop” which is intended to be equivalent to an apprenticeship in a company. However, it is reported that this guarantee is still on its way to becoming a recognised pillar of the Austrian system, and its significance as a tool in tackling inequality is overrated.

*Rethinking Education* notes that the rate of early school leaving is good but that there is no comprehensive strategy encompassing new measures. Further, there are particular issues for migrants in terms of their dropout rates which need further efforts. Migrants are also very underrepresented in apprenticeship training. In some regions, migrant children are still often transferred to special needs schools. The transition to work is also more problematic. Study interviewees report that there is also pronounced gender segregation, with women being underrepresented in apprenticeships and technical programmes. Efforts are in the initial stages and progress has been slow partly owing to scepticism in schools and companies. Guidance needs to start earlier and there also needs to be a focus on issues like teacher training and the use of gender appropriate language. More generally, schools are sometimes seen as doing too little to initiate career choice processes since they do not always see it as their responsibility.

### **2.3.3 United Kingdom (England)**

Issues of labour market relevance and permeability continue to be policy concerns in the UK. Arguably, these are more prominent policy issues than quality and social inclusion. The use of quality assurance systems at all levels in the system is comparatively well-established, and there is now a long track record of measures – at both national and local level – to assist people from disadvantaged backgrounds to access and progress within vocational education and training programmes. An important contextual feature of recent developments is the raising of the school leaving age, from 16 to 17 in 2013 and 18 in 2015. Equally important for context are the findings of the government-commissioned report from Alison Wolf

which recommended a reduction in the amount of time devoted to vocational qualifications before the age of 16 because of their lack of value in the labour market, and a corresponding increase in importance accorded to a general core curriculum. The approach introduced by the previous government which sought to develop learning across the entire 14 to 19 age range appears to have ended, reverting to the previous segmentation into 14 to 16 and 16 to 19. However, there continues to be debate about the appropriate age at which students should select vocational specialisations (14 or 16?).

Current policy measures to enhance the labour market relevance of vocational provision focus on expanding the number of apprenticeships, especially at higher levels (ISCED level 3 and above), and moving away from ideas of vocational providers “engaging” with employers towards the concept of “employer ownership” in which businesses take a much more proactive role.

Apprenticeships are currently being reviewed following concerns that quality is variable and that in some sectors they tend to be used by existing employees to certify existing skills rather than by new recruits to acquire new skills.

At national level, a key policy tool to take the employer ownership agenda forward is to reroute significant funds away from Sector Skills Councils and other bodies which have a representative function for business (although their legitimacy with business communities has often been questioned) to employer led partnerships to purchase and develop (new) training. The effects of this policy will only become clear in the coming years.

It should be noted that this policy is part of a wider agenda to adjust the responsibilities for education and training between government, individuals and employers which has also seen increases in fees for students. The experts who were interviewed commented that recent policy has sought to return the focus of vocational provision from lifelong learning to employment, with a consequent narrowing of the curriculum as qualifications and the funding of qualifications emphasise skills for the workplace. Narrow vocational qualifications do not serve well those learners who are not committed to a particular occupation in the UK context.

Issues related to a lack of well-developed progression routes between vocational provision and higher education remain significant. Although Foundation Degrees were introduced a number of years ago as short-cycle qualifications to help with such progression, UK universities in general continue to resist attempts to have vocational qualifications generally recognised as counting towards university entrance. Part of the problem is the vast number of qualifications available beyond a comparatively small core of 200–300 programmes which have an established reputation. Universities have resisted attempts to have a single national qualification framework and a single set of credit arrangements. The Qualifications and Credit Framework introduced a few years ago covers only vocational qualifications and not general qualifications. In this context, progression opportunities are largely a matter for local arrangements between further education colleges and higher education institutions. These have become more common in recent years, but they are highly variable geographically so that opportunities to progress often depend upon where a student lives.

In this respect, the advent of a new form of establishment in the vocational field is significant, i.e. University Technical Colleges which involve schools, colleges and universities in local partnerships to provide technical training for 11- to 19-year-olds, with associated progression routes into higher education. Five are already established, with 28 more approved to operate from September 2013. Studio Schools are also being introduced: these include a significant element of practical learning; 16 are already open, with another 16 in the pipeline.

In the UK context, with a lack of clarity regarding progression routes and poor linkages with employers, the need for good careers guidance is strong. However, public spending cuts have fallen on budgets for careers guidance, and in schools provision is left to the discretion of head teachers who are also under financial pressure.

In relation to social inclusion, practitioners are reported by study interviewees to be strongly committed, but the commitment is less strong policy level, notwithstanding a strong concern with young people not in education, employment or training (the NEETs group) which is long-standing owing to the apparently intransigent nature of the problem. Study interviewees report that current public spending restraints and performance targets tend to discourage VET providers from working with disadvantaged groups.

### 2.3.4 Germany

Like Austria, the German VET system has been described as “world-class”. At the same time, young people are tracked early into different forms of education and training and the strong institutionalisation of pathways raises questions about flexibility and permeability and the possibilities for tailoring provision for the needs of disadvantaged groups. It has also been suggested that there is a risk that not a large enough percentage of the population will acquire the skills needed in a high-tech economy, partly related to population decline and consequent shortages of trainees in highly qualified positions. More proactive help may be needed to support a larger number of people to progress to higher education from VET. Related to this, issues also remain regarding the strength of guidance services.

A number of measures have been introduced in recent years to improve progression and permeability between VET and general education which was identified by the study interviewees as a critical issue. In 2009 a measure was introduced to allow people with dual training qualifications to go into higher education and this now exists in all regions, with financial support available for students if required. New ways are also being developed to enable individuals who are vocationally qualified but lack a school leaving certificate to enter higher education. This involves making it possible to credit vocational competencies already acquired towards higher education. Alongside these measures, progress with the development of a national qualifications framework that would enable referencing with the EQF and also of a German credit system has been slow. The implications of such measures are seen as having far-reaching consequences by many stakeholders owing to the extremely strong connections between vocational qualification and entry to occupations and wage rates (part of what has been termed Germany’s “occupational labour market” system).

The position of people from disadvantaged backgrounds continues to be an issue in Germany. *Rethinking Education* calls for more effort to develop learning approaches that allow people regardless of their background to acquire the skills needed to enter professional training. There is a notable gap between the performance of the general population in education and training and people with migrant backgrounds. A range of measures has so far been introduced across the phases of education and training, with support to disadvantaged young people being developed through local educational alliances. A reassessment has been made of the support available to help young people progress into initial vocational education and training. In 2010 a project was launched to reduce dropout rates and to improve transitions from school into the dual system which included preventative measures for “educationally vulnerable” young people still at school, careers guidance, and mentoring from 7th grade until an initial vocational training qualification is obtained. In 2007 training modules were introduced for people who had been applying unsuccessfully for an apprenticeship place for more than one year. These modules can be taken in 11 significant occupations and are credited if someone then joins an apprenticeship. These are especially useful for disadvantaged young people. There is also an initiative to train young people from migrant backgrounds.

The development of effective guidance services appears to be a continuing issue in Germany. In a lifelong learning perspective, the policy goal is to get individuals to take greater responsibility for their own learning. This may face particular challenges in systems with highly structured and institutionalised pathways. Further, the study interviewees reflected that in the dual system progression is the responsibility of employers as much as VET schools. Arguably these features make effective guidance services even more important to help individuals make decisions. However, there is a lack of integration in guidance provision between ministries and a responsible institution to deliver high-quality careers advice to students is missing. The National Training Pacts drawn up in 2004 between the federal government and employers to ensure sufficient numbers of apprenticeship places are now increasingly focusing on providing better guidance to pupils interested in vocational education and training.

### **2.3.5 Greece**

The Greek education and training system is said to face “serious challenges in terms of quality, effectiveness and capacity to ensure successful school work transitions” (European Commission, 2012). The implementation of proposed reforms appears to be a major challenge. The low status of vocational education and training is a significant issue, and VET also suffers from high dropout rates. Vocational qualifications do not confer professional rights in the workplace. Study interviewees commented that current vocational curricula are outdated and lack flexibility.

The 2007–13 operational programme of the education ministry included a raft of measures to increase participation, enhance links with the labour market, develop quality assurance systems, and reform, modernise and decentralise the vocational education system. However, the severe financial crisis in Greece has not provided the conditions for full implementation of the programme, although some forward steps have been made such as the establishment of a common method for the development of occupational standards which led to the introduction of 145 new standards in 2009. Overall, however, the need to modernise curricula and textbooks, to upgrade training and ensure professional rights and to invest in vocational education and training (with poor premises and equipment being an issue) remain significant. In relation to guidance and counselling, the aim is to construct and run an effective system, and one development has been the creation of an electronic communication platform for relevant bodies (IRIS). However, there remains scope to make improvements in guidance and counselling services.

In relation to the question of social disadvantage, the study interviewees commented that VET policies are not really designed to contribute to social inclusion policies, and that while some measures are in place (such as the intention to reduce gender inequalities through guidance and counselling) the subject is not dealt with extensively.

### **2.3.6 Latvia**

Latvia faces a wide range of challenges stemming from the legacies of Soviet communism which require the development of a substantial body of policy. Issues of labour market relevance and quality of current provision dominate which arguably means other issues, such as permeability and the position of disadvantaged groups, are less of a focus of attention. Public finances in Latvia have suffered significantly during the current economic crisis and measures are being taken to ensure cost efficiency, such as rationalisation of the education school network and the introduction of a “money follows the student” funding model to replace institutionally based resource allocation.

The low proportion of upper-secondary students in vocational provision (around one-third) is a focus for attention, with the aim being to increase the proportion to 50 percent. In 2008 a project was launched called “Raising attractiveness of vocational education and involvement of social partners within vocational

education quality assurance”, although it is yet to be approved. The aims include: improving the types of vocational education programmes available; differentiation of provision between vocational schools; strengthening social partner involvement; and pushing forward the development of the National Qualification Framework. The National Education Development guidelines 2007–13 seek continuous public investment in modernising educational establishments and increasing the role of social partners. Several ESF projects aim to increase the attractiveness of vocational education and training and develop sectoral qualification systems. These systems take a very comprehensive approach to improving all aspects of programmes and qualifications including occupational standards, examinations, modernisation and the recognition of non-formal and informal learning.

Since 2007 occupational standards have had to include work-related professional competencies along with knowledge and skills. In 2010 accreditation procedures in general and vocational education were made uniform with clearly defined quality requirements based on educational and occupational standards and content, ensuring they are sufficient to enable relevant knowledge, skills and competencies to be acquired. Since 2010, two-year post-secondary programmes have been shortened to 1–1.5 years to improve the speed of labour market entry.

Reduced budgets coupled with population decline have stimulated changes to funding and structure. The “money follows student” reform is intended to promote school competitiveness, but concerns exist that the policies may have a differential impact on general and vocational schools. Structurally, the number of vocational schools is being slimmed down from 59 in 2009/10 to 30 by 2015, and reorganised into five types: competence centres; specialist vocational schools; vocational schools for basic competencies; affiliated schools (to permit linkages between schools over long distances); and integrated schools to provide all types of training. Unsurprisingly, there has been opposition to closures since schools can be a social and cultural focus and there is often inadequate transport infrastructure to support students travelling over long distances.

A number of reforms have been made to improve guidance services, but the most recent have been postponed owing to the economic crisis. In 2007 the state agency responsible for professional career counselling was made part of the state employment agency which was henceforth responsible for the provision of guidance and counselling to all individuals irrespective of their age and social status. In the 2007–13 strategic plan for implementing the lifelong learning policy of Lithuania, it was envisaged that 48 education support institutions would be established to provide career development and counselling alongside 150 career education projects. However, spending cuts have led to the postponement of this initiative. The reduced resources coupled with rising unemployment have also meant that careers guidance has been focused on the unemployed and jobseekers rather than other groups like young people in general. Cuts to schools have also impacted on career guidance which as a consequence is not regularly available.

Some measures have been put in place to support people at a disadvantage in education and training. The National Education Development Guidelines include the goal of introducing teacher assistant posts to support pupils with learning difficulties, and the provision of extra support to people with low levels of education and training. The guidelines for lifelong learning policy 2007-13 include the provision of a second chance education and the development of informal and non-formal education. However, in general disadvantaged groups do not have a high profile in current policy. Study interviewees remarked that the needs of disadvantaged groups are largely a matter for local action, which is related to the decentralisation of curriculum development responsibilities to schools.

It is evident that the Latvian system continues to face challenges in implementing reform. *Rethinking Education* notes that the quality and effectiveness of existing schemes under the lifelong learning strategy remain a challenge and states that their relevance to labour market needs appears to be insufficient. The

Country-specific Recommendations of Europe 2020 call for more efficient apprenticeships and vocational education and training.

### 2.3.7 Lithuania

Lithuania faces a wide range of challenges across all of the thematic policy areas discussed at the start of the chapter and has adopted a broad canvas of policies and measures accordingly in a long-term developmental perspective. European Social Funds were used at a comparatively early stage to help lever change. The National Education Strategy covers the period 2003–12 and has quality, accessibility and social justice at its core. It seeks to: bring vocational training, general education and non-formal and informal education closer together; to shift the focus to competencies, away from process to outcomes, and to move towards a modular, credit-based system (the development of a vocational education and training modular programme in the framework of the national qualifications framework is currently being piloted); to bring about more participation by employers and social partners, for example in final examinations; and to benchmark vocational training and higher education against international standards and labour market needs. These goals are echoed in the lifelong learning strategy adopted in 2008. The Practical Vocational Education and Training Resources Development Programme of 2007 establishes, amongst other things, an action plan to modularise the curriculum in the framework of the national qualifications framework, develop quality assurance in vocational training and improve vocational teachers' qualifications. *Rethinking Education* calls for a focus on the relevance of outputs from education and training to the economy and society, and on the overall quality of initial vocational education and training. Lithuania has already engaged with the principles of learning outcomes related to the development of the EQF.

Significant changes are also being made to the overall structure and management of education and training. Reforms are taking place to initial and continuing VET providers including the decentralisation of school management and merging of establishments. Management decentralisation is aimed at improving the status of vocational training, increasing the diversity of provision and strengthening the attractiveness of vocational training to stakeholders by reorganising state vocational training schools into self-governing institutions. It is intended that this will increase participation in management and funding by a wider group of stakeholders. Concerns exist that, although VET schools have the authority to develop new or adapt existing curricula to fit changing job requirements, the process can be prolonged due to the need to ensure relevant resources and infrastructure are in place. Sectoral practical training centres are also being established to improve labour market relevance. *Rethinking Education* notes that measures concerning the development of apprenticeships and better skills matching mechanisms are steps in the right direction. The Country-specific Recommendations of Europe 2020 call for enhanced effectiveness of apprenticeship schemes.

Vocational training institutions are also implementing internal quality management tools. Further development of QA systems is taking place based on the results of a European Social Fund project that ran from 2005–2008 and which developed a QA concept for vocational education and training. Another ESF project in the same period developed 100 VET standards, building on previous work. Standards are developed on the basis of labour market analysis and in close cooperation with employers. In 2010 a national project began to improve vocational teachers' qualifications.

A national programme for vocational guidance was set up in 2007. The need to ensure effective guidance provision remains an issue.

Permeability and progression are also issues. Only 15 percent of VET students who progress in education rather than entering the labour market actually complete their studies. To address such issues, some VET schools have agreements with colleges about students' further studies.

Issues related to opportunities for people from disadvantaged groups and to gender equality do not appear to be significant priorities.

### **2.3.8 Slovenia**

*Rethinking Education* notes that in Slovenia “overall the system performs well” but there are shortcomings with respect to matching skills obtained in the education system with labour market needs. Making VET more attractive and labour market relevant continues to be a feature of policy in Slovenia. The main challenge is to overturn declining enrolments and intensify cooperation with employers both in defining and providing short-term apprenticeships. There is also a need to develop more effective guidance for learners. The education system is generally considered to be “efficient and open” which facilitates changes between different tracks including between vocational education and general education. Not surprisingly, there is a well-developed body of policy dealing with the issues outlined at the start of this chapter.

The quality of education and lifelong learning have been at the centre of policy for a number of years. The 2005 Slovenian Development Strategy and the subsequent National Development Programme for 2007–13 both contain quality as core elements. It is mandatory for VET providers to apply a quality management approach and perform self-evaluation regularly. They must also organise a quality assurance commission with local stakeholders and publish an annual quality assurance report. Around 78 percent of VET providers are developing quality assurance systems.

The structure and content of training programmes has been reformed for more than 10 years now, with modularisation, credit transfer, individualisation and core competencies featuring prominently, along with more practical training with employers, the promotion of VET and the establishment of 20 percent within the curriculum for local adaptation. A new White Paper embodies a comprehensive review of education after development across the subsystems. Priorities include developing learning to learn; developing work habits and responsibility for personal development; and encouraging everyone to continue their education. The principle of social partnership and having different pathways to the same goal in education are prominent.

In Slovenia vocational training for 3 years' and 4 years' duration is offered with the latter used predominantly for access to further education and training (by 80 percent of the cohort on this track). The 3-year training is quite broad and employers complain about the need to top up the competencies of recruits with in-company training in job-specific skills. The level of general education in both routes is variable, and lowest on the three-year pathway, and this can make progression difficult. Some commentators report that the 3-year route does not prepare students well enough for lifelong learning. Further, some schools use the 20 percent of the curriculum open to local adaptation to improve general knowledge and competencies to help students progress further, rather than working with local employers and social partners to make the curriculum more relevant to local labour market needs. There needs to be stronger employer involvement at the local level.

Views tend to differ regarding the effectiveness with which vocational training handles disadvantage. The permeability that exists between different tracks may not in fact be used very much and therefore tracking can still reinforce stratification. Students who lack motivation to get to higher levels in vocational education and training may require further support. Some study interviewees report the system to be “half-open”. Stronger guidance provision is needed.

## 2.4 Policy Context Conclusions

This chapter has looked at the nature of EU policy along with the policy goals and measures adopted in the seven countries. What can we conclude from this about the nature of policy developments in general and in different types of country across the five policy fields?

### 2.4.1 Quality and attractiveness

This is a much more significant issue in some countries than others. In Greece, Latvia and Lithuania packages of major reforms have been launched and are in various stages of implementation. What these countries have in common is a need for significant systemic developments to put in place high quality vocational programmes that can appeal to learners as strong alternatives to general education. In Slovenia, measures to improve quality are advanced and the major challenge is to make vocational provision more attractive in the context of declining enrolments.

In Germany and Austria, recent interventions regarding quality are more in the form of measures to strengthen existing quality assurance arrangements at all levels of the system, and to move from process to output control. The latter involves embracing outcomes-based principles more generally as a new paradigm in education and training. This has stimulated considerable debate in Germany and Austria, where the principle underlying the acquisition of the rights to practice an occupation has encompassed not just what is learned, but how and where. In the case of Austria, new quality arrangements are taking place in the context of the steps being taken to give greater autonomy to schools. Attractiveness is not a significant issue in these countries since vocational provision is recognised as a valuable alternative to general education.

The same cannot be said of the UK. Here, vocational provision continues to suffer from low status compared to general education. Until 2010, government policy had sought to establish new vocational pathways through an agenda which focused on the 14–19 age range, to avoid the traditional break at age 16 and thereby encourage students to remain in education to higher levels. This approach now appears to have been abandoned, with the onus being placed upon colleges to develop attractive pathways in partnership with others, not least employers and universities, at local level. Similarly, the drive to improve quality has been seen as the responsibility of the sector in general and providers at local level, with quality principles and tools well established for some time.

### 2.4.2 Labour market relevance

Achieving greater labour market relevance for vocational education and training is also a policy issue that shows significant variation across the countries. The Austrian and German systems, with their strong emphasis on work-based learning and apprenticeships in the dual training subcomponent, are founded on long-established and strong social dialogue structures. They are now models of good practice celebrated and promoted by the European Commission. That said, what also characterises these systems is their constant awareness of the need to make adjustments or updates to ensure that vocational programmes remain relevant to the needs of the labour market.

In every other country within the project, the labour market relevance of provision is a priority. However, the contexts are variable. In the UK, free-market ideas underpin a long-standing principle of government policy that it should be left to businesses to organise themselves in respect of training, whilst constantly promoting to businesses the value of training and especially, in recent years, apprenticeships. Hence, there is huge variety in how sectors organise themselves to ensure a flow of recruits, from little or no col-

lective action at all (e.g. retail) to well-organised action to develop qualifications (e.g. engineering). Providers have for many years been encouraged to “engage” with employers at local level. Government policy now promotes employer “ownership” through exhortation and reallocation of some streams of funding directly to employer-led partnerships.

The other countries in the project (Greece, Latvia, Lithuania and Slovenia) are actively seeking to develop social dialogue mechanisms nationally and employer involvement at local levels. One important mechanism for doing this is the development of occupational standards which go hand-in-hand with the adoption of outcomes-based principles. Occupational standards necessarily involve employers in determining at a very detailed level the knowledge, skills and attitudes/behaviours they require for workers. Measures such as these represent important structural developments in countries which are striving to build methods of employer engagement over the long term.

### **2.4.3 Pathways and progression**

Unlike the preceding two policy fields, the need to improve pathways through and beyond vocational education and training is an issue in every country, although it takes different forms. In Slovenia, the system is generally reckoned to be flexible, although there are concerns that more proactive support is needed to help students move from vocational to general higher provision.

In Austria and Germany, the pathways through lower- and upper-secondary education have traditionally been strongly institutionalised with the result that during the early years of the century criticism intensified that the systems were inflexible and did not provide enough opportunities for students to switch between paths, and for vocational students to progress to general higher education. Steps have been taken to address these issues in both countries, with Austria making progress from earlier on.

Issues of pathways and progression are also of long-standing concern in the UK. The extremely large number of vocational qualifications that exists (partly due to the use of competitive awarding organisations, which is unique in Europe) means there is a lack of clear pathways into employment in many occupations. It was intended that the national qualification framework covering vocational qualifications would help tackle this problem but the number of qualifications has remained high. Permeability between vocational and higher education is also a problem. Resistance from many of the UK's universities have prevented the development of a single qualifications framework to cover both vocational and general/higher education qualifications. Although Foundation Degrees provide a bridge between the two in some subjects/occupations, their coverage both sectorally and geographically is variable. The onus is now being placed upon local providers to open up or consolidate pathways.

In Greece, Latvia and Lithuania the development of clear pathways through vocational training into occupations is part and parcel of improving quality and attractiveness. The issue of progression into higher education is also relevant. However, it appears that the focus of attention in these countries is primarily on developing a solid foundation of vocational education and training in the upper-secondary levels, whilst taking into account the need for progression opportunities, rather than making progression per se the centre of attention.

Across the board, the need to enhance or substantially develop guidance services remains an important policy priority. Often, this imperative exists despite measures over a number of years. There are several reports that current public spending cuts are reducing services or holding back reforms. Worryingly, this suggests that guidance services are still seen as existing within the margins of education and training provision and therefore ‘cut-able’.

#### **2.4.4 Internationalisation**

Whilst it is reported from all countries that there is support for student mobility and while progress (albeit variable) has been made in implementing the EQF and ECVET principles, it is evident that there is scope in most, if not all, countries for a more systematic approach to be taken in policy to the issues of internationalisation. There is general discontent among study interviewees that there is a lack of preparation in vocational education and training for a globalised economy. Language deficiencies were mentioned by interviewees in the UK, Germany and Slovenia. There were also concerns, for example from Slovenia, that mobility is not promoted sufficiently in schools. Some countries report “strategic cooperation” with some countries or regions, such as between Austria and countries in Eastern and South-east Europe, but there is generally a lack of strategic frameworks to encompass mobility, language learning, global education etc., a notable exception being Slovenia. The UK has a policy for internationalisation in education but this is focused mainly on higher education and reflects the UK’s unique position as a major exporter of higher education.

#### **2.4.5 Disadvantage and equality**

There is also generally a lack of comprehensive strategic approaches at national level to disadvantage and equality with regards to vocational education and training. Interventions tend to consist of specific measures, and can be time-limited rather than structural. Often such measures are vulnerable to public spending cuts. In Austria and Germany, issues of disadvantage are linked to inflexibilities in tracking which threaten to reinforce social stratification. There are indications that it can be hard for alternative provision to become accepted as equivalent to traditional provision and therefore as permanent features of systems, as in Austria.

In Slovenia, the system is regarded as “open”, and there are special provisions for people with special needs or disabilities at lower-secondary level, but again the issue of tracking people onto pathways raises questions as to whether this reinforces rather than reduces social inequality. Many students in vocational education and training are from poorer social backgrounds.

In the UK, interventions to support disadvantaged people have been largely left to local providers, with more or less support from government frameworks or funding, depending upon the policy of the government at any one time. Generally, there is strong commitment within the vocational training profession to make interventions, but inevitably this leads to variations from place to place in terms of what is available to disadvantaged people.

In those countries facing basic issues regarding the quality of provision – Greece, Latvia and Lithuania – questions of how to meet the needs of disadvantaged people feature less prominently, perhaps because the focus is on how to make improvements for the vast bulk of people in vocational programmes.

#### **2.4.6 Applying the policy context**

These conclusions provide an important context for the data analysis that follows. The survey at the core of the project provides a rich information source on the views of learners in vocational education and training. Many of the questions link directly into the policy issues discussed above. For example, they cover issues of quality of teaching and teaching resources. Other questions provide indirect insights. Together, they enable us to build up a picture of what students think and, coupled with the understanding of policy goals provided in this chapter, to draw conclusions as to how effective policy might have been so far, and where it may need to focus in future. The robustness of the sampling and survey analysis methods means, furthermore, that we can with confidence compare results across countries. Where patterns are different, the preceding analysis will help us to understand them.



## 3 METHODOLOGY OF THE LARGE-SCALE SURVEY

### 3.1 Approach of the study

The 7EU-VET project – Detailed Methodological Approach to Understanding the VET Education – is a research study on vocational education and training which builds on the theoretical backgrounds and secondary analyses of the existing documentation along with national and EU data in order to conduct quantitative and qualitative studies and derive empirical results. The survey of pupils in vocational education and training conducted in 2011 in Austria, Germany, Greece, Latvia, Lithuania, Slovenia and England delivered the necessary quantitative data for comparative analyses. This chapter provides a summary of the design and implementation of the survey in these seven EU countries using very similar methodologies and procedures. The methodological approach used in other work packages (e.g. the expert interviews and focus groups with students) is described in the reports produced as deliverables for the respective work packages.

In the next section (3.2), we provide a definition of the target population of the survey which has crucial consequences for the generalisability of the findings. The first section also comprises a description of the stratified multi-stage clustered sample design which, in addition, employs PPS in some countries. Based on existing studies, we also estimate design effects and provide a computation of the necessary size of the gross sample in each country. In the survey we used an international core questionnaire with additional national modules. Section 3.3 comprises a detailed description of the development of the international core questionnaire including translation and pre-testing issues. This questionnaire was administered using either paper& pencil or web survey methodology (or a combination thereof) in a classroom setting. Field work procedures are described as part of section 3.4. Here, we also summarise findings concerning the data collection in the seven countries as well as the data entry and completion rates.

Section 3.5 is focused on response rates. Here we describe the various obstacles to gaining cooperation on the school level, the class level and the level of the individual student and compute level-specific as well as overall response rates for the participating countries. In addition to the necessary design weighting, we provide a description of the nonresponse weights computed for the data set. Based on the weighted net sample, we determined the designs' effects and effective sample sizes (also in section 3.5). When integrating the national data sets for international analysis we aimed to harmonise national specifics in terms of grades, educational levels, wealth items and other variables. For most variables, we applied output harmonisation since we were unable to anticipate the actual categories of the variables (section 3.6). The final section (section 3.7) summarises some lessons learned and reflects on the benefits and drawbacks of the survey conducted.

## 3.2 Target Population and Sample Design

*“Sample designs may be chosen flexibly and there is no need for similarity of sample designs. Flexibility of choice is particularly advisable for multinational comparisons, because the sampling resources differ greatly between countries. All this flexibility assumes probability selection methods: known probabilities of selection for all population elements” (Kish 1994: 173).*

### 3.2.1 Target population

The target population of 7EU VET was defined as 17–18-year-old pupils in initial vocational education and training. Regarding the country-specific differences, this population can be found in a variety of school forms and different educational pathways. In addition, this age group can be found in different grades within the education systems.

Certain subgroups were excluded from the sample to ensure cross-national comparability. Institutionalised pupils (e.g. in vocational schools for prisoners) and pupils in special schools (e.g., for blind pupils or pupils with learning disabilities) were not part of the sampling frame. Moreover, because compulsory education in most countries only lasts until the age 16, young people not participating in any form of vocational education could not be reached within this study.

Using the age of the pupils as the selection criterion and base for the definition of the target population led to difficulties in certain countries. In Germany, with its highly differentiated educational system, classes in vocational schools are very heterogeneous with regard to age. Young people can start a vocational education after finishing secondary school. While pupils at general schools finish at the age of 16, graduates holding a university entrance diploma finish their secondary school at age 18 or 19. In addition, male youths have to participate in military or civilian service for one year. Therefore, the starting age within the VET system can be even higher for this group. Mandatory military or civilian service was abandoned in 2011, although this still affected the survey which was conducted in spring 2011. To ensure that enough pupils from the target population were included, in Germany pupils from the first and second year of VET programmes were sampled. The survey was conducted at the end of the school year; therefore, even pupils in their first year already gained reasonable experience within the VET system. In Austria we find a similar picture with regard to the difficulties of sampling a precise age group within the system. In addition, the age differs between the two main tracks within the system. To account for this, the third year of vocational schooling was sampled while for apprenticeship training pupils in their second year were selected. In Greece, pupils at the age of 17 follow the 2<sup>nd</sup> grade of EPAL/EPAS schools, while pupils at the age of 18 follow the 3<sup>rd</sup> grade. Here, the second grade was selected and, in contrast to Germany and Austria, the pupil body is relatively consistent with regard to age. Latvia, Lithuania and Slovenia possess a mainly single-track lower secondary school system where young people can decide after they have finished compulsory education whether to continue with general education or start initial vocational education and training. Here, the young people mostly have the same age when they enter vocational education and training. While in Lithuania classes in the third year of vocational education were sampled, in Latvia classes with the highest number of 17- or 18-year-olds were selected. Here, no restriction was applied with regard to the grade. In Slovenia, pupils in the third year of vocational education were sampled. Vocational courses in England also comprise pupils of mixed age groups. Instead of completing the survey in a classroom setting, the pupils in England were sampled by vocational institutions sending out an email including the survey link to all learners. To ensure that only eligible pupils took part in the survey, screening questions were applied. If a pupil was not 17 or 18 years old, this person was routed out of the survey. These differences have to be taken into account when comparing the results across the countries.

### **3.2.2 Sample design**

Like many large-scale international school-based studies, a complex two-stage sample design was applied to the 7EU VET study. In stage one, schools were sampled at random. In stage two, eligible classes within the chosen schools were selected at random. Classes were defined eligible when they catered for pupils of the target population. In the selected classes all pupils were asked to participate in the survey. A regional stratification was applied in order to improve the precision of the estimates. Also, in order to compensate for unequal selection probabilities, the selection probabilities of schools were proportional to size (PPS design). In addition to the regional stratification, a stratification by type of school was undertaken in Germany. This should mirror the unequal distribution of pupils with respect to the four main school types present in Germany. While the stratification guarantees that the real distribution of pupils within the country is mirrored in the sample, on the other hand the PPS design assures that the selection probabilities for all pupils are similar even though the schools differ in size. An important aspect that influences not only the design but also the estimation of the required gross sample size is the cluster design of this two-stage model. Because pupils are nested in classes and classes nested within schools this cluster effect occurs on both levels. Respondents belonging to the same cluster tend to be more similar to one another in certain respects than respondents selected at random. Accordingly, selecting additional members from one cluster is less informative than sampling participants at random from the population. This was taken into account by already including a factor in the estimation of the required gross sample size to compensate for this loss of precision.

In Latvia and Lithuania a census on the school level was carried out and therefore neither regional stratification nor the PPS design were applicable. Still, to compensate for the higher chance of selecting pupils in smaller institutions more classes were selected in larger schools (see the section “Sample size estimation” for more details). In England, the sample design differed considerably from the general design applied in all the other countries. Here, a convenience sample was used in which vocational education providers were contacted by phone and asked to disseminate an invitation e-mail with a link to the web survey to their pupils. To encourage participation, respondents were able to take part in the drawing of a lottery after they had filled in the questionnaire.

### **3.2.3 Sampling framework**

The basis of a proper sample is a correct sampling frame that consists of all elements corresponding with the definition of the target population. Ideally, a list with all pupils who belong to the target population would build the frame. In most countries no such list exists and the 7EU VET study therefore used the institutions where the target group was enrolled as the basis for sampling. In all countries (except England) complete lists with all schools were provided by the partners. In most cases, Ministries of Education or Cultural Affairs are responsible for making these lists available. These lists contain the contact information of the school (name and address) as well as the region where the school is located and the number of pupils enrolled in this institution. The last two aspects were necessary to apply regional stratification and the PPS design. In England a list of institutions was identified using data from the Individualised Learner Record (ILR) which is a collection of data about learners. The number of institutions required to achieve 1,000 responses was estimated by the English partner and they were also responsible for ensuring that the selection accurately reflects the distribution of vocational learners (that is, the type of provider where they are studying) through a stratified and random sample.

### **3.2.4 Exclusion rules**

The sampling frame consisted of all vocational schools of a country where our desired target group of 17- and 18-year-olds can be found. Nevertheless, certain exclusion rules were introduced on the school level aimed at certain school types:

- vocational schools in prisons;
- institutions and schools especially for pupils with special needs (for blind pupils/pupils with strong learning disabilities); and
- in some countries like Lithuania schools for certain population subgroups were excluded because instructions were not given in the national language (schools with instructions in Polish or Russian).

Schools falling into one of the categories given above were not included in the sample frame. Another exclusion applied on the class or pupil level was not explicitly formulated. All pupils in a selected class were asked to participate in the survey. Generally, exclusion was kept at a minimum and less than 5 percent of the target population was excluded. Following the definition of our target group, institutions that especially aim to train adults, offer retraining or further training were not part of the sample frame.

### **3.2.5 Measure of size**

Part of the sampling method for this study is a PPS (probability proportional to size) design. The PPS design guarantees that the selection probability for pupils in larger schools is not lower compared to their counterparts in smaller institutions. The measure of size (MOS) used for this method was the total pupil enrolment per school. This information was part of the school lists provided by every partner for his or her country. Of course, it would have been more desirable to use the exact number of pupils in the target group enrolled in the institutions but this number was not available. Still, we assumed that in general a larger school has the capacity to cater to more pupils in our target population compared to smaller schools.

### **3.2.6 Sample size estimation**

The background for the estimation of the required gross sample size was a minimum effective net sample size of N=1000 for larger countries (Austria, England and Greece) and N=750 for smaller countries (Latvia, Lithuania and Slovenia). In Germany, an effective net sample size of N=1500 was defined to assure that all subgroups within the sample were sufficient in size. For England, a detailed calculation was not applicable because here a convenience sample was applied. When achieving an effective net sample size of 1000 per country, a difference of about 4.4 percentage points of two countries would become significant ( $p < .05$ ). When the effective sample size is reduced to N=750 differences smaller than about 5.1 percentage points would not become significant. These computations are based on worst-case scenarios assuming that the difference occurs in the range of 47 percent vs. 53 percent. Of course, with smaller percentages the precision of the estimates increases.

*Table 3.1: Estimation of the gross sample size for each participating country (without England)*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
N(eff)	1000	1500	1000	750	750	750
Estimated response rate %	40	70	75	70	70	70
Estimated design effect	2.5	2.5	2.5	2.5	2.5	2.5
Estimated number of pupils per school (two classes per school)	36	30	40	30	30	50
Estimated number of pupils per class	18	15	20	15	15	25
Required net sample size (N(eff)*deff)	2500	3750	2500	1875	1875	1875
Required gross sample of pupils	6250	5357	3333	2679	2679	2679
Required gross sample of classes	347	357	167	179	179	107
Required gross sample of schools	174	179	83	89	89	54

Several components define the required gross sample size and therefore the number of classes or schools that need to be surveyed. Next to the effective sample size (N(eff)), building the starting point, the design effect and the expected response rate must also be included in the formula. To estimate the number of classes and hence the number of schools that need to be included, the average number of pupils per class (n(class)) is important information.

The design effect for a study cannot be determined precisely prior to field work. Nevertheless, based on other studies using a clustered design of two classes per school it was estimated to be 2.5 (Dahmen & Fuchs, 2011).

Apart from the design effect, the response rate in the different countries also needed to be accounted for. For 7EU VET the desired overall response rate was set at 70 percent for the majority of the participating countries. In Austria the low participation rates seen in previous surveys suggested a lower response rate of 40 percent.

In Latvia and Lithuania, the number of schools calculated to be necessary for this survey was larger than the actual number of vocational schools existing in these countries. A census on the school level was conducted and, to compensate for the lower number of schools, more classes per school were sampled. In this way it was ensured that the required number of pupils could be reached.

*Table 3.2: Number of classes sampled in countries conducting as a census on the school level*

Latvia	
Number of pupils enrolled in the institution	Number of classes sampled
<600 pupils enrolled	Two classes
>=600 pupils enrolled	Four classes

Lithuania	
Number of pupils enrolled in the institution	Number of classes sampled
<600 pupils enrolled	Two classes
>=600 <800 pupils enrolled	Four classes
>=800 <1800 pupils enrolled	Six classes
>=1800 pupils enrolled	Eight classes

### **3.2.7 Sampling of classes**

In most countries two classes per school were sampled at random. In Germany two or three classes were sampled. Next to two classes from the second grade, in certain schools one class from the first grade was included in the sample. This approach sought to ensure that the number of 17-year-olds was not too low. In Latvia and Lithuania more classes were sampled as well due to the small number of vocational schools in these countries.

To ensure a random sample of classes within the schools, clear instructions were given to the schools about which classes were to be asked to participate in the survey. Only classes that fit the target population definition were included in the selection process. One procedure adopted for the random selection of classes was to use the form teacher's name to identify a class. Here, classes were selected where the form teacher's name is the first/last in alphabetical order. Due to the country-specific modes of operation that were used in other surveys in the countries and proved to be successful the precise sampling procedure was developed by each partner. Nevertheless, it had to be ensured that it was a random sample of classes and that no classes were systematically excluded. Except for England, all countries sampled classes at random. The English project partner stated that the way in which vocational education is delivered in England makes survey participation in a classroom setting impractical. Therefore, they worked with institutions that either sent out an email including the survey link directly to all learners or posted a link to the survey on their intranet or virtual learning environment. This leads to the assumption that most pupils in England filled in the questionnaire at home or outside their regular lessons.

In case the selected class was not present at the school during the time of the fieldwork, for example due to practical training in an enterprise, a replacement class was drawn following the standard selection procedure.

### **3.2.8 Replacement schools**

In most countries the sampled schools were contacted by mail or phone prior to the actual survey. It was determined during this first contact whether the schools cater to pupils from the target population. The approval of headmasters was also obtained. In addition, the classes were selected following a nationally specific procedure and the number of pupils listed in the selected classes was requested. If schools had no pupils in our target population enrolled, these schools were dropped from the sample and the partners were supposed to request a replacement school. These replacements were part of the same stratum and similar in size to the excluded school. The replacement of schools was not undertaken if the school simply refused to participate. In this case, the school was counted as a non-response.

## **3.3 Survey Mode and Instrument Development**

### **3.3.1 Mode of data collection**

Initially, the survey was planned as a web survey to take place within the classroom or computer facility of the schools. This approach was not feasible in all countries because not all the schools were sufficiently equipped with computer facilities or the headmasters rated this approach as being too laborious. Therefore, several countries (Latvia, Slovenia, Greece) decided to use a paper-and-pencil version instead or a combination of web and paper-and-pencil (mixed-mode) (Germany, Austria). Schools could thereby decide whether they prefer the web or the paper-and-pencil mode. Still, choosing the web mode was encouraged as this was the more cost-efficient approach. The table 3.3 that follows presents the survey mode for each participating country.

*Table 3.3: Survey mode*

Country	Survey mode
Austria	Mixed-Mode
England	Web
Germany	Mixed Mode
Greece	Paper-and-Pencil
Latvia	Paper-and-Pencil
Lithuania	Web
Slovenia	Paper-and-Pencil

In order to maintain the comparability of the data sets and to facilitate the compilation of the cross-national data set, the web survey was hosted on a central server using software that allows multiple languages. Programming of the web survey was provided for all countries that had decided to use this mode by the German partner which was responsible for coordination of the survey. Respondent access to the web survey was regulated using individual anonymous access codes for each pupil that expired after use. Thus, each pupil could complete the survey just once (multiple entries of the same pupil could be prohibited, although each pupil could access their questionnaire multiple times until it had been completed). The codes were provided by the German team and were explicitly attached to one specific class/school. Every class received one fixed package of codes that might not be exchanged between the classes participating at a single school. At the same time, the identity of each pupil was protected since the teacher distributed the access codes in each class at random. In order to keep response rates high, pupils were to complete the online questionnaire preferably in the school's computer facility under the supervision of a teacher and during regular lessons. Filling the online questionnaires in at home was discouraged.

The web survey in England was hosted on a Snap webhost server where only respondents with a unique link were able to access the web survey. To ensure the identification of the provider they belong to, an additional question was added whereby pupils had to indicate the provider they are studying with. To ensure that each pupil could complete the survey only once, additional information was collected which enables whether there are duplicate pupils in the dataset to be checked.

Similar to the web survey, the paper-and-pencil mode was administered in a classroom setting under the supervision of a teacher. Administration of the paper-and-pencil questionnaires maintained the full anonymity of the pupils. Nevertheless, it must be clear which pupil belongs to which class and to which school. This was assured by using tracking numbers. These numbers were composed in a specific way:

- a one-digit country ID (for example, 1 for Lithuania);
- a three-digit school ID (for example, 402);
- a two-digit class ID (for example, 01 or 02 or 03); and
- a two-digit pupil ID (for example, 12).

Following our example, the final ID for a single pupil would be 14020212.

The tracking numbers were listed in the monitoring tool that was maintained by all partners during the fieldwork. The individual access codes for the web survey were composed like the tracking IDs, thereby making tracking throughout the whole process much easier.

### 3.3.2 Questionnaire design, translation and pretesting

Because the survey could be conducted either online or with a paper-and-pencil questionnaire, instruments for both modes were developed. Still, the two modes required the classroom setting and therefore the length of the questionnaire was limited. To be able to conduct the survey within one school hour, the pupils should be able to fill in the questionnaire within 30 minutes (plus a few minutes to introduce the survey and collect the completed questionnaires).

With respect to content, the instrument covered several substantive questions on vocational education and socio-demographic background variables. The goal of the research study is to measure young people's perception of VET systems and their views on their future possibilities for employment, career building, and mobility. Key questions are: What influences the educational and vocational satisfaction of VET pupils? Which are the differences between the VET pupils in terms of learning outcomes (competencies) and how are they determined? How to measure them, are the current knowledge evaluation methods sufficient? What are the VET pupils' career aspirations?

The instrument was subdivided into several sections, with each covering a special topic. The sections are:

Section A: Your previous programme and the transition into your current programme

Section B: Your current programme

Section C: Acquired knowledge

Section D: About yourself and your career

Section E: Acquired skills and abilities

Section F: Information and communication technology

Section G: You and your family

The master questionnaire was developed in English. It was then translated into the national languages. To ensure the accuracy of the translations the country-specific versions were then back-translated into English. The back translation was done by a professional translator whereas the translation into the regional languages was done by the 7EU VET project partners themselves. The back-translated version was then checked against the original English master questionnaire and, if necessary, the partners had to correct their national translation.

In autumn and winter 2010, each 7EU VET project partner conducted two to four focus groups in vocational schools or programmes to test the questionnaire. To determine whether the questionnaire would be well received by pupils, the focus groups involved an interview setting where those particular pupils were asked to explain reactions to the question form, wording and order. Further, the filled in questionnaires were checked and evaluated. Each country prepared a national focus group report including general findings and comments from the pupils on the questionnaire. The findings were discussed and considered and the questionnaire was revised where necessary.

In addition to the questionnaire for pupils, a short instrument for teachers was developed. Here, key information about the class was gathered (e.g. number of pupils registered in the class, number of pupils present, reasons for absence).

In England a shortened version of the questionnaire was applied. Since survey participation in a classroom setting was assessed as impractical, no teacher questionnaire was used to gain information about the classes.

### 3.4 Data collection and the field phase

The data collection for the 7EU-VET project took place between early spring of 2011 and late autumn of 2011, depending on the country. The following Table 3.4 presents the collection periods for each participating country.

*Table 3.4: Survey collection period*

Country	Collection date
Austria	Beginning of March to end of July 2011
England	June to October 2011
Germany	Mid-March to end of July 2011
Greece	September to December 2011
Latvia	Beginning of April to end of May 2011
Lithuania	End of March to mid-May 2011
Slovenia	End of April to mid-June 2011

Field procedures included contacting schools and sampling classes, preparing materials for the data collection, tracking the incoming questionnaires and creating the country-specific data files (entering and cleaning data).

**Contacting schools:** To get in touch with the sampled schools an initial general introductory letter or email with information concerning the 7EU VET project was sent to schools. In Austria, the first contact was established by telephone but, in nearly all cases, written material was requested. The first contact via email or letter was then followed up by telephone calls to secure participation in the survey and discuss further steps (administering the survey, appointing a contact person in the school, selecting the classes, a timeline). In Latvia, the introductory letter was followed up by an introductory seminar where the project and course of the survey were presented to the headmasters of the participating schools.

Once a school had agreed to participate, a school coordinator was identified who was responsible for all activities concerning the survey within that particular school. The school coordinator was often the headmaster, a teacher or another member of staff, including social workers in Slovenia or directors of pupil services or quality in England. The responsibilities of the school coordinator included providing information about the classes, randomly selecting the required classes, distributing the invitation and information letters to the pupils, distributing access codes or questionnaires and obtaining parental permission if necessary.

**Respondent recruitment:** Each country reported significant variation among the schools or institutions regarding how easy they were to recruit and how cooperative they were once they had agreed to participate. Typically, it was necessary to contact schools and headmasters multiple times to obtain the approval and all the necessary information for sampling the classes.

The main reason for not participating in the survey on the school level was the high number of prior surveys in schools. Other reasons included exam commitments or internships or practical training in the pupils' training company. In Slovenia, whole classes in our target group had finished lectures about a month before the survey and therefore could not take part in the survey. Reasons for non-participation in Austria included the high number of questions included in the survey and resistance to answer questions on the topic of the survey. In Slovenia, the majority of the school coordinators and most pupils declared that the questionnaire was too long.

Approximately one week after having sent out the survey material (questionnaires/access codes, instructions and permissions) to the schools, the school coordinators were again contacted to ascertain whether the school and especially the coordinator had received the material and to remind them of the survey.

### 3.4.1 Data collection

Depending on the mode involved, the survey was conducted in a slightly different way:

*Web survey:* The sampled class was led by their teacher or by the coordinator to the computer facility. First, the supervisor had to control and collect the permissions from parents and pupils (where necessary). The supervisor then explained how the web survey works, wrote down the website on the board and described how to access the survey with the individual codes. Then the anonymous access codes were distributed at random and pupils found the web survey and started to fill it in. If necessary, the supervisor assisted if pupils had problems filling in the online questionnaire (e.g. if a question was unclear to them). After finishing the questionnaire, the pupils continued their school day. In the meantime, the teacher or the headmaster was asked to fill in the paper version of the teacher questionnaire. Afterwards, the supervisors handed all of the paper material including permissions and teacher questionnaires that had to be sent back to each partner to the coordinator who had prepared the package. Upon sending back the package the survey was completed by the schools.

*Paper-and-pencil survey:* The sampled class participated within their classroom supervised by a teacher or by the coordinator. First, the supervisors had to control and collect the permissions from parents and pupils (where necessary). Afterwards, they explained how the survey works and distributed the questionnaires (if necessary distributed envelopes as well). When the pupils started filling in the questionnaire he or she filled in the teacher questionnaire. If necessary, the supervisor assisted when pupils had problems filling in the questionnaire (e.g. if a question was unclear to them). After finishing the questionnaires (and putting it inside individual envelopes where necessary), the supervisor collected them and put them into the correct class envelope (marked with the class name and ID) together with the teacher/headmaster questionnaire. The pupils continued their school day and the supervisors had to hand all of the material that had to be sent back to partners to the school coordinator who had prepared the package. The sending back of the package signified the completion of the survey by the schools.

In England, the data collection process differed considerably from the data collection process applied in all other countries described above. First, administering the survey in a classroom setting was impractical in most instances and therefore the survey was administered as a web survey only. Second, a convenience sample was used in which the vocational education providers disseminated the survey to their learners. These providers applied different dissemination strategies: they either disseminated the survey link via email to their vocational learners or they posted the link on the intranet. Others undertook the survey in a classroom-based setting. Further to ensure that the correct age group was included, a filter question was used and therefore only 17- or 18-year-old pupils were able to fill in the questionnaire. To encourage participation, all respondents who submitted a filled in questionnaire were entered into a lottery draw.

### 3.4.2 Monitoring, progress reports and quality control back-checks

In preparation for the fieldwork, the German partner supplied each partner with a fieldwork manual and a fieldwork monitoring tool to facilitate the data collection and fieldwork monitoring. The *fieldwork manual* was intended as a step-by-step guide describing the general course of the fieldwork and pointed out important issues needing special attention. The *fieldwork monitoring tool* was an Excel sheet used for documenting the development of the study. In each country all schools and classes that were sampled were listed in this document (together with their tracking ID). During the field work the monitoring tool was used

to document the contact attempts, the number of pupils in the sampled classes and to record the participation of each school.

### 3.4.3 Data Entry and Quality Assurance

Each participating country was responsible for the data entry which implied transcribing the information from both pupils and teacher questionnaires into computer data files based on templates, a data cleaning manual and codebooks provided by the German partner. Each country was responsible for coding occupations using standard coding schemes such as the International Standard Classification for Occupation (ISCO). See the Harmonisation chapter for more details.

Double data entry was required for 10 percent of the paper questionnaires in order to assess the data quality in terms of typing or editing errors. In addition to the proper coding of IDs and case numbers, reliability was tested on the basis of 47 items. Reliability scores around 0.7 were considered to be adequate. Where there was not enough consistency between both data files the countries were asked to check the data set for keying or editing errors.

Before creating the international database the following checks were made on all national data files: It was ensured that all national data files conform to the structure and specifications of the codebook and that the values of all variables conform to the range of valid values. Inconsistencies within the school and student identification numbers were resolved, if possible in cooperation with the countries involved.

### 3.4.4 Participation rates and sampling weights

Break-offs and partial interviews were classified according to AAPOR standards (AAPOR 2009). According to this definition, respondents answering less than 50 percent of all applicable questions (filter questions or questions not asked in all countries were excluded) were treated as a break-off, whereas more than 50 percent equals partial with missing data or completes (if everything was answered). Consequently, all cases that failed to answer at least 50 percent of all applicable questions were excluded from the data set. For this reason, those cases were also excluded from the response rate calculations. An overview of the partial or completed questionnaires and break-offs can be found in table 3.5.

*Table 3.5: Partial/Completed questionnaires and break-offs of participating countries*

	Austria	England	Germany	Greece	Latvia	Lithuania	Slovenia
Complete/Partial	96.4 (2097)	99.2 (993)	96.6 (5377)	99.5 (2396)	98.9 (2926)	97.3 (2641)	99.2 (1197)
Break-Off	3.6 (78)	0.8 (8)	3.4 (188)	0.5 (12)	1.1 (32)	2.7 (74)	0.8 (10)
Total	2175 (100.0)	1001 (100.0)	5565 (100.0)	2408 (100.0)	2958 (100.0)	2715 (100.0)	1207 (100.0)

### 3.5 Response Rate

The overall response rate envisioned prior to the fieldwork was 70 percent in most countries. This value was used to estimate the required gross sample size which is given for each country in Table 3.6.

*Table 3.6: Gross samples of participating countries*

Region	Schools in sample	Classes in sample	Final number of pupils in sample
Austria	174	348	8269
Germany	181	499	9614
Greece	83	170	3374
Latvia	79	203	4631
Lithuania	52	180	4248
Slovenia	54	108	2600

However, no country was able to reach this threshold. To prepare a better overview, the response rate was computed on the different levels (school, class, pupil). First, the response rate was determined on the school level. Here, the participation of the selected schools ranged from 36 percent in Austria to 83 percent in Latvia and Lithuania. On the class level, the participation was somewhat higher. Here, only eligible classes – classes in schools that did not refuse to participate – were included. With 88 percent, Austria had the lowest rate while all other countries reached over 90 percent, with Germany even reaching 98 percent. On the pupil level, the response was lower than on the previous level. Most countries achieved a response rate of 73 percent and with nearly 80 percent Latvia had the highest participation rate. Reasons for non-responses on the pupil level:

- permission from parents was not at hand;
- individual pupils were not at school due to practical training;
- absence on the day of study (authorised or unauthorised); and
- general refusal to participate by the pupil.

To determine an overall response rate the values from the different levels were multiplied. While Austria only reached an overall response rate of 23 percent Latvia was able to achieve a figure of 63 percent.

Response rate calculation for England: The response rate on the school level, respectively on the provider level, for England was calculated on the basis of the 92 providers (Further Education Colleges, Private Training provider, Sixth Form Colleges) which had been contacted. In the end, 35 out of 92 providers participated, leading to a response rate of 38 percent. Since the survey was not administered in a classroom-based setting, determining a response rate on the class level is unfeasible. To calculate the response rate on the pupil level information about how many pupils were contacted by the vocational providers, how many declined and how many were screened out is needed. Since we lack this information, the average number of learners per provider was estimated as the basis for the response rate. Therefore, the number of pupils per region was divided by the number of providers per region; certainly, this calculation can only deliver a rough estimate. With this presumption it is assumed that the providers disseminated the survey to all of their pupils, which is an ultraconservative estimation of the response rate. On the basis on the average number of pupils per provider, England reaches a response rate of 2 percent. The overall response rate is nearly 1 percent.

Table 3.7: Non-response on the school, class and pupil levels

Region	School level		Class level			Pupil level			Overall
	Participants	Response rate in %	Eligible classes	Participants	Response rate in %	Eligible pupils	Participants	Response rate in %	Response rate in %
Austria	63	36.2	126	111	88.1	2880	2097	72.8	23.2
England	35	38.0	--	--	--	--	993	--	--
Germany	131	72.4	346	340	98.3	7151	5377	75.2	53.5
Greece	76	91.6	154	154	100	3094	2396	77.4	70.9
Latvia	66	83.5	175	164	93.7	3668	2926	79.8	62.5
Lithuania	43	82.7	158	154	97.5	3624	2641	72.9	58.7
Slovenia	37	68.5	74	67	90.5	1646	1197	72.7	45.1

\*Due to the methodological approach applied in England calculating the overall net sample size is unfeasible. The number of eligible pupils required for this calculation could not be determined because reliable data on these numbers are missing. Further, because of the sample design that is not based on classes the category 'class level' is not applicable.

### 3.5.1 Weighting

As stated previously, the regional stratified sample was selected in two steps: In each stratum a previously determined number of schools were sampled in the first step with the probability proportional to size. In the second step, eligible classes within the chosen schools were selected at random with equal probabilities. In Latvia and Lithuania, a staggered design was necessary where the size of the school determines the number of classes chosen in every school. In Germany, a bivariate stratification by region and type of school was adopted. Due to the regional stratification in each participating country (except for England), the sample of pupils reflects the regional distribution of the total pupil population.

In order to adjust for unequal selection probabilities in the gross sample design weights were calculated for each country so that the weighted gross sample reflected the selection probabilities of each stratum (j). The design-weight gives more weight to under-sampled pupils and less weight to over-sampled pupils.

$$\text{Design - Weight } w_j = \frac{\text{proportion in population in cell } j}{\text{proportion in gross sample in cell } j}$$

Finally, the design-weight was normalised for the whole sample so that the total number of weighted cases is equal to the number of unweighted cases. When computing any tables or percentages, the design-weight should always be used. The distribution of cases with their respective design-weights is presented in Table 3.8. Due to the sample design described above, in England we cannot compute the design-weights.

Table 3.8: Distribution of the design-weights per country (except England)

	Austria		Germany		Greece		Lithuania		Latvia		Slovenia	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
< 0.5	--	--	57	1.1	--	--	--	--	--	--	--	--
0.5 - ≤ 1	1691	80.6	2719	50.6	894	37.3	1348	51.0	1483	50.7	689	57.5
> 1 - ≤ 1.5	406	19.4	2196	40.8	1502	62.7	783	29.6	1394	47.6	509	42.5
> 1.5 - ≤ 2	--	--	296	5.5	--	--	511	19.3	48	1.7	--	--
> 2	--	--	108	2.0	--	--	--	--	--	--	--	--
N	2097	100	5377	100	2396	100	2641	100	2926	100	1197	100
Max	1.07		2.16		1.48		1.69		1.86		1.12	

In addition to the design-weight, a non-response weight was provided. The non-response weight is the product of the design-weight and a non-response adjustment factor. The non-response adjustment factor for each stratum  $j$  was calculated as follows:

$$\text{Non-response factor } n_j = \frac{\text{proportion in design} - \text{weighted gross sample in cell } j}{\text{proportion in design} - \text{weighted net sample in cell } j}$$

In almost every country a one-step weighting process was sufficient, whereas in Germany a two-step non-response weighting process was applied: In the first step, the net sample was weighted bivariate resulting in 16x4 different weighting factors (16 federal states and four different types of schools). In the second step, the net sample was weighted univariately by region and type of school. The net sample in England was weighted univariately by region and in a second step by type of provider.<sup>11</sup> In Lithuania no school in the region of Telsiai participated. To account for this, the regions Telsiai and Klaipeda were merged. Also in Slovenia no schools in the regions of Goriška and Koroška participated in our survey and therefore Goriška was merged with the W and SW region, whereas Koroška was merged with the Podravska region. For building the nonresponse-weight, the design-weight was multiplied by the non-response factor and normalised for the whole sample. The distribution of the cases with their respective nonresponse-weights as well as the maximum value is presented in the following table 3.9.

Table 3.9: Distribution of the nonresponse weights per country

	Austria		England		Germany		Greece		Latvia		Lithuania		Slovenia	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
< 0.5	94	4.5	119	12.0	42	0.8	--	--	--	--	--	--	--	--
0.5 - ≤ 1	788	37.6	240	24.2	3139	58.4	1414	59.0	1846	63.1	1169	44.3	719	60.0
> 1 - ≤ 1.5	719	34.3	102	10.3	1412	26.3	901	37.6	742	25.4	1357	51.4	479	40.0
> 1.5 - ≤ 2	189	9.0	318	32.0	533	9.9	--	--	338	11.6	115	4.3	--	--
> 2 - ≤ 2.5	148	7.1	44	4.4	38	0.7	--	--	--	--	--	--	--	--
> 2.5 - ≤ 3	--	--	65	6.5	--	--	46	1.9	--	--	--	--	--	--
> 3 - ≤ 4	--	--	--	--	213	4.0	36	1.5	--	--	--	--	--	--
> 4 - ≤ 5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
> 5	159	7.6	105	10.5	--	--	--	--	--	--	--	--	--	--
N	2097	100	993	100	5377	100	2396	100	2926	100	2641	100	1197	100
Max	5.49		17.44		3.49		3.98		1.79		1.53		1.42	

### 3.5.2 Design Effects

In the 7EU VET study a two-stage clustered design was applied with pupils nested in classes and multiple classes nested in randomly selected schools. To compensate for the complex design of the study, the design effect was included when calculating the gross sample size. The design effect is a measure that indicates by how much a sample has to be increased to yield the same precision like an SRS (in an SRS the design effect would be 1.0). Because the design effect was unknown prior to the actual study, it was estimated based on previous studies with a similar design. All countries decided to use an estimated design effect of 2.5 for estimating the gross sample size.

The design effect is not a property of a whole survey and is instead a property of each estimate. Therefore, design effects are not identical for all variables within a single sample. In addition, actual design ef-

<sup>11</sup> National providers, meaning organisations that have multiple sites across England and therefore cannot be allocated to one specific region as well as those types of providers which could not be assigned to Further Education colleges, Private Provider or Sixth Form Colleges are excluded from the population.

fects vary for participating countries. From the cleaned 7EU VET dataset 32 variables were selected and the design effect for each one was estimated separately for each country. These estimators have to be metric variables showing a normal distribution. The formula we used (see Lohr 1999: 309) is based on Cornfield's (1951) and Kish's (1965) suggestions to approximate the efficiency of a sampling plan by dividing the variance of an estimator of the complex sample by the variance of an estimator from a simple random sample of the same size.

$$deff = \frac{V(\text{estimator from sampling plan})}{V(\text{estimator from a SRS with same number of observations})}$$

Because the design effect is influenced by the homogeneity of the cluster (e.g. class or school), certain variables showed extremely high effects. These variables mainly have a strong relation to the programme, school or class context. For example "Please indicate to what extent you agree with the following statement: School facilities are well maintained" or "Please indicate to what extent you agree with the following statements? Most of my classes are interesting". Variables of this type will yield a design effect that is well above the average because many pupils in a class or school will answer this question in the same way. In contrast, variables that only reflect an individual attribute will feature a smaller design effect. Variables that could be sorted into this category are questions about the main information sources when selecting a vocational education programme (e.g.: Sources: Parents or family members). Still, we assume that most items in our survey are interconnected with the programme the pupils have chosen and that variables without any reference to the programme are scarce. Table 3.10 provides an overview of the design effects for different variables and countries. We can clearly see that the same item can produce different values for each country. While in Greece the variable A4\_7 only shows a design effect of 1.59, the value for this item is considerably higher in Latvia (3.50).

Table 3.10: Design effect for selected variables

Variable	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	England*	Mean Design Effect
A4_7 Choice: The reputation of the programme was attractive to me	2.74	2.36	1.59	3.50	2.50	2.54	4.60	2.54
A5_2 Sources: Parents or family members	1.13	1.77	1.66	2.80	2.04	1.53	2.22	1.82
B5_1 Satisfaction: Most of my classes are interesting	4.37	3.96	3.30	7.27	8.30	2.95	10.22	5.02
B5_6 Satisfaction: School facilities are well maintained	15.58	10.56	7.71	11.02	8.62	6.19	2.28	9.95
B8 How often have you thought about leaving your current programme?	1.95	2.29	1.60	2.18	2.58	1.39	NA	2.00

\*Due to the methodological approach applied in England, calculating the design effect will not deliver reliable results. Mean design effects are calculated without the results from England. A complete list of the calculated design effects is available from the authors.

Based on the data from the 32 variables, we determined the mean design effect for each country. We used the variables selected for the quality assurance and removed variables that did not meet the requirements for a design effect calculation (e.g. dichotomous variables).

The results displayed in Table 3.11 demonstrate that the design applied in this study yields different design effects for each country. In Greece, the value of 2.19 is below the previously estimated one of 2.5, while in Austria the design effect is 4.36 and therefore considerably higher than anticipated.

Table 3.11: Mean design effect for 32 variables

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	England*	Mean Design Effect
Mean Design Effect per country	4.36	2.85	2.19	3.64	4.00	2.77	5.09	3.30

\*Due to the methodological approach applied in England, calculating the design effect will not deliver reliable results. Mean design effects are calculated without the results from England.

### 3.5.3 Effective sample size

The design effect allows the effective sample size to be calculated based on the cleaned data set. Table 3.12 clearly demonstrates the loss of precision introduced into the survey by using the complex design described above. However, it should be noted that this design is the only feasible method for obtaining a high quality survey of VET students in several European countries. Thus, one has to invest in large samples with a complex design in order to produce reliable results.

Table 3.12: Effective net sample size

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	England*
Initially planned n(effective)	1000	1500	1000	750	750	750	1000
Realised N(net)	2097	5377	2396	2926	2641	1197	997
Design effect	4.36	2.85	2.19	3.64	4.00	2.77	5.09
N(effective)	481	1887	1094	804	660	432	196

\*Due to the methodological approach applied in England, calculating the design effect will not deliver reliable results.

In Germany, the effective sample size is larger than originally planned for (n= 1887 as compared to the initially planned sample size of 1500). This is also true for the other participating countries. However, while Germany, Greece and Latvia achieved an effective sample size that meets the initially planned sample size, the other countries were unable to obtain the desired sample size.

## 3.6 Harmonisation

Certain variables within the dataset refer to nationally specific properties of the education systems like the different educational levels or grades. To be able to compare the answers given by the pupils these items must be harmonised. Internationally acknowledged schemes can be adopted for several socio-demographic variables. The following variables were harmonised:

- grades;
- vocational training direction (occupation);
- school types;
- level of educational achievement (pupil and parents); and
- nationally specific wealth items.

In the harmonisation process the national items were maintained and additional variables were computed which could be used for the international comparison. With regard to grades two new variables were computed. The first variable (e.g. A3\_1a\_int1) only distinguishes between *pass* and *fail* by using the lowest grade to pass as the threshold.

In the second variable (e.g. A3\_1a\_int2) all nationally specific schemes were transferred into one system using the 'modified Bavarian formula'. The achievements of the pupils could thereby be easily compared using a scale that ranges from *one* to *six*. The system building the base for this approach was the German grading system with "1" being the best grade and "4" the lowest grade to pass. Grades "5" and "6" are both grades stating that a pupil has failed a class. The "modified Bavarian formula" converts the grades of different countries into the equivalent German grades and is calculated as follows:

$$\frac{(\text{best possible grade} - \text{average grade of pupil})}{(\text{best possible grade} - \text{worst possible passing grade})} * 3 + 1 = \text{equivalent to German grade}$$

Contrary to the grading systems of the other partner countries, which are based on numerical scales, England uses letter grades ranging from A\* to G. To enable a transfer into one comparable system the letter grades were converted into numbers (see Table 3.13).

*Table 3.13: Grading in England*

Letter grades	Numerical equivalence
A*	1
A	2
B	3
C	4
D	5
E	6
F	7
G	8

Table 3.14 lists the different grading schemes of the participating countries. Next to the best grade, all grades in the grading spectrum that fall between the best grade and the lowest grade to pass are given. In Greece, for example, all grades ranging from 19 down to 10 fall into this category. The last column presents all failing grades in each country.

*Table 3.14: Nationally specific grading schemes*

Country	Best grade		Lowest grade to pass	Fail
Austria	1	2, 3	4	5
England	A* / A	B, C, D, E, F	G	N/U
Germany	1	2, 3	4	5, 6
Greece	20	19, 18, 17, 16, 15, 14, 13, 12, 11	10	9, 8, 7, 6, 5, 4, 3, 2, 1, 0
Latvia	10	9, 8, 7, 6, 5	4	3, 2, 1
Lithuania	10	9, 8, 7, 6, 5	4	3, 2, 1
Slovenia	5	4, 3	2	1

Pupils in each country obtain a vocational education in a variety of different occupations. To make dealing with the diverse data easier, the occupations were classified using the ISCO-88 (International Standard Classification of Occupations) coding scheme. Not only did this have the advantage that similar occupations were integrated into occupational groups which could be more easily used in the analyses, it also made the translation of the occupational terms which were given in the nationally specific languages into English unnecessary.

Coding was needed for question B2a “What is the title of the programme you are enrolled in?” and question D4 “What kind of job do you expect to have when you are about 30 years old?”. Due to the fact that the pupils are still in vocational education they do not really practice an occupation. Often the names of the training programme the pupils are enrolled in do not clearly indicate which occupation will be practiced afterwards. Classes often cater to pupils who get trained in the same field but will practice different occupations afterwards. In addition, in certain countries like Germany several programmes do not train for a specific occupation at all; instead, they offer a broad vocational education and in most cases pupils will continue with an additional vocational education and training after having finished one of those programmes. Further, when asking about the job they expect to have when they are 30 years old, the pupils often stated something that was not codable; for example, becoming a “millionaire”, “boss” or “mother”. All of these aspects complicated the coding and many answers were labelled a non-response as it was im-

possible to apply an appropriate code to them. The initial variables were kept in the dataset and for each of the two variables a new one was added (B2a\_ISCO and D4\_ISCO).

In all countries several different school types catering to the target population exist. To alleviate the making of comparisons, the ISCED level the pupils can achieve when finishing the school was used to categorise the schools. A new variable (B1\_ISCED) based on the ISCED categories was computed.

Table 3.15: Vocational school types

ISCED	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	England
ISCED 4					Aukštesniojo ir aukštojo išsilavinimo nesuteikiantis pavidurinis mokymas		
ISCED 4B					Pirminio profesinio mokymo programos, skirtos asmenims, turintiems vidurinį išsilavinimą		
ISCED 3B, 4A or 4B		Part-time vocational schools (Berufsschulen)					
ISCED 3A, 3B or 4A		Full-time vocational schools (Berufsfachschulen)					
			EPAL Epagelmatiko Lykio - Educational Lyceum, EPA.L.	Pilna laika profesionalūs pamatizglītības (arodskola), kā rezultātā profesionālās 1.kvalifikācijas līmenis	Pirminio profesinio mokymo programos, turintiems pagrindinį išsilavinimą	Poklicna srednja šola	Further Education College
ISCED 3C			EPAS  I.E.K. - Institutouto Epagelmatikis Katartisis - Vocational Training Institute	Pilna laika profesionalūs izglītības un apmācības (arodskola), kā rezultātā profesionālās 2.kvalifikācijas līmenis			Training Provider
	Berufsbildende mittlere Schule			Pilna laika profesionālā vidusskola (arodvidusskola), kā rezultātā profesionālās 3.kvalifikācijas līmenis un vidējā izglītība		Srednja tehniška ali strokovna šola	
ISCED 3B	Berufsschule/ Lehrlingsausbildung						
	Berufsbildende höhere Schule	Senior technical schools (Fachoberschulen)			Pirminio profesinio mokymo programos, turintiems pagrindinį išsilavinimą, ir suteikiančios galimybę įgyti vidurinį išsilavinimą	Gimnazija	Sixth Form college
ISCED 3A		Vocational grammar schools / trade and technical grammar schools (Berufliche Gymnasien)					
ISCED 2					Pirminio profesinio mokymo programos, neturintiems pagrindinio išsilavinimo, bet suteikiančios galimybę jį įgyti		
ISCED 2A					Pirminio profesinio mokymo programos, neturintiems pagrindinio išsilavinimo		

To code the highest level of education that had been achieved by both the pupil and his or her parents the ISCED-97 classification was used. The International Standard Classification of Education was already included in the development of the questionnaire (input harmonisation) and the partners had been asked to give the appropriate labels for each ISCED category in their national language. All of the ISCED levels with the nationally specific labels are given in Table 3.16.

To have an adequate classification system for citizenship, each partner country prepared a list with the 10 most common nationalities in our target population in their country. The most common nationalities and their corresponding labels in the dataset are listed in the following table 3.16. Citizenships not included on the list of the most common citizenships were coded as “other”. In Bavaria, Germany asking for the pupils’ citizenship was not allowed in an open question. Instead of an open answer, three categories were offered regarding the answer on citizenship: German (12), EU citizenship (41); and non-EU-citizenship (42).

Table 3.16: Highest level of education achieved

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	England
	Promotion; Habilitation	Promotion; Habilitation	University/ Technical University/ TEI	Doktora grāds	Aukštasis universitetinis išsilavinimas	Magisterij, doktorat, specializacija	Postgraduate degree or PhD/degree
ISCED 5A/6	Abgeschlossenes Studium an Hochschule, Universität, Akademie	Abgeschlossenes Studium an einer Hochschule, Universität, Akademie, Polytechnikum (Diplom, Magister, Master, Staatsexamen)		Augstākā izglītība iegūta padomju laikā			
ISCED 5B		Abgeschlossenes Studium an einer Fachhochschule (auch Abschluss einer Ingenieurschule), Schule des Gesundheitswesens	University/ Technical University/ TEI	Maģistra grāds (profesionālais vai akadēmiskais)	Aukštasis neuniversitetinis arba aukštesnysis išsilavinimas (kolegija)	Visoka šola	
				Bakalaura grāds (profesionālais vai akadēmiskais)			
ISCED 4B			IEK	1. līmeņa profesionālā augstākā (koledžas)	Profesinis povidurinis aukštojo išsilavinimo nesuteikiantis mokymas (profesinė mokykla)	Višja šola	
ISCED 3B/3C	Abschluss einer berufsbildenden mittleren Schule Lehrabschluss		Lyceum	Vidējā profesionālā (arodizglītība, vidējā speciālā) Profesionālā pamatizglītība (bez vidējās)	Vidurinis išsilavinimas	Srednja poklicna ali strokovna šola	GCSEs (or equivalent e.g. NVQ Level 2)

Finally, when asking about socio-economic status we used 11 international and up to three nationally specific wealth items that can be found in the homes of the pupils. These items were used in the PISA 2006 questionnaire and were available for all countries in the 7EU VET survey.

Table 3.17: Wealth items

	Wealth item 1	Wealth item 2	Wealth item 3
Austria	Subscription to a newspaper	Video camera	<i>Not asked</i>
Germany	Subscription to a newspaper	Video camera	ISDN or DSL connection
Greece	Home cinema	Subscription TV / pay TV platform	Alarm system for the house
Latvia	Bicycle	Snowboard	Digital camera
Lithuania	Digital camera/Video player	<i>Not asked</i>	<i>Not asked</i>
Slovenia	Digital or video camera	Personal MP3-Player	Sauna
England	Digital TV	Digital Camcorder	<i>Not asked</i>

### 3.7 Methodology Conclusions

The survey conducted as part of this project represents one of the key accomplishments of the whole project. It provides a comparative database on VET individual students across the seven participating studies and is thus one of the first studies to allow cross-national comparisons of VET students. We aimed for the highest methodological standards in order to demonstrate that it is possible to obtain internationally comparable micro data in the field of VET students. The survey employed a set of core methods in all countries while necessary national adaptations were implemented to achieve comparable data. Accordingly, we chose a prudent compromise of international standardisation and country-specific adaptive solutions that served the overall purpose of gaining comparable data. For example, we conducted self-administered surveys in all the countries using an international master questionnaire with probability samples in all countries (except England). At the same time, the sample design differed to a great extent across the countries and we also accommodated the national modules in the questionnaire in order to provide room for country-specific research questions and policy issues.

Some issues need to be addressed when replicating such a cross-national survey among VET students. First and foremost, we need to put more emphasis on methods that help tackle country-specific response rates. While in some countries we had no problem achieving overall response rates of 50 percent or more, in other countries we struggled with cultural and legal constraints. A second key issue that should be improved in future studies is the sample design and field work in the UK/England. Due to the heterogeneous structure of the VET system there we had problems obtaining a sample of similarly high quality like we achieved in the other six countries. Future studies should particularly try to learn from this experience.

Aside from these minor technical confinements, the research teams involved in the survey struggled with the country-specific definitions of VET. While some countries have a clear consecutive education system where students choose VET at a certain point in their educational career, other countries exhibit more permeable education systems where students enter VET from various pathways, and at multiple ages and points in the educational careers. In this survey we aimed to find a suitable compromise when defining the target population. However, while some countries chose to survey the international target population and, in addition, other important national segments of VET which were not part of the target population, other countries did not. For example, the restriction on 17- and 18-year-old VET students would have limited the German VET data set considerably (most white collar VET students would have been excluded because they first acquire a higher education entrance diploma before they enter VET). Fortunately, the German survey comprised all VET students regardless of their age; however, for the international comparison we are able to restrict the data set to members of the target population. For future studies it would be advisa-

ble to include all relevant/important parts of VET from all countries. At the same time, a joint target population should be defined for cross-national comparisons.

Nevertheless, the survey has been a great success. This is primarily due to the fact that we could administer the survey according to high methodological standards in the seven participating countries. The study provided key findings regarding VET students in the seven EU countries using a very similar methodology. Even though the response rates differed across the countries and the effective sample sizes did not reach the target values in all countries, we provided an extensive methodological insight and expertise to solve such problems in future studies. The detailed methodological experiences gained during the field work of this project put researchers in the position of being able to conduct such a comparative survey on an even larger scale across more or all European countries.

## 4 UNDERSTANDING NATIONAL VET SYSTEMS

Samo Pavlin and  
Julian Stanley

### 4.1 Introduction

This chapter provides a country-by-country account of VET across the seven countries in this study. These national studies draw upon different research strands from the 7EU Research Programme<sup>12</sup> to create an account of each VET system with selected findings from the qualitative research and the large-scale survey.

The rationale for organising the material in this way is as follows:

1. The summary account of the seven VET systems provides the context against which we can interpret the findings of the seven national surveys.
2. The presentation of the seven VET systems in terms of the same key features, characteristics and issues helps us to understand what these systems share and how they differ. This understanding has informed the comparative analysis which is presented in Chapter 5.
3. From a methodological point of view, this chapter is intended to mark out what can be said about the seven VET systems separately, in contrast to Chapter 5 where we seek to make comparative judgements.

Each section deals with a different country and is structured in the same way. Initially, there is an introduction to the education and training system of each country, followed by a summary of the key features of the national provision of vocational education and training: principles and governance, involvement of the social partners, programmes, quality assurance and continuing education and training. This is followed by a summary description of the VET population. This leads to an interpretation of findings from the survey relating to transition in VET and learner decision making.

The next section deals with the VET curriculum in each country. A formal description of the VET curriculum is provided and then the survey is drawn upon in order to discover how students are spending their time, what their motivation is, how satisfied they are and how well they believe they are achieving.

The last sub-section deals with careers guidance and progression. It is framed by a formal account of careers provision. This is followed by evidence from the survey relating to student aspirations and goals with regard to employment and their plans for continuing education and training.

Each national section ends with a short conclusion summarising some of the key findings in relation to each country.

---

<sup>12</sup> In particular, work packages 4, 5 and 7.

## 4.2 Lithuania

### 4.2.1 General Educational System Characteristics

In Lithuania, legislation establishes the goals of the national education policy and defines the overall structure of the education system and the mission and characteristics of the different levels of education. The same law provides a framework for the education system, including vocational education and training at the secondary level. It establishes the goals of the national education policy and defines the overall structure of the education system and the mission and characteristics of the different levels of education. Education is compulsory for people under the age of 16. Specific legislation defines the goals of Vocational Education and Training and the roles of the key authorities at the secondary level. The Law on Vocational Education and Training includes a series of provisions specifying the objectives of the vocational education and training system and the role of the principal authorities involved in the management of vocational education and training at the secondary level, including the Vocational Education and Training Council of Lithuania, the Ministry of Education and Science, county governors, municipal councils and social partners. In this respect, the Law stipulates that management of vocational education and training at the secondary level should be based on the “cooperation of state government institutions and social partners”. The latest VET Law (2008) sets out the principles for the VET system management and quality assurance, defines the national qualifications framework, introduces apprenticeship and creates measures and legal preconditions for the means to bridge Initial Vocational Education and Training (IVET) and Continuing Vocational Education and Training (CVET).

Basic education in the Lithuanian education system has two compulsory stages. The first is Primary Education (ISCED level 1) for children aged between 7 and 10 years. The second stage is Lower Secondary Education (ISCED level 2) where children (11–16) can choose between: General School, VET school at Stage 1 (ages 15–17), Youth School (*jaunimo mokykla*) (ages 12–16) or Specialised Lower Secondary School providing general lower secondary education together with pre-vocational training.

Lithuanian secondary education (ISCED level 3) consists of: Upper-secondary General Education (*vidurinis mokymas*) for students in the age range 17–18; VET at Stage 2 (*vidurinis profesinis mokymas*, ISCED level 3) for students between 17 and 19 years old; and VET at Stage 3 (*vidurinis profesinis mokymas*, ISCED level 3) for students that are between 17 and 20 years old.

Students (aged 19–20) can continue education in Post-Secondary IVET studies – Stage 4 (*povidurinis profesinis mokymas*), which is equivalent to ISCED level 4.

Lithuanian higher education is offered through university and non-university studies (ages 19–24 or 19–28) at ISCED level 5. At age 25 students can continue to doctoral studies and postgraduate art studies (ISCED level 6).

The official language of instruction is Lithuanian. Linguistic/regional minorities (Russians, Poles and Belarusians) have the opportunity to teach their children their mother tongue and national history, and to foster their culture.

Since 2000 attempts have been made to bring general and vocational education closer to the introduction of technical gymnasiums in vocational schools and the introduction of technical subjects in general programmes.

Lithuania has a centralised education system with a strong emphasis on formal education which is highly recognised and valued. However, lifelong learning, non-formal and informal learning are gaining in importance.

#### **4.2.2 Fundamental principles and legislative framework of IVET**

Vocational education and training in Lithuania is conceptualised as comprising those vocational programmes that enable individuals to acquire and improve their qualifications (Law on the Amendment of the Law on Vocational Education and Training, 2007).

In 2008, the Ministry of Education and Science delegated the implementation of the national qualifications framework (NQF) to two subsidiary institutions, the Centre for the Methodology of Vocational Education and the Centre for the Evaluation of Quality Studies of Higher Education. These institutions play important roles with regard to curriculum design, assessment coordination, qualification award, and accreditation provision.

Since 2005, vocational schools have been reorganised to transform them from state-financed to public self-governing institutions and, in addition, well-equipped technological centres of vocational training of employment sectors have been established. This reform is intended to increase the diversity of vocational schools, open up new sources of funding and decentralise management.

The measures for implementing the Lithuanian Government Programme 2008–2012 include a provision that children and youngsters with special education needs, those who have lost motivation to learn or dropped out of school should be integrated into the education system by focusing more attention on them, applying non-formal and other recognised methodologies and individualising their education curricula.

##### *Quality Assurance*

To ensure the *quality* of vocational education and training, a new VET standard structure was adopted in 2003 in order to align vocational education to the needs of the labour market, thus easing the transition from school to the labour market. VET standards are developed on the basis of labour market analysis and in close cooperation with employers. Competencies are defined in VET standards with regard to the upcoming five years on the basis of a labour market analysis and in close cooperation with employers. Since 1990, curriculum development has been the responsibility of VET providers. They have to ensure that the VET programme is being developed in accordance with a certain VET standard and general requirements which are established by the Ministry of Education and Science. A newly drafted VET programme is subject to approval by the competent employer organisation (e.g. the Chamber of Commerce, Industry and Crafts). Further, the Methodological Centre for VET organises the external evaluation of both programme content and the adequacy of resources for its implementation. If it is recognised as being compliant with legal provisions, it will be approved by the Ministry of Education and Science.<sup>13</sup> VET providers have been encouraged to develop internal quality assurance systems until 2013 and received necessary support for this purpose.

##### *Involvement of the social partners*

The infrastructure for developing the Lithuanian system of qualifications consists of: the Vocational Education Methodology Centre, the Centre for the Assessment of the Quality of Studies, the Centre for Vocational Education and Research at Vytautas Magnus University, the Labour and Social Research Institute, and the Lithuanian Labour Market Training Authority.

---

<sup>13</sup> Lithuania: Country VET report, ReferNET, 2009)

There are numerous collegiate, advisory institutions that involve the social partners, including employer organisations and trade unions.

A system of professional committees consisting of the Central Professional Committee and 17 Professional Committees of employment sectors has been established in 2010–2012. Each committee for a sector consists of nine or more members representing employers, employees and education providers. The main function of the committee is to advise the Qualifications and VET Development Centre regarding the sector's qualifications and the competencies needed to acquire them, to set priorities for the development of qualification standards by listing requirements for various levels of qualifications necessary for the specific sector of employment and to endorse standards. Qualifications standards are approved by the Minister of Education and Science and the Minister of Employment with the approval of the committee for the sector.

Other important institutions include the Council of Vocational Education, the Council of Higher Education, and the Council of Occupations.<sup>14</sup>

Partnerships between the labour market and the education community exist not only for the purpose of managing and funding vocational schools and colleges, but also for the overall development of the vocational education and training system. Partnerships between the labour market and the academic community are built into the management structure of vocational schools. In fact, the boards that manage vocational schools are mostly composed of the people representing businesses and employer groups.

In vocational schools and colleges, partnerships with businesses can take the following forms: practicums for students; equipment loans or donations; funding for renovating or outfitting premises and facilities; continuing training activities for teachers. Vocational schools and colleges usually maintain contacts with county governors and municipal authorities.

Those vocational schools holding the status of public self-governing institutions have a great deal of flexibility with regard to funding. In addition to financial contributions from their shareholders, they can also generate profits by offering services in exchange for payment (e.g. the rental of premises and equipment, or the sale of products manufactured by students in practical training workshops held at school). The profits made by the school are used to finance school activities.<sup>15</sup>

#### **4.2.3 Socio-demographic Characteristics and Transition to IVET – Comparative Aspects of VET Structures**

*VET structures: schools and programmes*

Initial vocational and training (IVET) programmes offered by vocational schools are divided into four levels according to the programme content, duration and prior education required for admission. Vocational education and training in Lithuania is offered throughout the country at secondary level by vocational schools and at the post-secondary level by colleges.

Level 1 programmes are intended for students over 14 years (no restrictions on the maximum age) who have completed the first two years of lower secondary education (i.e. those with six years of schooling). Level 1 comprises two types of programmes. The first type lasts two years and enables students to acquire the competencies they need to practise a semi-skilled trade or occupation. Those who complete the programme obtain a Qualification Certificate. The second type lasts three years and

---

<sup>14</sup> EUCEN EQF PRO LITHUANIA, 2008

<sup>15</sup> Roles, Responsibilities and Partnerships in Management of Educational Institutions Offering Vocational and Technical Training in Quebec and Lithuania, 2010

enables students to acquire the competencies they need to practise a semi-skilled trade or occupation and to complete lower secondary education. It leads to both a Qualification Certificate and a Basic School Leaving Certificate (which is proof of the successful completion of lower secondary education, ISCED level 2). Some 70–90 percent of the total time is allocated to teaching vocational subjects and 60–70 percent of this time should take the form of practical training. Practical training in a company or a school-based workshop simulating working conditions is obligatory during the last year of training and should take up to 15 weeks. Apart from general subjects, the programme includes: the fundamentals of economics, business and civil security; environmental studies, IT and foreign languages (integrated into vocational subjects or developed as separate modules). Level 1 programmes are provided in Vocational Schools (*profesinis mokymas*) and Youth Schools (*jaunimo mokykla*), which combine general and vocational education. VET programmes at the ISCED 2 level are primarily designed to retain in education students who are at risk of dropping out from the system by providing opportunities to develop practical skills and acquire a qualification. Socially and educationally neglected pupils aged 12–16, who have dropped out of a mainstream general school, are admitted to the youth schools (*jaunimo mokykla*) – an educational institution offering 5/6 years of lower secondary education. Institutions can operate as separate educational establishments or use the facilities of vocational school. Pupils are admitted at the request of their parents or guardians. General and pre-vocational courses are offered.

Level 2 programmes are intended for students aged 17–19 (no restrictions on the maximum age) who have completed lower secondary education (i.e. ten years of schooling). They last two years and enable students to acquire the competencies they need to practise a skilled trade or occupation. They lead to a Qualified Worker's Diploma (ISCED level 3C).

Level 3 programmes are intended for students aged 17–20 who have completed lower secondary education (i.e. ten years of schooling). They last three years and lead to a Qualified Worker's Diploma and a Maturity Certificate (ISCED level 3A), which gives access to higher education. 60–90 percent of the time is dedicated to vocational subjects and similar rules on practical training apply as for level 1 programmes.

Level 4 programmes are intended for students aged 19–20 who have completed upper-secondary education, accumulated 12 years of schooling and have a Maturity Certificate. They last one, one-and-a-half or two years and enable students to acquire the competencies they need to perform complicated work in areas requiring responsibility, independence, deep knowledge and the exercise of specific skills. Organisation and administration skills for team management are acquired. They lead to a Qualified Worker's Diploma (ISCED level 4B).

Vocational study programmes offered by the colleges in Lithuania are the only form of vocational education and training offered at the post-secondary level. These programmes last three or four years and focus on practical training as well as applied research. They are intended for students who have completed upper-secondary education and accumulated 12 years of schooling. They enable students to acquire the competencies they need to practise a technical trade or occupation and lead to a Professional Bachelor's Degree with a Specific Qualification in that trade or occupation (ISCED 5).

Table 4.1 sets out the admission requirements for the different levels of vocational programme available in Lithuania. Most vocational learners enter ISCED Level 3A programmes with the successful completion of lower secondary education at the age of 17.

*Table 4.1: Vocational school students by the level of ISCED; academic year 2008-2009<sup>16</sup>*

ISCED level	Description name of programme	Minimum entrance requirement	Theoretical starting age	Theoretical duration of the programme	Work-based element (y/n)	Enrolments
2A	Vocational education programmes for persons without a basic education	Unfinished basic general education	15	3	No	1343
2C	Vocational education programmes for persons without a basic education	Unfinished basic general education	15	2	No	2837
2C	Vocational education programmes for persons with special needs without a basic education	Unfinished basic general education	15	3	No	1218
3A	Vocational education programmes providing secondary education for persons with a basic education	2A	17	3	Yes	29289
3C	Vocational education programmes for persons with a basic education who are not seeking to obtain a secondary education	2A	17	2	Yes	464
4B	Vocational education programmes for persons with a secondary education	3A	19	1-2	Yes	8689

The formal qualification level of the Lithuanian population is high. Based on labour force survey data on the educational attainment of the population, in 2007 46 percent of the population aged 25–64 has attained qualification at post-secondary (both tertiary and non-tertiary) level. The proportion of those with a vocational qualification at the lower-secondary or upper-secondary education level is 23 percent. Around 30 percent of the population have completed general lower-secondary or upper-secondary education. Taking into account the educational attainment level of the population aged 20–24, Lithuania has already reached 90 percent.

Based on data from Statistics Lithuania, in 2000–2006 the number of children (0–14 years) declined by almost one-quarter. For this reason, the number of the learners is decreasing. The majority of young people in the age group 15–24 in Lithuania are in education and training. Based on data from Statistics Lithuania, in 2007 the enrolment rate was 79.2 percent. Students' enrolment statistics for VET programmes in Lithuania are provided in Table 4.2, Table 4.3.

*Table 4.2: Enrolment statistics of VET Lithuania. As at the start of the academic year<sup>17</sup>*

Year	Vocational schools	Students, thousands	Number of students admitted, thous.	Graduates, thous.
2000	84	47.0	15.0	14.9
2001	81	45.1	18.8	14.9
2002	82	44.4	19.1	13.6
2003	83	44.4	20.6	14.5
2004	73	46.3	21.0	12.6
2005	76	46.3	20.5	13.0
2006	80	45.4	19.9	12.7
2007	80	43.9	19.3	12.6

In 2008, out of 12.7 thousand graduates, 6.8 thousand were awarded maturity certificates.

<sup>16</sup> UNESCO institute for statistics, 2009

<sup>17</sup> Demographic Yearbook , Statistics Lithuania, 2009

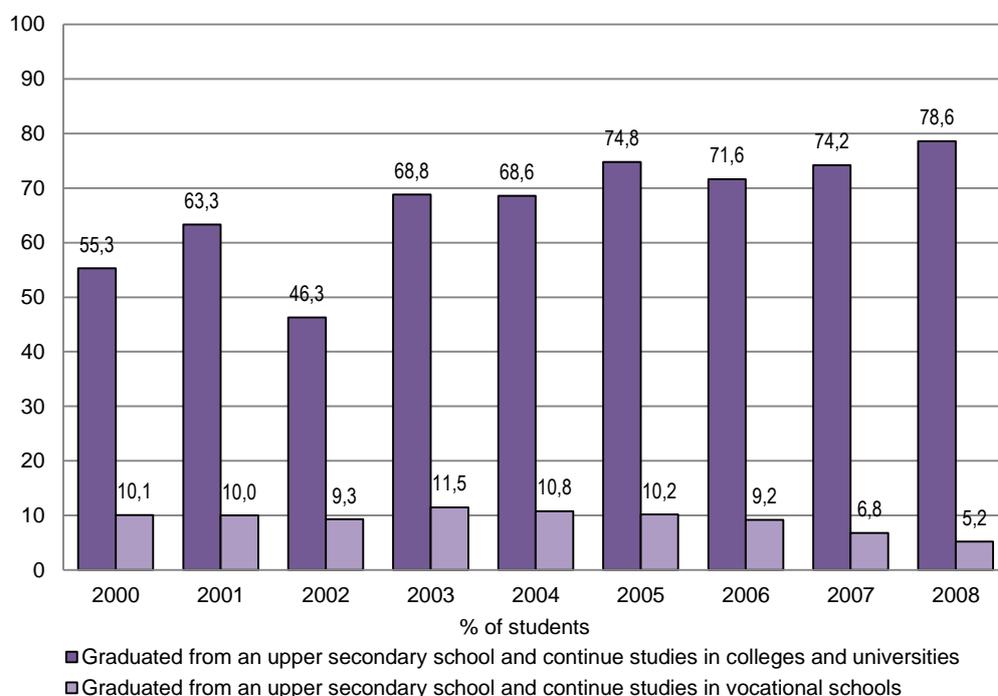
*Table 4.3: Students entering vocational schools by graduated educational establishment and beginning of academic year, Lithuania<sup>18</sup>*

	2006-2007	2007-2008	2008-2009	2009-2010
Total by educational establishment	19 913	19 319	20 518	22 659
Not finished basic school	2 764	2 642	2 664	2 690
Upper secondary school	5 200	4 189	5 403	6 920
Vocational school	779	1 072	268	411
Professional college	134	221	123	175

The number of graduates from tertiary education (ISCED 5–6) exceeds the number of graduates from ISCED 3–4 vocational and pre-vocational programmes by approximately four times. Similarly, based on data from Statistics Lithuania about entrants, the share of young people entering VET (19.3 thousand in 2007) is approximately 3 times smaller than the share of those entering tertiary education (56 thousand in 2007) which, in turn, has an impact on the proportion of VET and tertiary education graduates. Therefore, it is likely that the discrepancy between the supply and demand for skilled workers may further increase and impede the development of business.

As seen from Chart 4.1, the majority of students in upper-secondary education prefer general education orientation programmes. This is mainly due to tradition since both general education and higher education are more highly rated among the Lithuanian population than VET. According to data from Statistics Lithuania about the continuation of education and training, in 2007 about 74 percent of upper-secondary general education graduates continued studies in higher education (ISCED 5) programmes and only 6.8 percent of graduates entered VET programmes (ISCED 4). Only a few students in lower education (ISCED 2) participate in VET programmes.

*Chart 4.1: Further education of pupils who graduated from general upper secondary education<sup>19</sup> (in percent)*



<sup>18</sup> <http://db1.stat.gov.lt/statbank/default.asp?w=1280>

<sup>19</sup> Demographic Yearbook , Statistics Lithuania, 2009

There are various reasons for such trends; the first one is the historically low reputation and value of manual labour, others are the high prestige of higher education, living standards etc. Until now, normally in Lithuania only worse performing academic achievers choose a vocational direction. VET graduates are oriented to the labour market. Therefore, the general education level of training in vocational schools is lower than in general schools. Admission to higher education institutions is based on the maturity exam results in Lithuania; VET school graduates with a vocational education and practical work experience do not have access to this vital qualification.

*Findings from the 7EU VET survey: Sociodemographic characteristics and the transition to VET*

Our survey was conducted in spring of 2011 among 17–18-year-old VET students and provides a snapshot of initial VET students in Lithuania. For further analysis, 7EU-VET Lithuanian VET programmes were categorised into three following types:

- ISCED 2 – Lower secondary education programmes (“less demanding”)
- ISCED 3 – Upper-secondary education programmes (“medium demanding”)
- ISCED 4 – Post-secondary education programmes (“more demanding”).

We found that VET programmes are slightly more popular among male students (62 percent of respondents) and students with low grades. Most VET students (61 percent of respondents) come from an average socio-economic background and report they are ‘coping’ with their current income (58 percent); the majority of respondents’ VET programmes last 3 years. Programmes of the industry sector are more popular (60 percent) than of the service sector in Lithuania. Students are distributed in Lithuania approximately uniformly according to their place of residence (big cities, towns, rural).

The highest level of schooling which most pupils have achieved prior to their current programme is ISCED level 2 (80 percent), whereas 14 percent hold an educational qualification equivalent to ISCED level 3 and the proportion of pupils without school leaving certificate is 5 percent.

The results show that more pupils with a higher level of prior schooling (ISCED 3) attend a programme in the industry sector than in the service sector (13 percent vs. 11 percent). In comparison, fewer pupils who have achieved an equivalent of ISCED level 2 attend training in the industry sector than in the service sector (79 percent vs. 84 percent).

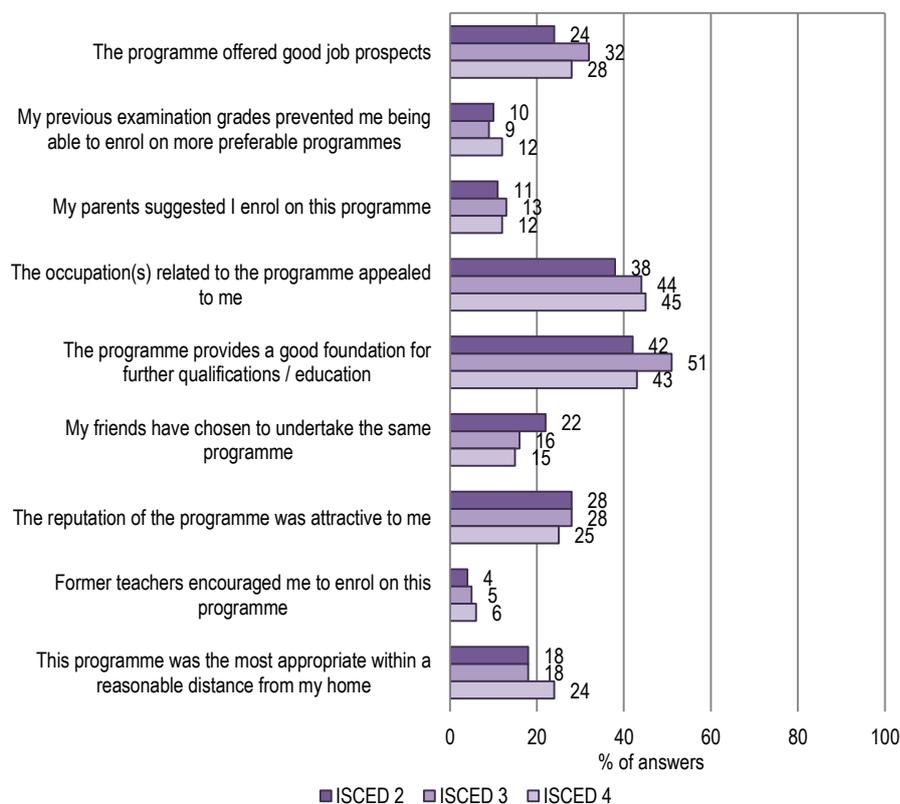
*Transition and Choice*

*Students choose programmes that provide useful practical experience for entering the workforce, prepare them well for further education and for a job that is important for society.*

Half of all the surveyed pupils in Lithuania stated that it was important for them that the programme provides a good foundation for further qualification (50 percent), 43 percent declared that it is important that the occupations related to the programme appealed to them, whereas 32 percent were attracted by the fact that the programme offers good job prospects.

The reputation of the programme was important for 28 percent of respondents, while 18 percent stated as a reason for choosing the programme that it was the most appropriate within a reasonable distance from home. The least influential factors when students were deciding on a programme were: parents (14 percent) and teachers (5 percent) who suggested enrolling in this programme and previous examination grades which prevented the pupils from enrolling in more preferable programmes (9 percent).

Chart 4.2: Factors influencing students' programme choice by programme type (in percent)



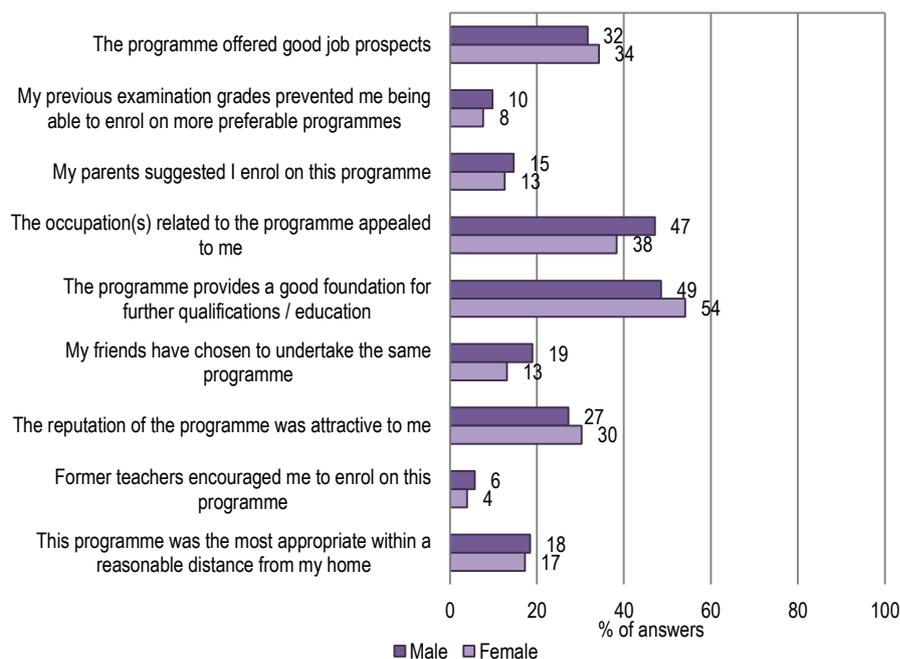
Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very".

The three factors influencing students more in Lower secondary education programmes (ISCED 2) than in Upper-secondary and Post-secondary education programmes (ISCED 3 & ISCED 4) were: the occupation appealed to them, the school was within a reasonable distance and previous grades prevent them from enrolling in more preferable programmes.

Only 21 percent of the surveyed pupils in Lithuania agreed that their programme ensured employment in the job market and 20 percent believed that their programme enabled them to receive a good starting salary when successfully completed.

Chart 4.3 shows that females more than males were influenced by the fact that their programme prepares them well for further education and training (54 percent vs. 47 percent) and they care more about the reputation of the programme (30 percent vs. 27 percent).

Chart 4.3: Factors influencing students' programme choice by gender (in percent)



Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

We can notice that girls in contrast boys agree less with the statement that their programme enables them to receive a good starting salary when successfully completed (16% vs. 23%).

We can notice that females in contrast to males agree less with the statement that their programme enables them to receive a good starting salary when successfully completed (16 percent vs. 23 percent). Males were more influenced by friends to undertake the same programme than females (19 percent vs. 13 percent) and the fact that the occupations related to the programme appealed to them (46 percent vs. 38 percent).<sup>i</sup>

Table shows that students of industry programmes (ISCED 3 and ISCED 4 types) more often decide on a programme because it offers them a good foundation for further education and because the programmes appealed to them more than those that are offered in service programmes.<sup>ii</sup>

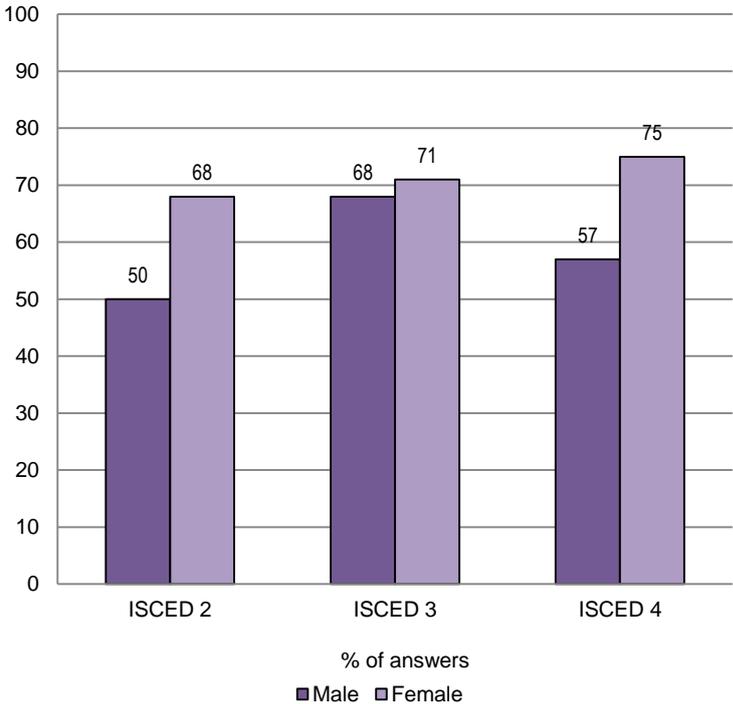
We found no connection between the factors of students' choices of training programme and their parents' employment status, which is presented in Table.<sup>iii</sup>

Pupils with better educated parents more often state that their parents had suggested enrolling in a certain programme and deciding on the programme because it offered them a good foundation for further education.<sup>iv</sup>

*Most students in the process of enrolling in VET also considered alternative programmes; however, the influence of their socio-economic background is low*

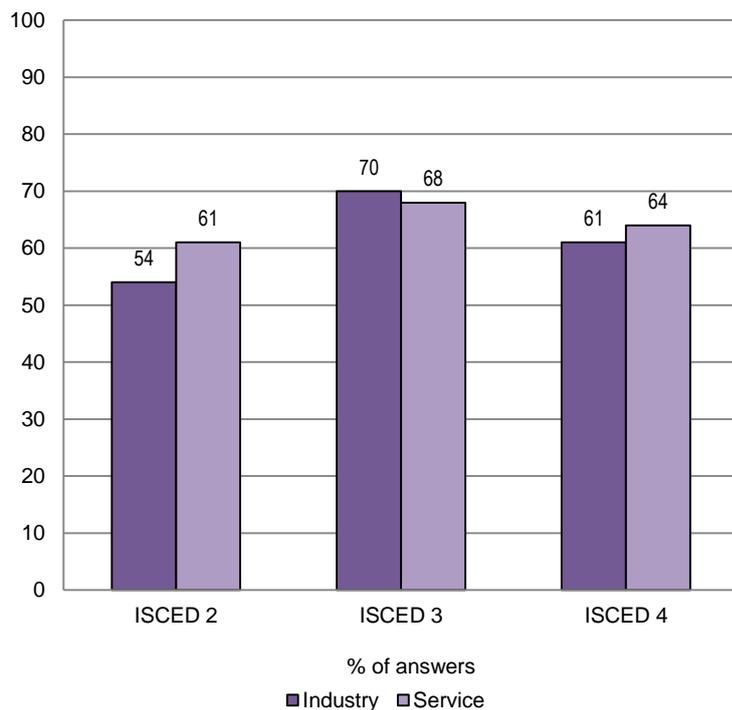
The majority of students in all three types of programmes was considering at least one other alternative programme (68 percent) when deciding on the current one.<sup>v</sup> Female students more often (71 percent) considered other alternative programmes than males (65 percent). In ISCED 4 programmes, female students more often considered alternative programmes than male students. Female students in ISCED 4 programmes more often considered alternative programmes than in ISCED 2 and ISCED 3 programmes. However, the sector-orientation of the programmes did not affect these differences.

Chart 4.4: Percentage of student also considering other alternative programmes by VET structures & gender



Question: A6 Have you considered any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't considered any alternative programme", 2=" I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"

*Chart 4.5: Percentage of student also considering other alternative programmes by VET structures & employment sector*



*Question: A6 Have you considered any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't considered any alternative programme", 2=" I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"*

We note that students of ISCED 2 considered alternative programmes less if their father was unemployed or worked part-time.<sup>vi</sup> Parents' employment status did not influence whether students had more than one programmes alternative.<sup>vii</sup>

#### **4.2.4 Vocational Curricula in Lithuania. Teaching Learning and Success in School**

##### *Vocational Curricula (school-based and practical training)*

Curricula for VET programmes in Lithuania are developed and the achievements of students are assessed on the basis of *VET standards*. The first VET standards were prepared in 1999.

The requirements for VET programmes state that all curricula taught in vocational schools should be competence-based. Practical training should comprise 60–70 percent of the total time allocated to teaching vocational subjects. Practical training in a company or a school-based workshop simulating working conditions is obligatory during the last year of training and should last up to 15 weeks. Supplementary competencies which reflect local and/or temporary needs should take up 10–15 percent of the total time allocated to teaching vocational subjects. In addition, programmes should contain the fundamentals of economics and business, as well as civil defence. Environmental studies, IT and foreign languages should be either integrated into the vocational subjects or developed as separate modules. Vocational programmes are expected to include the same general education subjects as are found in general schools.<sup>20</sup>

<sup>20</sup> National system overviews on education systems in Europe and ongoing reforms, Eurydice, 2010)

In the course of implementing the Programme for the Development of Practical Vocational Education and Training Resources, a network of sector-specific practical training centres has been created. This network will unite educational institutions evenly distributed across the territory of Lithuania, and the methodical and teaching material presented on the website will be available to all educators. Modern equipment required for the implementation of vocational education and training curricula will be installed at the sector-specific practical training centres and training institutions and institutions of other levels of education will also have access to it. To maximise the use of capacities of the practical training centres established and to provide services of the highest possible quality to the largest possible number of users, advanced methods of learning based on information technologies will be introduced and technological competencies of vocational teachers and lecturers will be improved.<sup>21</sup>

#### *Assessment and certification*

Pupils are continuously assessed by their teachers, and the results of the assessment are always communicated to the parents. Pupils in difficulty can be made to repeat a year. Those who complete general lower-secondary education obtain a basic school leaving certificate which provides access to *upper-secondary education, either general or vocational*.

The Chambers of Commerce, Industry and Crafts and the Chambers of Agriculture are responsible for the final assessment of students' competencies. Exam commissions are made up of three members representing employers, employees and the VET provider on equal terms. The social partners are also involved in preparing both the theoretical and practical tests. The qualification is awarded to all those who demonstrate all the competencies set out in the relevant VET standard. The qualification exam is split into two parts: theoretical and practical. Successful graduates receive a qualification certificate providing access to the labour market.

#### *Findings from the 7EU VET survey: Teaching, Learning and School Success*

We used the survey to explore how the learning characteristics of students correlate with their different socio-demographic characteristics, different academic achievements, and programmes' sectors. The survey also gives us an evaluation of the students' satisfaction with their curricula and their perception of the skills they are attaining through their study.

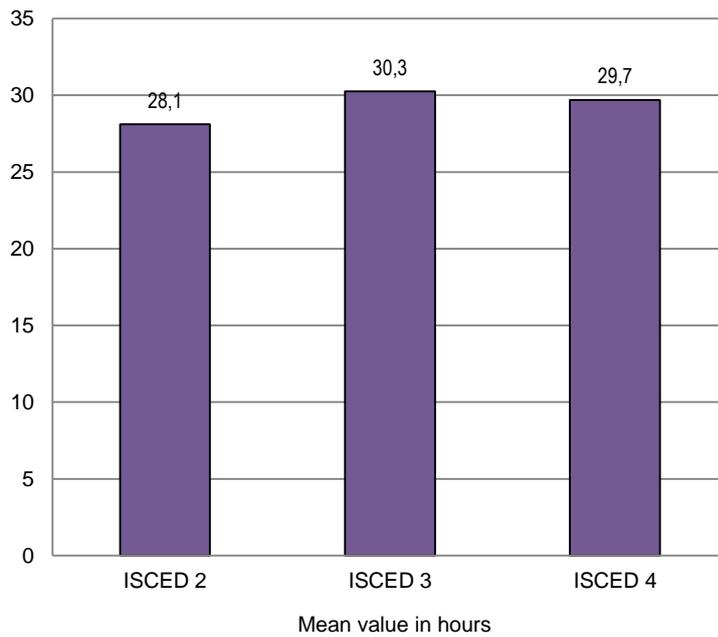
#### *VET students spend only a small amount of time studying outside school*

Chart 4.6 shows that students in ISCED 3 programmes spend more time in school (30.3 hours per week) than those in ISCED 2 (28.2 hours) and ISCED 4 (29.7 hours) programmes. There are small differences in the time spent in school between genders in the same types of programmes: males of ISCED 2 and ISCED 3 programmes spend approximately 1.5 hours per week more than females.<sup>viii</sup> Similar tendencies regarding the differences in the time spent in school were found between employment sectors in the same types of programmes: students of the industry sector spend more time in schools than those in the service sector.<sup>ix</sup>

---

<sup>21</sup> Programme for the Development of Practical Vocational Education and Training Resources  
<[http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_l?p\\_id=334382](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=334382)>

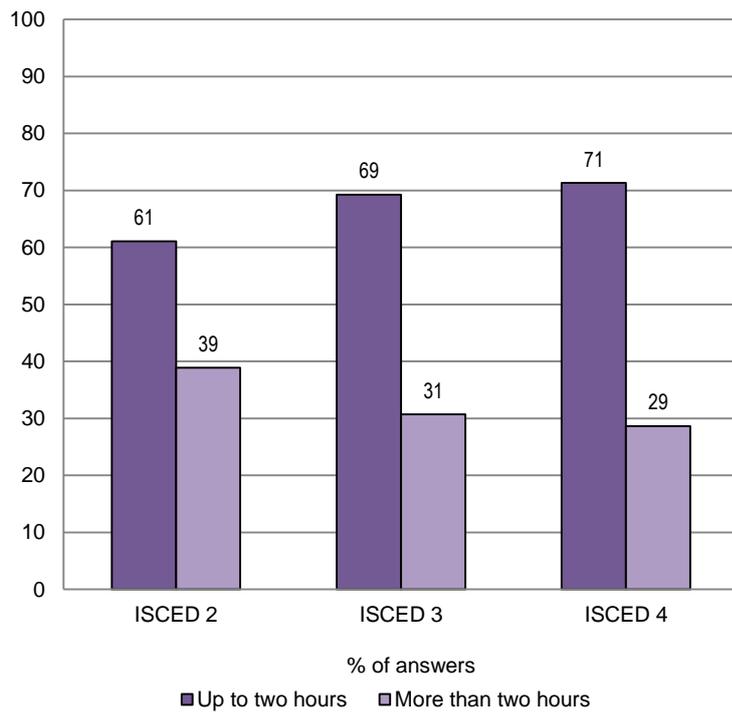
Chart 4.6: Students spending time in school by VET structures



Question: B3 How many school hours per week do you spend at school?

As presented in Chart 4.7, students spend more time studying outside school in those programmes in which they spend less time in school – more than two hours is spent: 39 percent of students in ISCED 2 programmes; 31 percent in ISCED 3 programmes and 29 percent in ISCED 4 programmes. In all programmes, very high percentages (ISCED 2: 61 percent, ISCED 3: 69 percent, ISCED 4: 71 percent) of students spend less than two hours per week studying outside school, which is a very short duration per week.

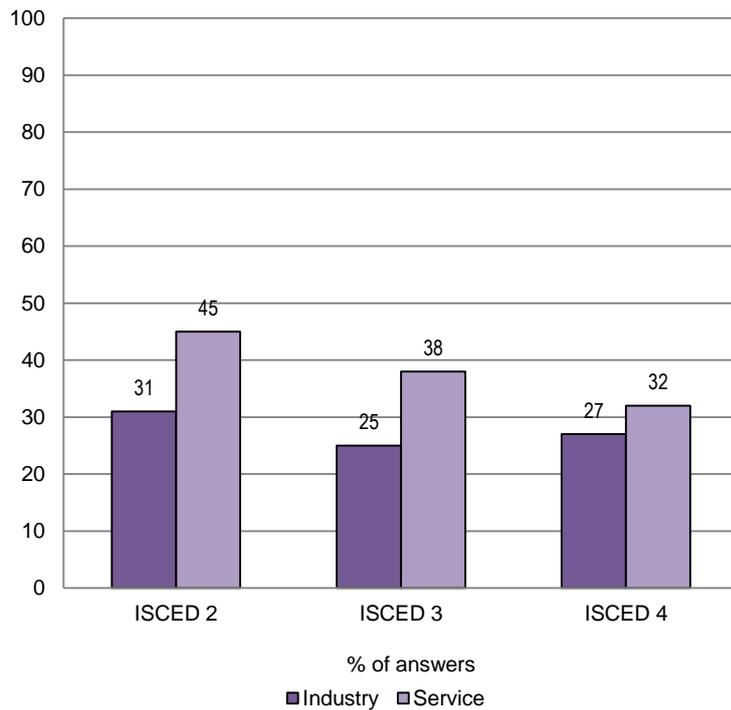
Chart 4.7: Hours students spend learning outside school by VET structures (in percent)



Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?

In Chart 4.8 we can see that in all types of programmes students spend more time studying outside school if they are in service programmes than students from industry programmes. But the difference is largest in the ISCED 2 programmes (45 percent : 31 percent).

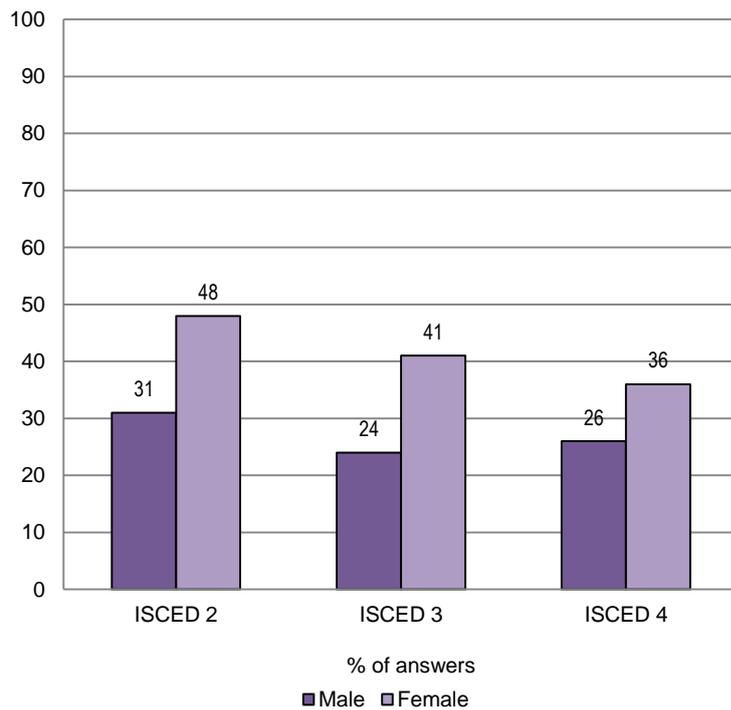
*Chart 4.8: Hours students spend learning outside school by VET structures & programme orientation (in percent)*



*Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"*

It is no surprise that similar tendencies of the time spent studying outside school could be found between genders in the same types of programmes: females spend more time studying outside schools than males, as presented in Chart 4.9.

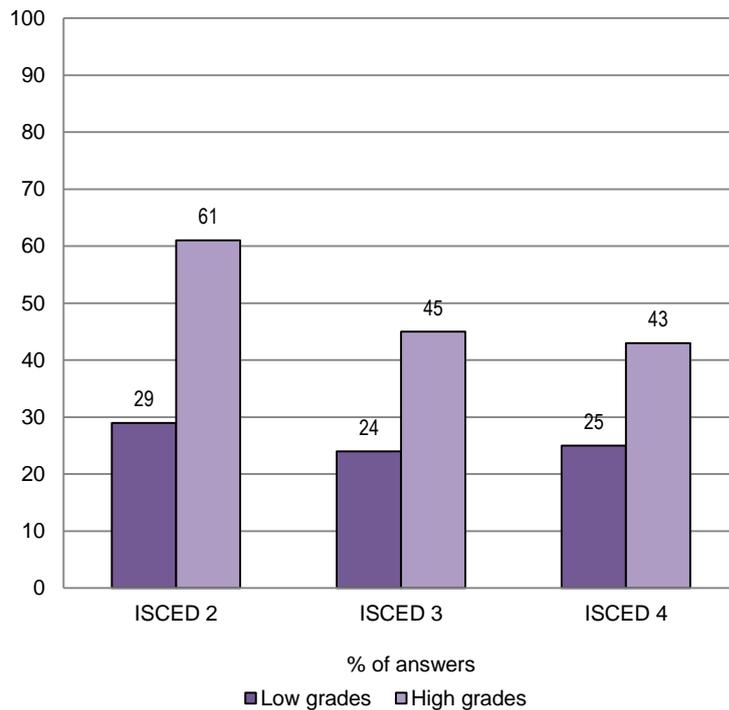
Chart 4.9: Hours students spend learning outside school by VET structures & gender (in percent)



Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"

Another expected result is provided in Chart 4.10. We can see that more students with higher grades than students with low grades spend time studying outside school (more than two hours per week) in all types of programmes. The difference is noticeable in ISCED 2 programmes, where only 29 percent of students with low grades learn for more than two hours outside school compared to 61 percent of those with high grades. In ISCED 3 programmes, these percentages are much lower: 24 percent and 45 percent. We see the tendency of students in highly demanding programmes to spend fewer hours studying outside school.

Chart 4.10: Hours students spend learning outside school by VET structures & School Success (in percent)



Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"

*VET students enjoy practical learning and consider understanding the substance of learning as very important – they do not like classical academic learning*

According to Chart 4.11 there are no large differences in study behaviour among the students of the three types of VET programmes in Lithuania. The differences are found in the following: seeing importance in fully understanding what they need to learn (ISCED 4 – 36 percent vs. ISCED 3 – 45 percent and ISCED 2 – 46 percent); enjoying learning (ISCED 4 – 18 percent vs. ISCED 3 – 24 percent and ISCED 2 – 27 percent); interest in general subjects (ISCED 4 – 24 percent vs. ISCED 2 – 34 percent), striving for the highest possible marks (ISCED 4 – 32 percent vs. ISCED 3 – 41 percent and ISCED 2 – 37 percent), which are mentioned less by students from the ISCED 4 programme.

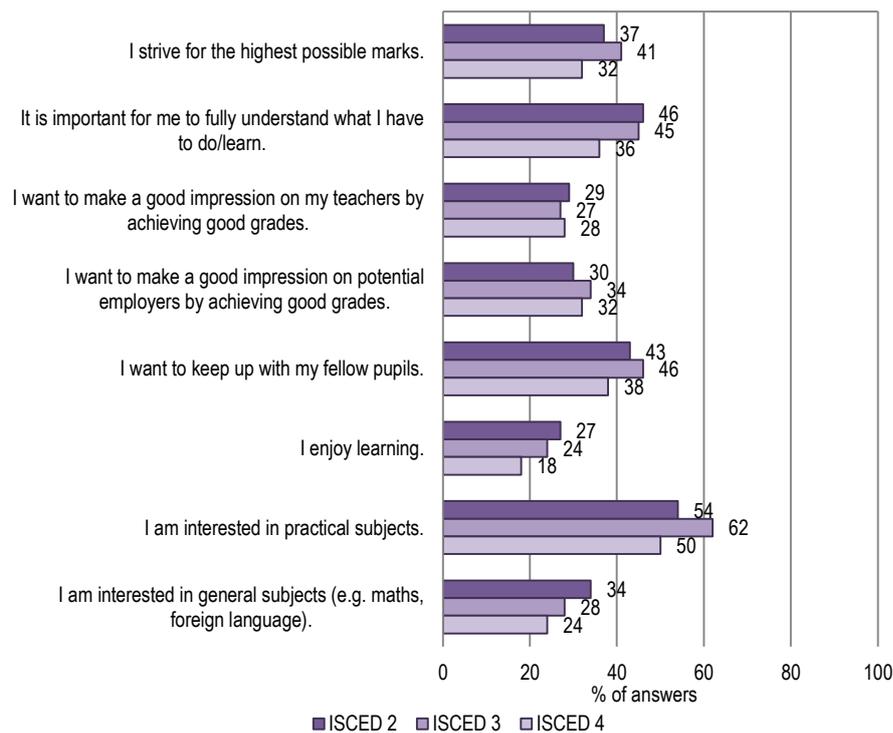
We can propose a hypothesis that the relatively low motivation of students in ISCED 4 programmes in relation to academic learning is based on the particularity of their educational background. The stage 4 programmes (ISCED 4) attract people who have attained secondary education or completed a curriculum of a general education secondary school and seek to acquire a profession as a qualified worker.

When comparing students by programme orientation, we can notice that a higher percentage of students in ISCED 4 programmes from the industry sector enjoy practical training (59 percent) than those from service programmes (44 percent). However, students in the service sector more often want to keep up with their fellow pupils (47 percent) than students from the industry sector (33 percent). Students in ISCED 3 programmes in both sectors are interested in general subjects: in the industry sector programme 32 percent of them and in the service sector programme 35 percent. Also they would like to make a good impression on potential employers by achieving good grades: in the industry sector – 32 percent and in the service sector – 37 percent. 27 percent of service sector students in

ISCED 3 type programmes enjoy learning, and 21 percent of industry sector students do so in ISCED 3, but only 14 percent of industry sector students in ISCED 4 programmes.<sup>x</sup>

In more demanding (ISCED 3 and ISCED 4) programmes, females more often like to keep up with their fellow students (49 percent, 49 percent) and are more often interested in general subject training (36 percent, 26 percent) than males (23 percent, 23 percent). While in less demanding programmes (ISCED 2) males more often strive for the highest marks, want to make good impression on employers by achieving good grades and believe that it is important to fully understand what they need to learn.<sup>xi</sup>

Chart 4.11: Students' learning incentives for learning by VET structures (in percent)



Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Student success is connected with students' study behaviour in all three types of programmes (Table 4.4), but the connection is stronger in the ISCED 3 and ISCED 4 programmes. In all three types of programmes, students with lower grades less often strive for higher marks, less often find it important to fully understand what they have to learn, and less often enjoy learning than those with higher grades.

*Table 4.4: Students' learning incentives by VET structures & School Success (in percent)*

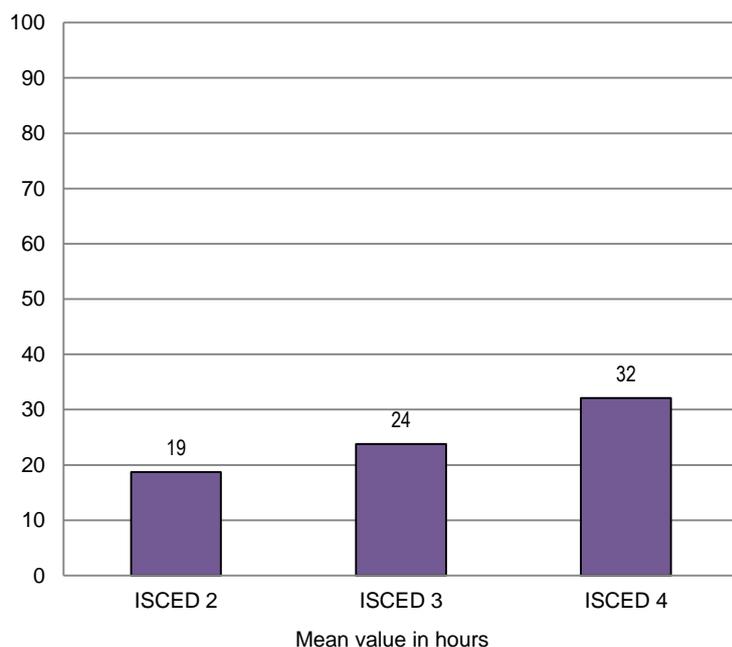
	ISCED 2	ISCED 3	ISCED 4
<i>Low grades</i>			
I strive for the highest possible marks.	31	33	27
It is important for me to fully understand what I have to do/learn.	44	39	32
I want to make a good impression on my teachers by achieving good grades.	27	23	27
I want to make a good impression on potential employers by achieving good grades.	28	31	31
I want to keep up with my fellow pupils.	43	43	37
I enjoy learning.	22	20	15
I am interested in practical subjects.	54	59	49
I am interested in general subjects (e.g. maths, foreign language).	28	24	23
<i>High grades</i>			
I strive for the highest possible marks.	53	60	60
It is important for me to fully understand what I have to do/learn.	54	60	56
I want to make a good impression on my teachers by achieving good grades.	36	37	42
I want to make a good impression on potential employers by achieving good grades.	33	45	45
I want to keep up with my fellow pupils.	42	53	47
I enjoy learning.	36	32	32
I am interested in practical subjects.	52	70	58
I am interested in general subjects (e.g. maths, foreign language).	45	37	33

*Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*  
*() n is less than 10, (()) n is less than 5*

*A small percentage of VET students do paid work*

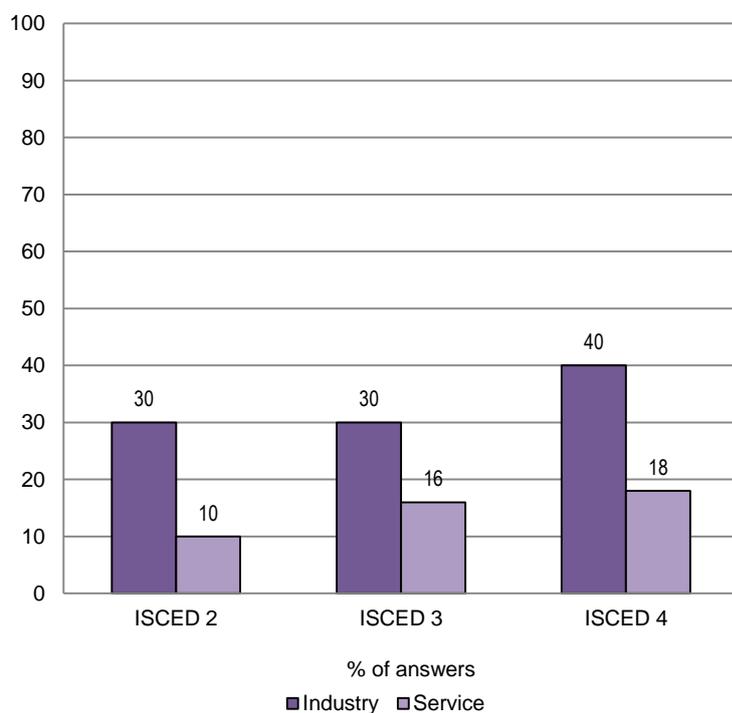
Chart 4.12 shows that only 24 percent of the interviewed VET students were doing paid work. The difference based on VET structure is insignificant, with only 8 percent more in ISCED 4 programmes. Students in industry programmes have more often done paid work than students from service programmes in all types of programmes, see Chart 4.12.<sup>xii</sup> Students in ISCED 3 and ISCED 4 types of programmes from big cities more often have paid work experience than those from a country village or town.<sup>xiii</sup>

Chart 4.12: Students doing paid work by VET structures



Question: C6a Have you worked for payment during the last year outside your programme (eg. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

Chart 4.13: Students doing paid work by VET structures & programme orientation (in percent)



Question: C6a Have you worked for payment during the last year outside your programme (eg. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

Male students have more often work experience than female students in all types of programmes.<sup>xiv</sup> In ISCED 3 and ISCED 4 programmes, students with a below-average SES index are more likely to be involved in paid work than those with an average or above-average SES index (31 percent vs. 22 percent).<sup>xv</sup> And in ISCED 3 programmes students with low grades are more likely to be involved in paid work than those with high grades (28 percent vs. 16 percent).<sup>xvi</sup>

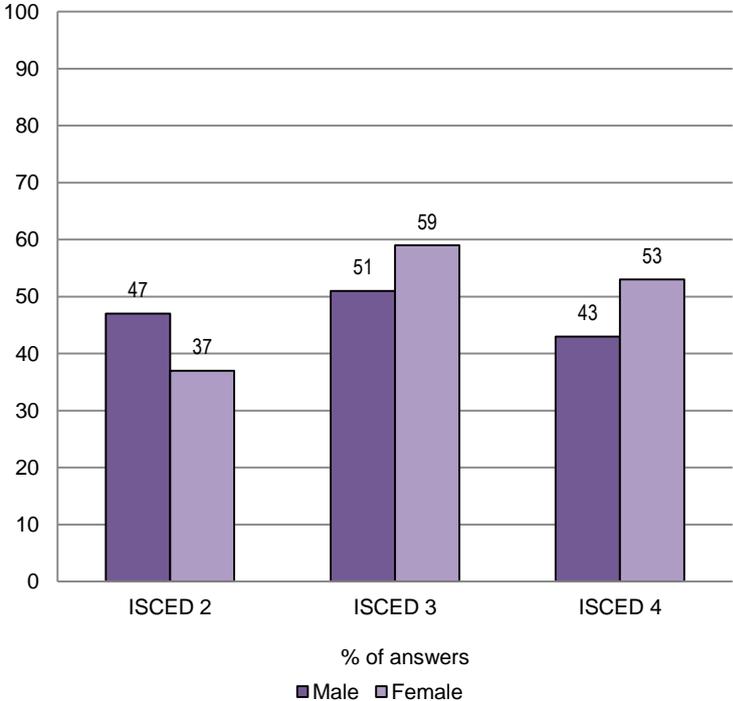
*Students in upper-secondary (ISCED 3) VET programmes are more satisfied with their programmes than students in lower-secondary (ISCED 2) and post-secondary (ISCED 4) programmes*

There is a difference in satisfaction with the programme depending on the programme type: mostly students at the ISCED 2 and ISCED 4 levels are *unsatisfied* with their programmes (58 percent and 54 percent), while students of the ISCED 3 programme are mainly (58 percent) satisfied.

If we take a look at ISCED 2 programmes based on the programme orientation there is quite some difference: 48 percent of students in industry programmes are satisfied with their programme, while only 38 percent of service programme students are satisfied with their programme.<sup>xvii</sup> In the same type of programme we can also notice differences in satisfaction between genders, where 47 percent of males are satisfied with their programme and only 37 percent of the females (Chart 4.14).

As noted above, students of the ISCED 3 programme are satisfied: 52 percent of students in industry programmes are satisfied with their programme, and 57 percent of service programmes students are satisfied with their programme. There is no difference in satisfaction with the ISCED 4 programme based on programme orientation: both employment sectors are equally satisfied, but only at the level of 46 percent.

Chart 4.14: Satisfaction with the current programme by VET structures & gender (in percent)



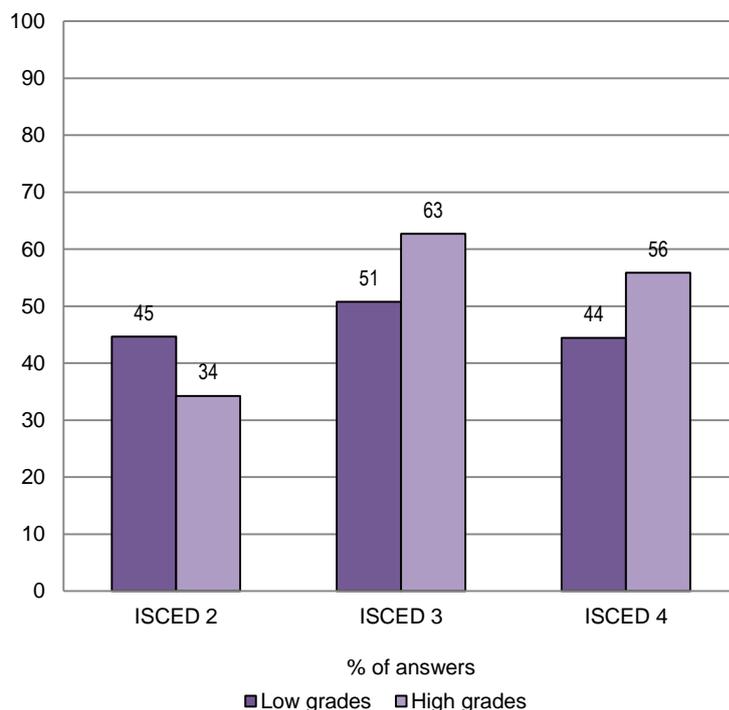
Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

*Students of upper- and post-secondary (ISCED 3 & ISCED 4) education programmes with higher grades are more satisfied with their programmes than students with lower grades. But students with lower grades in lower-secondary (ISCED 2) VET programmes are more often satisfied than those with higher grades.*

We can see in Chart 4.15 that learner success is associated with students' satisfaction with the programme in ISCED 3 and ISCED 4 programmes, where students with high grades are more often satisfied than those with low grades. The situation in ISCED 2 programmes is the opposite in Lithuania – students with low grades are more often satisfied with their programme than those with high grades.

The explanation of such finding could be the following. VET programmes at the ISCED 2 level in Lithuania are primarily designed to retain in education students who are at risk of dropping out from general school by providing opportunities to develop practical skills and acquire a qualification. As found in the interviews with VET experts, Lithuanian vocational schools work under a specific methodology with students who do not have the ability to learn. Efforts are being made to improve their qualifications with respect to their learning abilities. Learners do not have to be afraid to go to school. Teachers use different ways to enhance the motivation of students: special techniques to teach students basics, assignments adapted to students' abilities, methods of individual training, participation in contests, activities in projects, and practice mobility abroad. The relatively high level of satisfaction in relation to these programmes reported by students with low grades suggests that these programmes are well matched to their audience.

*Chart 4.15: Students' overall satisfaction with the programme by VET structures & school success (in percent)*

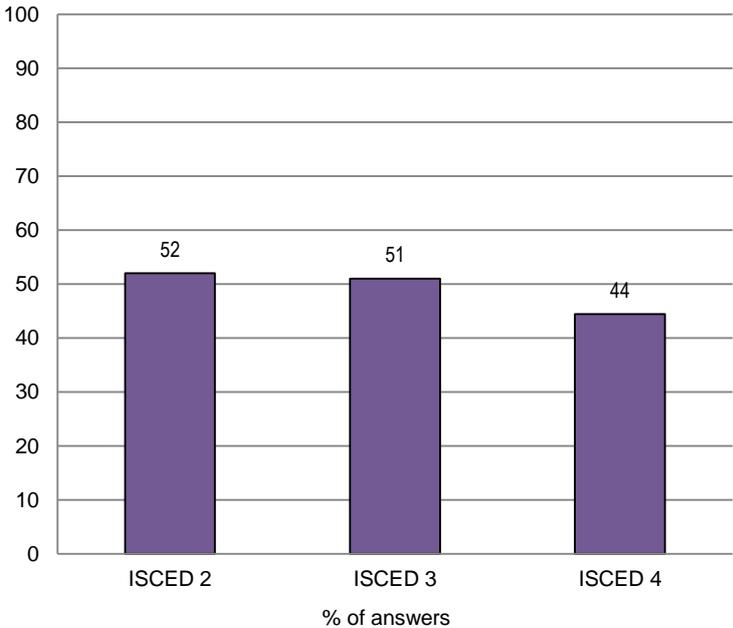


*Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*Differences in the ISCED level of the VET programme and in student grades are associated with differences in students' perceptions of how well they are prepared for work in terms of particular competencies*

Chart 4.16 presents data showing that in ISCED 2 and ISCED 3 programmes half of the students believe they are skilled to manage occupational tasks independently, while in ISCED 4 programmes there are only 44 percent of such students.<sup>xviii</sup> One possible explanation is differences in the curriculum experienced over time by the learners. The survey involved students of 17–18 years. According to the curriculum of the ISCED 2 and ISCED 3 programmes, students have already got practical training, while students of the ISCED 4 programme have just started to learn in their programme.

*Chart 4.16: Percentage of VET students who have acquired selected generic competence to a large extent by VET structures*



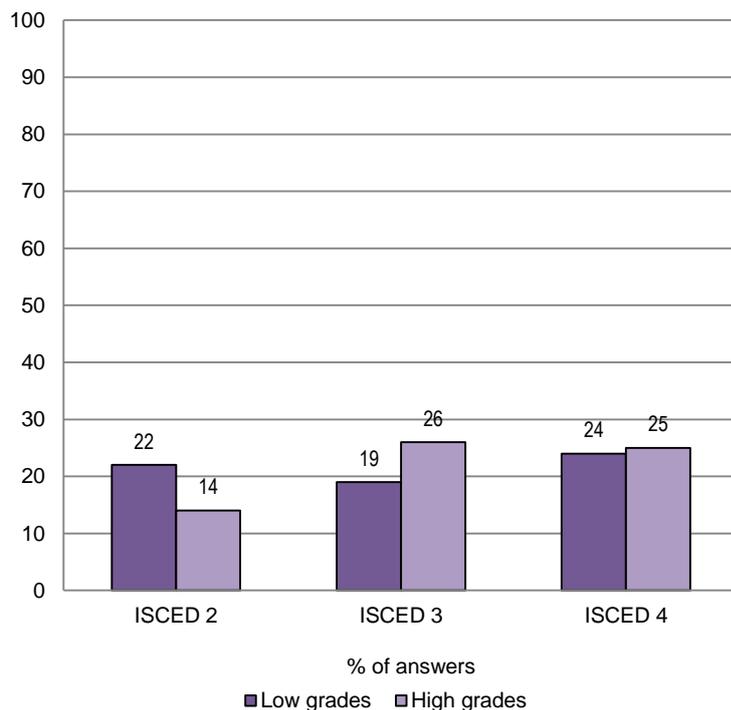
*Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"*

Females in all programmes more often than males believe they are able to manage occupational tasks independently.<sup>xix</sup> Programme orientation, parents’ education and socio-economic status do not influence skill acquisition in all VET programmes’ students.

Chart 4.17 shows that student performance is associated with the belief that students have acquired the skills to manage occupational tasks independently of students from upper-secondary (ISCED 3) and post-secondary (ISCED 4) programmes. In this case, the higher the grades, the higher will be the percentage of students reporting that they have acquired that skill.

Most students from all three types of programmes (81 percent, 79 percent and 70 percent) believe that they are not prepared well overall.<sup>xx</sup> The overall acquisition of competencies is influenced by student performance in ISCED 3 and ISCED 4 programmes, with a higher percentage of students with high grades acquiring competencies than those with low grades.<sup>xxi</sup> Also the acquisition of competencies by ISCED 3 programmes’ students is influenced by the SES index: the higher the SES, the higher will be the percentage of students that acquired that skill.<sup>xxii</sup>

Chart 4.17: Percentage of VET students who acquired competencies overall to a large extent by VET structures & school success



Question: E1b Overall, to what extent does your current programme prepare you to these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Most of the interviewed Lithuanian experts defined the proper balance as 60–70 percent of practical hands-on training and general theoretical training in a vocational education programme. The theoretical training should serve to understand the modern technologies used and provide students with the foundations for occupational work or further education. It is expected that the network of newly built and equipped, sector-related vocational training centres in Lithuania will enhance the development of the up-to-date practical skills needed to match the needs of the labour market.

#### 4.2.5 Career Guidance and the Progression of IVET Graduates

The financing of Lithuanian education institutions is currently organised on the basis of pupil/student 'baskets' (per capita). Pupil 'basket' funds are allocated to municipalities as targeted grants. Therefore, general education schools are not concerned about the share of information about VET schools for their pupils.

##### *National System of Career Guidance*

Responsibility for the career guidance system in Lithuania is shared between the Ministry of Education and Science and the Ministry of Social Security and Labour:

- The Ministry of Education and Science delivers information on the available training opportunities. It is also responsible for the design and implementation of programmes that support the development of career planning skills intended for learners of general education and vocational training schools.
- The Ministry of Social Security and Labour is responsible for labour market career guidance, i.e. it develops and organises the services that provide labour market career guidance services and provides information and forecasts about the labour market. The Ministry performs

these functions through the Lithuanian Labour Exchange and the Lithuanian Labour Market Training Authority (which operate local agencies).

Lithuania has joined a European information system comprised of two parts: EURES (search of jobs in Europe)<sup>22</sup> and PLOTEUS (learning opportunities in Europe).<sup>23</sup> A national open vocational information, counselling and guidance system, AIKOS, has been set up to make educational and labour market data widely available to career guidance providers.<sup>24</sup>

The National Resource Centre for Vocational Guidance of Lithuania (Euroguidance Lithuania) develops the information resources for vocational guidance and counselling practitioners at the national and international level in relation to education, training and mobility opportunities.<sup>25</sup> Career Information Points provide information on the issues of career choices, training and employment opportunities in the country and abroad and on the situation within the labour market and vocations. The services are intended for learners at general and vocational educational schools, their parents and teachers.

#### *Findings from the survey*

*The survey provides an insight into the way in which learners experience progression. In particular, it reveals what their career goals are, what influences these goals and how these intentions relate to socio-demographic characteristics.*

#### *Survey results*

*The majority of students are driven more by personal career aspirations than professional and material goals; differences in gender and grades are associated with differences in career goals.*

Most often (approximately 73 percent) VET students strive for a job that will make and maintain relationships with others, good relationships with colleagues, and make them happy. Also VET students often (approximately 69 percent) strive for job that would allow them opportunities to learn new things at work and have responsibility at work. Chart 4.18 shows that students of ISCED 3 and ISCED 4 VET programmes more often than those from ISCED 2 programmes strive towards all the goals we asked about; however, the biggest difference (20 percent) was for the goal of gaining job security.

Students of ISCED 3 service programmes more often strive towards maintaining relationships with others, good relationships with colleagues, jobs that make them happy, having opportunities to learn new things at work and responsibility at work, advancing to a high level of status in society, obtaining solid occupational proficiencies than students from industry programmes. Striving towards goals was not influenced by programme sector in the case of students from ISCED 4 and ISCED 2 programmes.<sup>xxiii</sup>

---

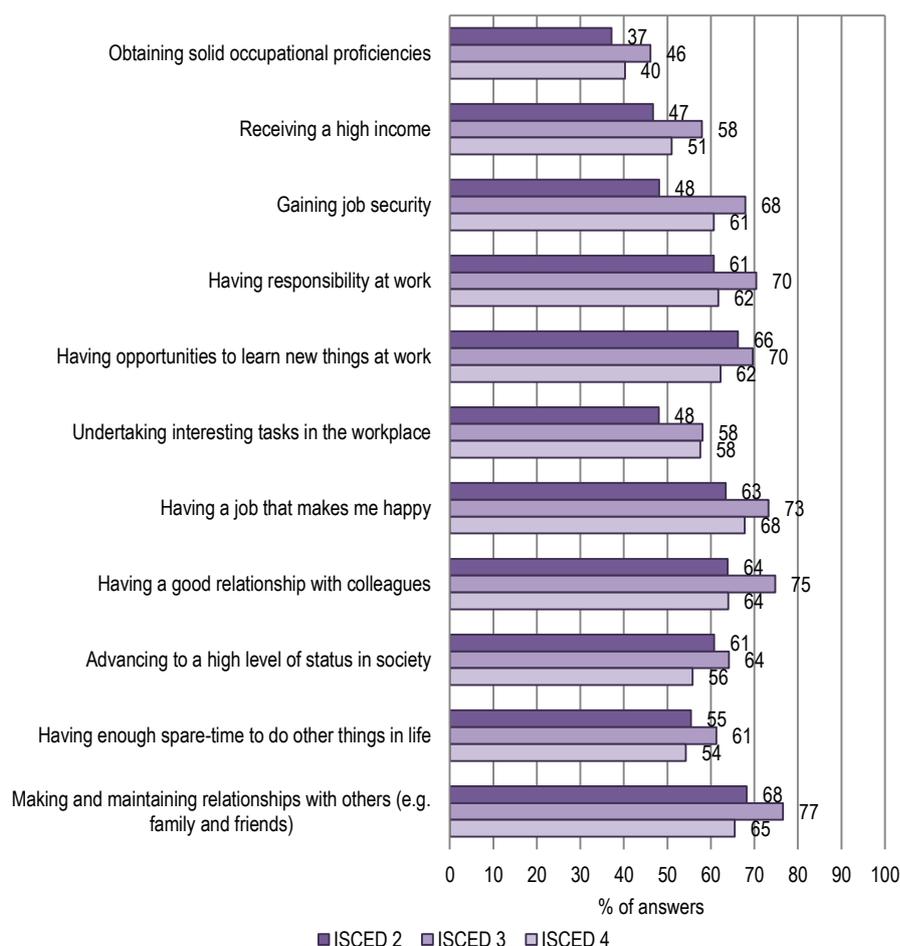
<sup>22</sup> [europa.eu.int/eures](http://europa.eu.int/eures)

<sup>23</sup> [europa.eu.int/ploteus](http://europa.eu.int/ploteus)

<sup>24</sup> [www.aikos.smm.lt](http://www.aikos.smm.lt)

<sup>25</sup> Euroguidance Lithuania [www.euroguidance.lt/en/](http://www.euroguidance.lt/en/)

Chart 4.18: Drivers of VET students' professional development by VET structures (in percent)



Question: D1 To what extent do you agree with following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Students from ISCED 3 programmes are more influenced by their place of residence regarding all goals except having a good relationship with colleagues. The goal of having a good relationship with colleagues is not influenced by place of residence in all programme types. Students from big cities or suburbs more often than students from towns and country villages strive towards all goals.<sup>xxiv</sup>

Gender also influences goal striving in ISCED 3 and ISCED 4 VET programmes (see Table 4.5). Female students of ISCED 3 and ISCED 4 programmes more often than male students strive towards all goals. Only one goal – receiving a high income – is not influenced by gender: 54 percent of males and 58 percent of females strive towards this goal.

In ISCED 2 programmes female students are the ones who more often strive towards making and maintaining relationships with others, but male students more often strive towards all other goals (see Table 4.5).

Table 4.5: Drivers of VET students' professional development by VET structures & gender (in percent)

	ISCED 2	ISCED 3	ISCED 4
<b>Male</b>			
Obtaining solid occupational proficiencies	43	42	36
Receiving a high income	49	57	50
Gaining job security	49	65	58
Having responsibility at work	61	65	57
Having opportunities to learn new things at work	70	66	57
Undertaking interesting tasks in the workplace	50	55	55
Having a job that makes me happy	64	68	64
Having a good relationship with colleagues	64	70	58
Advancing to a high level of status in society	63	60	51
Having enough spare-time to do other things in life	61	60	51
Making and maintaining relationships with others (e.g. family and friends)	64	72	61
<b>Female</b>			
Obtaining solid occupational proficiencies	31	52	52
Receiving a high income	44	59	55
Gaining job security	46	72	68
Having responsibility at work	60	79	72
Having opportunities to learn new things at work	62	75	75
Undertaking interesting tasks in the workplace	46	63	64
Having a job that makes me happy	63	80	78
Having a good relationship with colleagues	64	82	80
Advancing to a high level of status in society	58	70	68
Having enough spare-time to do other things in life	48	64	62
Making and maintaining relationships with others (e.g. family and friends)	73	84	78

Question: D1 To what extent do you agree with following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

( ) n is less than 10, (()) n is less than 5

Students from ISCED 3 programmes and with parents with an upper-secondary education more often strive towards gaining job security and having enough spare time to do other things in life than students whose parents have a tertiary education or lower education. Otherwise, parents' education does not influence students' goal striving.<sup>xxv</sup>

Students from ISCED 2 and ISCED 3 programmes with an average and below-average socio-economic status (SES) more often strive towards gaining job security than those with an above-average SES. In the case of striving towards having responsibility at work: the higher the SES, the higher will be the percentage of students from every type programme who are striving towards having responsibility at work.<sup>xxvi</sup>

*Table 4.6: Drivers of VET students' professional development by VET structures & school success (in percent)*

	ISCED 2	ISCED 3	ISCED 4
<i>Low grades</i>			
Obtaining solid occupational proficiencies	38	42	40
Receiving a high income	42	55	54
Gaining job security	50	66	60
Having responsibility at work	65	66	61
Having opportunities to learn new things at work	64	68	60
Undertaking interesting tasks in the workplace	53	54	56
Having a job that makes me happy	59	70	65
Having a good relationship with colleagues	64	73	62
Advancing to a high level of status in society	66	62	55
Having enough spare-time to do other things in life	52	59	54
Making and maintaining relationships with others (e.g. family and friends)	67	75	63
<i>High grades</i>			
Obtaining solid occupational proficiencies	39	55	50
Receiving a high income	57	67	47
Gaining job security	45	75	68
Having responsibility at work	53	81	67
Having opportunities to learn new things at work	71	76	74
Undertaking interesting tasks in the workplace	42	67	65
Having a job that makes me happy	74	83	87
Having a good relationship with colleagues	65	82	74
Advancing to a high level of status in society	52	73	68
Having enough spare-time to do other things in life	60	68	67
Making and maintaining relationships with others (e.g. family and friends)	70	84	83

*Question: D1 To what extent do you agree with following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

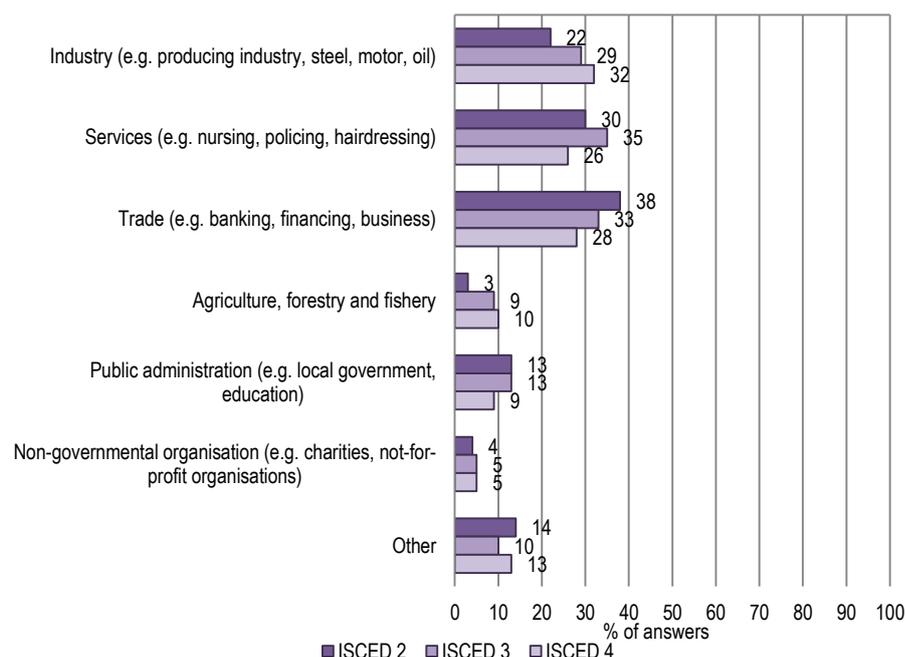
*( ) n is less than 10, (()) n is less than 5*

Students from ISCED 3 programmes with high grades more often strive towards all mentioned goals than those with low grades, as shown in Table 4.6. On the other side, school performance only influences striving towards having a job that makes one happy and making and maintaining relationships with others in the case of students from ISCED 4 and ISCED 2 programmes, where students with higher grades more often strive towards those goals.

*The most popular employment sector among students is services, followed by trade and industry*

Most students in upper-secondary and post-secondary VET programmes would like to work in the services sector, followed by trade, the industry sector, public administration, and other sectors. Most students in lower secondary VET programmes would like to work in the trade sector, followed by services, the industry sector, public administration, and other sectors (see Chart 4.19).

Chart 4.19: Sectors students would like to work in by VET structures (in percent)



Question: D5 Which sector would you like to work to the most?

In all three types of programmes students in industry programmes would more often choose the industry sector and the trade sector to work in and students from service programmes would more often choose the services sector and the trade sector ( Table 4.7).

Table 4.7: Sectors students would like to work in by VET structures & programme orientation (in percent)

	ISCED 2	ISCED 3	ISCED 4
<b>Industry</b>			
Industry (e.g. producing industry, steel, motor, oil)	39	38	38
Services (e.g. nursing, policing, hairdressing)	(22)	23	19
Trade (e.g. banking, financing, business)	30	32	25
Agriculture, forestry and fishery	((6))	12	14
Public administration (e.g. local government, education)	((2))	12	(7)
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((2))	4	(6)
Other	(15)	10	15
<b>Service</b>			
Industry (e.g. producing industry, steel, motor, oil)	(9)	17	22
Services (e.g. nursing, policing, hairdressing)	36	51	39
Trade (e.g. banking, financing, business)	44	33	32
Agriculture, forestry and fishery	((1))	5	((5))
Public administration (e.g. local government, education)	21	13	(12)
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((6))	6	((3))
Other	(13)	9	(11)

Question: D5 Which sector would you like to work to the most?

( ) n is less than 10, (( )) n is less than 5

As revealed in Table 4.8, students in ISCED 3 programmes from a country village or farm would more often (17 percent) choose agriculture, forestry and fishery to work in than students from towns (6 percent) or big cities (5 percent). But students of ISCED 2 programmes from country villages would more often choose services (37 percent), trade (37 percent), public administration (18), industry (12), other sectors ((12)) and very rarely agriculture, forestry and fishery ((5)). Services (e.g. nursing, policing, hairdressing) would be chosen by 43 percent of ISCED 2 programmes students living in small cities, 37 percent of ISCED 2 programmes students living in country villages and only 13 percent living in big cities.

*Table 4.8: Sectors students would like to work in by VET structures and residency (in percent)*

	ISCED 2	ISCED 3	ISCED 4
<i>Country village or a farm</i>			
Industry (e.g. producing industry, steel, motor, oil)	((12))	27	29
Services (e.g. nursing, policing, hairdressing)	37	35	32
Trade (e.g. banking, financing, business)	37	24	26
Agriculture, forestry and fishery	((5))	17	(15)
Public administration (e.g. local government, education)	(18)	9	(8)
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((3))	5	((5))
Other	((12))	9	(15)
<i>Town or small city</i>			
Industry (e.g. producing industry, steel, motor, oil)	(27)	31	35
Services (e.g. nursing, policing, hairdressing)	43	36	28
Trade (e.g. banking, financing, business)	(26)	36	23
Agriculture, forestry and fishery	((3))	6	(7)
Public administration (e.g. local government, education)	((9))	16	(9)
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((7))	5	((4))
Other	((14))	7	(10)
<i>Big city or the suburbs</i>			
Industry (e.g. producing industry, steel, motor, oil)	(27)	28	31
Services (e.g. nursing, policing, hairdressing)	((13))	36	21
Trade (e.g. banking, financing, business)	49	36	34
Agriculture, forestry and fishery	((3))	5	(9)
Public administration (e.g. local government, education)	((10))	12	(9)
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((3))	5	((5))
Other	(15)	12	15

*Question: D5 Which sector would you like to work to the most?*

*( ) n is less than 10, (( )) n is less than 5*

If we take a look at Table 4.9 on how gender influences students' decisions on the sectors where they would like to work, we can see that in all programmes females would far more often (54 percent) decide on services than males (21 percent), while males would more often choose industry (39 percent) and trade (32 percent). School performance, parents' education and socio-economic status do not significantly influence students' choices of the sector in which they would like to work.

Table 4.9: Sectors students would like to work in by VET structures and gender (in percent)

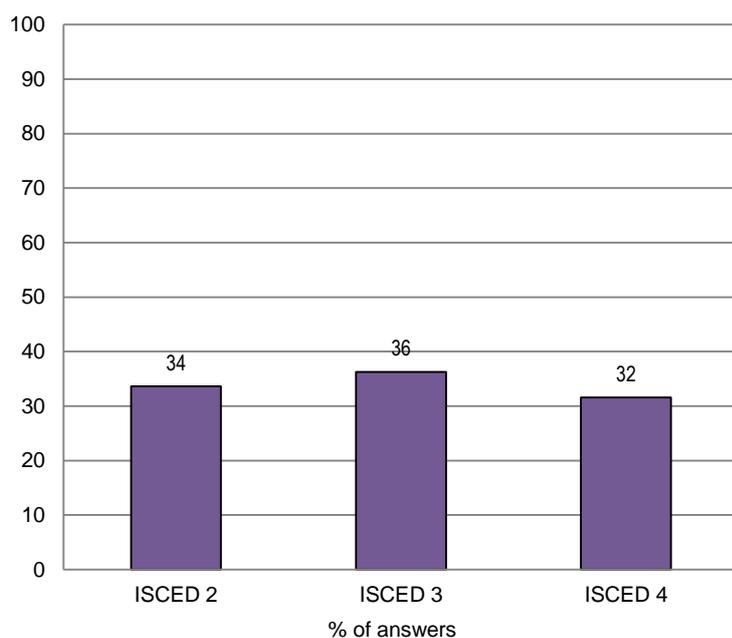
	ISCED 2	ISCED 3	ISCED 4
<b>Male</b>			
Industry (e.g. producing industry, steel, motor, oil)	31	40	37
Services (e.g. nursing, policing, hairdressing)	24	22	17
Trade (e.g. banking, financing, business)	40	32	29
Agriculture, forestry and fishery	((5))	14	13
Public administration (e.g. local government, education)	((2))	9	7
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((0))	4	(4)
Other	(12)	10	15
<b>Female</b>			
Industry (e.g. producing industry, steel, motor, oil)	((10))	13	22
Services (e.g. nursing, policing, hairdressing)	38	55	49
Trade (e.g. banking, financing, business)	36	34	24
Agriculture, forestry and fishery	((2))	2	((4))
Public administration (e.g. local government, education)	26	18	(13)
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((9))	7	((6))
Other	(15)	8	(8)

Question: D5 Which sector would you like to work to the most?

() n is less than 10, (( )) n is less than 5

We can see in Chart 4.20 that in all three programmes only one-third of students answered they are likely to continue with further education. Parents' education and socio-economic status do not significantly influence students' intentions to continue schooling. Programme orientation, school performance, gender and residency however do influence such intentions. Students from the service sector, females, those living in big cities and students with higher grades are more likely to continue education than those with lower grades.

Chart 4.20: Percentage of VET students who intend to continue schooling by VET structures



Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

#### 4.2.6 Conclusion

Our survey conducted in spring of 2011 among 17–18-year-old VET students provides a snapshot of students in initial VET in Lithuania. The students are mainly enrolled in three types of programmes: most pupils studying in initial VET programmes are pupils with a basic education permitting them the opportunity to acquire secondary education (ISCED 3); the second popular type is for persons currently taking lower-secondary – basic education (ISCED 2) and third type post-secondary education programmes (ISCED 4). The majority of VET programmes last 3 years.

The highest level of schooling most pupils have achieved prior to their current programme is ISCED level 2 (80 percent), 14 percent of respondents have achieved ISCED level 3 and 5 percent are without a school leaving certificate. VET students are distributed in Lithuania approximately uniformly according to their place of residence (big cities, towns, rural). Most VET students come from an average socio-economic background, but their family income limits costs.

VET programmes are generally considered a less prestigious educational pathway than general education in Lithuania: VET programmes usually recruit pupils with below-average marks from upper-secondary education or pupils who only have a basic education. More males than females are enrolling in initial vocational schools.

Programmes serving the industry sector are slightly more popular than those serving the service sector in Lithuania. The most popular programmes are for car mechanics, electricians, locksmiths, welders, metal, machinery and related trades workers and artisans (ISCO 72), and professional training programmes for florists, hairdressers, beauticians, bakers, cooks, personal and protective services workers (ISCO 51). Only a small number of respondents are enrolled in agricultural, fishery work or nurse professional training programmes (each profession has less than 0.5 percent of respondents). Also, a small number of pupils learn the following occupational programmes: furniture makers,

carpenters, tailors (ISCO 74 skilled workers and artisans), plant and machine operators and assemblers (ISCO 81), photographers, real estate professionals.

More than half the surveyed pupils chose their vocational training programme mainly because it provides a good foundation for further qualification and it appealed to them. But students of ISCED 2 level programmes are also likely to have decided on their programmes because the school is within a reasonable distance from home and because previous grades prevent them from enrolling in more preferable programmes. Students in secondary and post-secondary VET programmes oriented towards the industry sector are likely to decide on programmes they believe offer a good foundation for further education. Teacher recommendations for choosing the vocational training programmes seem to be relatively important for learners in higher level programmes and those living in cities rather than in towns and villages. Males are influenced by friends in their choice of VET programme and are particularly influenced by the occupation a programme connects to. But females care more about the reputation of the programme and obtaining good foundations for further qualifications, they strive more for socially-related career goals than males, they are more likely than males to want to make and maintain relationships with others and have a good relationship with colleagues.

Approximately half of the Lithuanian pupils evaluate the key features of their VET programme positively. The level of satisfaction with the current programme at the vocational school is related to the pupils' academic performance. Students of upper- and post-secondary education programmes with higher grades are more satisfied with VET programmes than students with lower grades. But students with lower grades in lower-secondary (ISCED 2) VET programmes are satisfied more often than those with higher grades. The explanation of such a finding could be the following: VET programmes at ISCED 2 level in Lithuania are primarily designed to retain in education students who are at risk of dropping out from general school by providing opportunities to develop practical skills and acquire a qualification. As was found in the interviews with the VET experts, Lithuanian vocational schools work under a specific methodology with students who do not have the ability to learn. Efforts are being made to improve their qualifications with respect to their learning abilities. Learners do not have to be afraid to go to school. Teachers use different ways to enhance the motivation of students: special techniques to teach students basics, assignments adapted to students' abilities, methods of individual training, participation in contests, activities in projects, practice mobility abroad. The relatively high level of satisfaction in relation to these programmes reported by students with low grades suggests that these programmes are well matched to their audience.

Pupils living in cities are the most satisfied with their training programme, then follow pupils living in rural areas while the least satisfied are pupils living in small towns. It is likely that if the family's financial situation allows, pupils from small towns will enrol and commute to VET schools in cities. More pupils living in big cities believe that their programme has a good reputation and prepares them to start their own business. A low family income is associated with lower pupil academic achievement and consequently constrains enrolment in more preferable programmes. Many pupils living in villages and with low prior examination grades are unable to enrol in preferred programmes. Pupils from families with a below-average socio-economic index assess themselves as having less developed competencies than pupils from families with an above-average SES.

Although around half the students evaluate their programmes positively, while most students believe they are not prepared well overall. But females more often than males believe they are able to manage occupational tasks independently. We found that the overall acquisition of competencies is influenced by school performance and the level of the socio-economic index.

The level of parents' education has an influence upon their child pupil's academic achievements, their goals, and their decisions regarding programmes and education paths. Where parents are more educated: 1) their children have a higher level of education (upper-secondary) at age 17/18; 2) their children more often listen to their parents' advice to enrol in a certain programme; 3) their children strive for the best grades; 4) their children enjoy learning more; and 5) their children assess their own competencies more highly (e.g. the ability to communicate ideas and suggestions to others clearly).

The majority of students aim more towards social rather than professional and material career goals. For two-thirds of Lithuanian VET pupils, the most important career goals are making and maintaining relationships with others and having a good relationship with colleagues. Most pupils do not care so much about their professional competence – less than half the surveyed pupils desire to obtain solid occupational proficiencies.

Students studying in upper-secondary programmes spend more time per week in school than students in lower-secondary programmes and post-secondary programmes. Students of industry sector programmes spend more time in schools than in service sector programmes. Only one-third of students with low grades learn for more than two hours per week outside school. We identified the characteristics of students who spend more time studying outside schools: more females than males; studying in basic education programmes, with higher grades than lower grades; students of programmes who spend less time in school. We see a tendency of students of post-secondary education programmes spending fewer hours studying outside school.

VET students enjoy practical learning and are concerned to fully understand what they are being taught, but they do not like academic learning. Only one-third of students are interested in general subjects. Only one-quarter of students enjoy learning. Student success is connected with students' study behaviour. It would be interesting to understand why only one-third of post-secondary programme students see the importance of fully understanding what they need to learn when approximately one-half of students in lower secondary programmes see this importance. Students with lower grades strive less for higher marks, find it less important to fully understand what they have to learn, and enjoy learning less than those with higher grades.

Most of the interviewed Lithuanian experts defined the proper balance as 60–70 percent of practical hands-on training and general theoretical training in a vocational education programme. The theoretical training should serve to understand the modern technologies used and provide students with the foundations for occupational work or further education. It is expected that the network of newly built sectorised vocational training centres equipped with modern technologies in Lithuania will enhance the development of the up-to-date practical skills needed to match the needs of the labour market.

Only one-quarter of the interviewed VET students do paid work. Males and students in industry programmes have more often done paid work than females and students from service programmes.

73 percent of VET students strive for a job that will make and maintain relationships with others, good relationships with colleagues, and make them happy. Also often (approximately 69 percent) VET students strive for job that would allow them opportunities to learn new things at work and have responsibility at work. Females in upper-secondary programmes more often than males strive towards all goals. Students from big cities more often than students from towns and country villages strive towards all goals.

Most students in upper-secondary and post-secondary VET programmes would like work in services sector, followed by trade, industry sector, public administration, and other sectors. Most students in

lower-secondary VET programmes would like work in the trade sector (for example, business or finance), followed by services, the industry sector, public administration and other sectors.

Students in industry programmes would more often choose industry sector and trade sector to work in and students from service programmes would more often choose the services sector and the trade sector.

The majority of males want to work in industry and trade, while females would prefer to work in services.

Only one-third of students would like to continue education. This is confirmed by the view of experts we consulted that, while 30 percent of graduates of VET schools are admitted to colleges and universities, about half of these drop out so only 15 percent complete. Access to the school leaving certificate (“matura”) is only available in some upper-secondary vocational schools and this qualification is needed for access to colleges and universities. Students from the service sector, females, students living in big cities and students with higher grades are more like to continue education.

Based on this empirical research among VET students and the qualitative interviews with experts, we can conclude that the reputation of VET schools is good enough in Lithuania. The most critical issues are: 1) reasonable systematic planning of VET education according to the problems of the economy; 2) analysis of the needs of occupations and graduates of VET schools; 3) predicting which training programmes will be in demand in the near future; 4) image creation for each VET school; 5) creation of a system of cooperation between the school and employers, close inclusion of the social partners and employers in the development of study programmes; and 6) a system to equip teachers of a profession with pedagogical skills.

Vjaceslavs Sitikovs

## 4.3 Latvia

### 4.3.1 General Education System Characteristics

The administration of education is organised at three levels in Latvia: national, municipal and institutional. At the national level, the main decision-making bodies are Parliament (*Saeima*), the Cabinet of Ministers (CoM) and the Ministry of Education and Science (MES). The MES is the main education policy-making institution.

Regional governments are responsible for: vocational and professional educational institutions, extra-curricular centres (except national or privately-owned institutions) adult education, vocational guidance for children and youth, the continuing professional development of teachers, boarding schools, special education facilities, child protection in the area of education, collecting and managing educational data and the funding of educational institutions under their supervision.

Educational institutions enjoy a considerable level of independence. They draw up internal regulations, control appointments, manage their own resources and assign responsibilities to their staff.<sup>26</sup>

Formal and informal education programmes are regulated through specific legislation.<sup>27</sup> Formal educational programmes are divided into three types: general, vocational and academic.

---

<sup>26</sup> For national system overviews on education systems in Europe and ongoing reforms, see: [http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_LV\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_LV_EN.pdf)

In Latvia, pre-school education is compulsory for 5- and 6-year-olds. *Basic compulsory education* lasts 9 years from the age of 7 till 16. It is possible to start compulsory education a year earlier or later upon the judgment of a medical commission and if the parents do desire. Attendance in basic education is mandatory until the age of 18.<sup>28</sup>

Upper-secondary education in Latvia is provided by secondary schools, gymnasium (secondary schools having more support from the state in terms of financing) and vocational secondary schools (that provide both professional qualification and secondary education allowing graduates to enrol in higher education). The completion of formal education is confirmed by the state recognised leaving diploma and in vocational education while, in addition, there are professional qualifications (levels I-III).

### 4.3.2 Fundamental principles and legislative framework

The governance of vocational education is determined by the Education Law (*Izglītībaslikums, 1998, 2001*) and the Vocational Education Law (*Profesionālās izglītības likums, 1999, 2001*). According to the new Education Law (1991) secondary education is no longer compulsory. General upper-secondary education lasts 3 years, whereas upper-secondary vocational education lasts 3 or 4 years depending on the particular programme.

In Latvia, both general and vocational secondary education in public sector schools are free of charge.<sup>29</sup> The Ministry of Education and Science determines the number of state-financed places in each accredited vocational education programme.<sup>30</sup> The state provides financial support for full-time pupils studying in state and municipal vocational schools: a monthly scholarship and a contribution towards transport or accommodation costs.

#### *Admission requirements*

There are no age limits for entering general and/or vocational secondary education for everyone who has completed basic education and has a certificate of basic education (*apliecība par vispārējo pamatizglītību*). Graduates of vocational basic education (*profesionālā pamatizglītība*) and general basic education (*arodizglītība*) can both enter a vocational secondary education programme. For admission to both general secondary and vocational secondary educational institutions an achievement sheet is necessary. Vocational secondary education is open to everybody without any prior educational requirements, although not before the year in which they reach the age of 15. Pupils can express their preferences for particular schools. Each school can define its own admission criteria. Usually enrolment at a vocational education institution is carried out through a competition based on past subject assessments. However, several groups of pupils are enrolled without a competition, such as children with special needs, orphans and children without parental support.<sup>31</sup>

#### *Quality Assurance*

In Latvia there is quality assurance for both schools and educational programmes. Accreditation is required for every educational programme that a school offers within two years after the programme is launched. The accreditation of vocational education institutions and programmes is performed by the Vocational Education Administration. This institution also monitors the compliance of educational pro-

---

<sup>27</sup> Latvia. VET in Europe – Country Report:

[http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010\\_CR\\_LV.pdf](http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010_CR_LV.pdf)

<sup>28</sup> Organisation of the education system in Latvia:

[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase\\_full\\_reports/LV\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase_full_reports/LV_EN.pdf)

<sup>29</sup> Charges may be made if schools recruit more students than they have funded places or if they offer courses which are not publicly funded.

<sup>30</sup> Organisation of the education system in Latvia

<sup>31</sup> Organisation of the education system in Latvia

cesses in relation to the regulative framework.<sup>32</sup> National testing is also regarded as a quality assurance mechanism with respect to the VET standards.<sup>33</sup>

#### *Involvement of the social partners*

In 1993 the National Tripartite (employers, state and union organisations) Council for Cooperation (NTCC) began to function.<sup>34</sup> Since that time, the NTCC has developed suggestions for national policies and strategies in the vocational education area and confirms occupational standards. NTCC representatives also participate in the qualification examinations commission.<sup>35</sup>

In 2010, the State Education Content Centre (SECC) and State Education Development Agency (SEDA) conducted a phone poll of sectoral organisations to explore which qualifications (levels 1-3) were required by sectors across all regions of Latvia. The data were used to design the vocational student enrolment plan (basic and secondary level) for the following study year.<sup>36</sup>

The State Employment Agency (SEA), when funding vocational educational programmes, takes into account indications from employers on what kinds of specialists are lacking. Craft and professional associations are involved in the design of apprenticeship programmes.

### **4.3.3 Socio-demographic Characteristics of VET learners and the Transition to IVET**

#### *VET structures: Schools and programmes*

There are three levels of vocational programmes in Latvia and they are offered by different kinds of vocational school:

1<sup>st</sup>-level programmes are offered by basic vocational schools (*pamatarodskola*) for students aged 13-16. This phase is equivalent to lower-secondary education. 1<sup>st</sup>-level programmes include theoretical and practical training and result in a vocational qualification at the ISCED 2a or ISCED 2c level.

2<sup>nd</sup>-level programmes are offered by vocational schools (*arodskola*) to 16-19 year olds. These programmes include theoretical and practical training which qualifies the graduate (at ISCED level 3c) for independent skilled work.

3<sup>rd</sup>-level programmes are offered by vocational secondary schools (*arodvidusskola*) to 16-20 year olds. Programmes can last for three to four years. These programmes include theoretical and practical training and also preparation for the planning and organisation of work. They prepare students either for independent skilled work or to pursue higher education (ISCED levels 3a and 3b).

#### *Post-secondary (ISCED level 4)*

After the completion of general (upper)secondary or vocational secondary education, a person can be enrolled in a vocational further education programme (lasting one to three years) or vocational in-service training programmes (not less than 160 teaching hours). These programmes result in vocational qualifications at ISCED level 4.

---

<sup>32</sup> Structures of Education and Training Systems in Europe. Latvia

<sup>33</sup> Structures of Education and Training Systems in Europe. Latvia

<sup>34</sup> Organisation of the education system in Latvia

<sup>35</sup> Structures of Education and Training Systems in Europe. Latvia.

<sup>36</sup> Latvia. VET in Europe – Country Report.

### *Continuing Education and Training*

General adult education is provided (without charge) for adults in day classes and evening school for adults who do not have qualifications. Continuing vocational education is available through Latvia's Vocational Education and Training and Employment Services and also for many professions such as teachers and doctors.

### *Findings from the 7EU VET survey: Socio-demographic characteristics*

Pupils enrolled in approximately 200 VET programmes were included in the survey. The percentage of boys and girls in the sample (Table 4.10) approximately corresponds to the ratio of the population enrolled in IVET in Latvia (60 percent of boys and 40 percent of girls). The majority of respondents (83 percent) are enrolled in programmes combining both vocational and secondary education giving the opportunity for further education in high schools or universities. Industry-oriented programmes (hereinafter “industry”) and service-oriented programmes (hereinafter “service”) were represented almost equally. Different types of residential location are represented in the survey also almost equally – about one-third of IVET students live in big cities or their suburbs (hereinafter “cities”), in towns or small villages (hereinafter “towns”) and in country villages or farms (hereinafter “farms”).

**Table 4.10: Brief summary of the participants’ socio-biographic characteristics (in percent)**

Female	Male	Service-related	Industry-related	Big cities or their suburbs	Towns or small villages	Country villages or farms	Living on family's present income			
							Comfortably	Can cope	Difficult	Very difficult
46	54	51	49	37	31	32	31	45	19	5

Questions: G1 Are you male or female?

B2a What is the title of the programme you are enrolled in?

G7 Which phrase below best describes the area where you live?

G14 Which of the descriptions below comes closest to how you feel about your family's income?

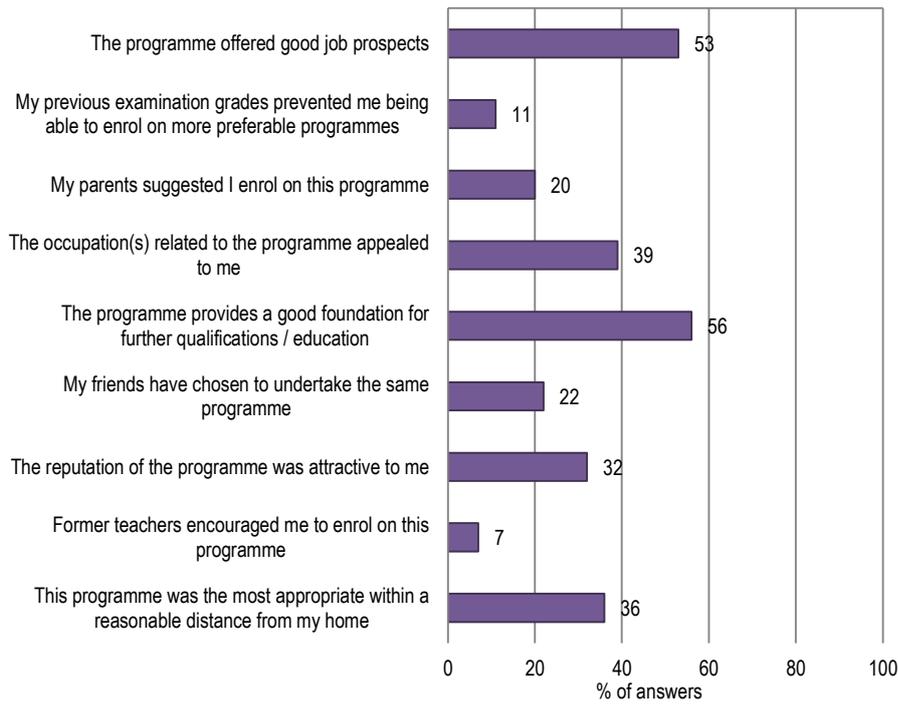
The adequacy of income provides a simple measure of living standards – whether they are living comfortably on the present family income or can just cope with the present family income or find it difficult or very difficult.

### *Findings from the 7EU Survey: The Transition to IVET*

*Students choose programmes that offer them good job prospects, are connected with appealing occupations, are an appropriate distance from students’ homes and have an attractive reputation*

Chart 4.21 shows that in general Latvian students more often choose a programme because it offers good job prospects (53 percent), the occupation related to the programme appeals to them (39 percent), it is a reasonable distance from their home (36 percent) and because the programme has a good reputation (32 percent).

Chart 4.21: Factors influencing the decision on the current programme (in percent)



Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

The examination of certain socio-demographic characteristics shows that the parents' suggestion is more important for girls than for boys (Table 4.11). The same holds for the reputation of the programme (Table 4.12).

Table 4.11: Pupils stating that their parents suggested they enrol in the programme (in percent)

Female	Male	Grades			Parents born			
		Good	Merit	Fair	Both in Latvia	One in Latvia	Both in another EU country	Both in non-EU country
23	18	13	19	24	18	26	29	21

Question: A4\_3 How important were the following aspects for you when you were choosing your current programme? My parents suggested I enrol on this programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Table 4.12: Pupils mentioning the reputation of the programme and the distance from home (in percent)

The reputation of the programme was attractive to me					This programme was the most appropriate within a reasonable distance from my home		
Female	Male	Good grades	Merit grades	Fair grades	Cities	Towns	Farms
34	29	48	32	25	32	40	38

Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Pupils with lower grades more often stated that previous examination grades prevented them from enrolling in more preferable programmes (Table 4.13).

*Table 4.13: Pupils mentioning job prospects and previous grades (in percent)*

The programme offered good job prospects							My previous examination grades prevented me from enrolling in more preferable programmes		
Grades			Living on family's present income				Grades		
Good	Merit	Fair	Comfortably	Coping	Difficult	Very difficult	Good	Merit	Fair
55	56	46	54	56	45	54	6	10	17

*Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

Parents' suggestions were more important to pupils with lower grades (Table 4.11). However, regarding the reputation of the programme (Table 4.12) the picture is reversed. The same tendency (while less pronounced) applies to the factor that the programme offers good job prospects (Table 4.13) – 46 percent of pupils with fair grades vs. about 56 percent of pupils with merit and good grades.

Friends' advice (Table 4.14) is more important for pupils born in EU countries other than Latvia in comparison to those born in non-EU countries, and to a greater degree those born in Latvia.

*Table 4.14: Pupils who mentioned related occupation and friends' suggestions (in percent)*

The occupation(s) related to the programme appealed to me				My friends have chosen to take the same programme									
Living on family's present income				Born in			Parents born				Socio-economic status (SES)		
Comfortably	Coping	Difficult	Very difficult	Latvia	Other EU	Non-EU	Both in Latvia	One in Latvia	Both in another EU country	Both in non-EU country	Below-average	Average	Above-average
43	37	35	43	21	66	42	19	28	38	25	26	18	17

*Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

The influence of parents on pupils' decisions (Table 4.11) is stronger when both parents were born in the EU outside of Latvia, whereas the weakest dependence on parents is when both parents were born in Latvia.

It is similar with the importance of friends' advice (Table 4.14) – for 38 percent of pupils whose both parents were born in the EU outside of Latvia friends' advice was quite or very important compared to 19 percent of pupils whose both parents were born in Latvia. It is predictable that distance from home to school (Table 4.12 **Error! Reference source not found.**) is more important for pupils from towns or mall cities and from country villages or farms than for pupils from big cities or their suburbs.

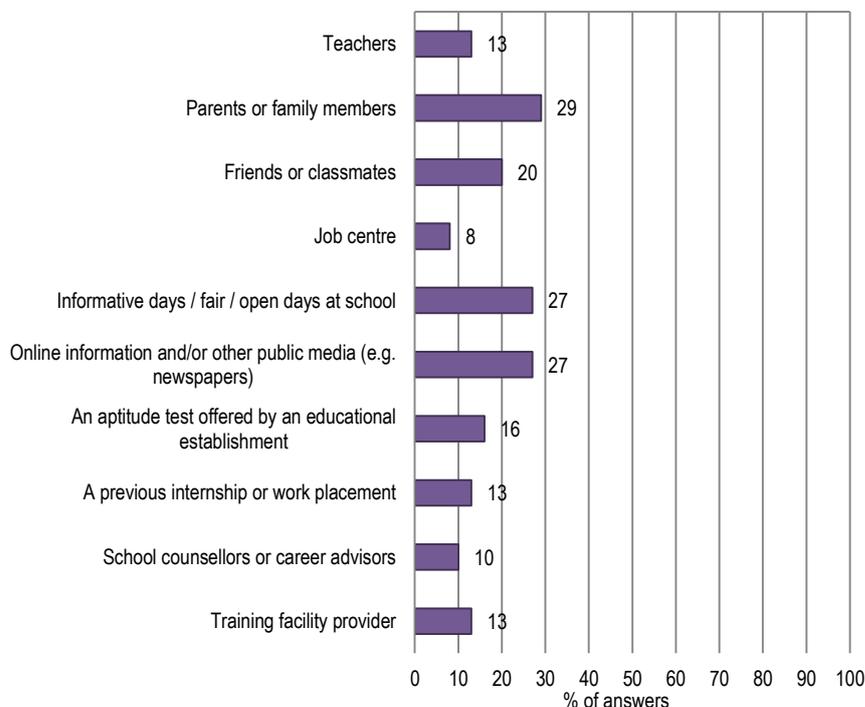
It is surprising that for pupils whose families find it difficult to live on the present income the aspect that the programme offers good job prospects (Table 4.13) is less important than for those whose families are coping with the present income. It is also surprising that the occupation related to the programme chosen (Table 4.14) is more important for pupils from families living either comfortably or with difficulty than for families with a middle income – coping or feeling difficulties living on present incomes.

Including the index of socio-economic status (hereinafter "SES") shows that the aspect that friends have chosen the same programme (Table 4.14) is more important to pupils from families with socio-economic backgrounds below the average (hereinafter "below") than for average and above-average ones (hereinafter "above").

Most students select their current programme bearing in mind parents' or family members' suggestions as well as online information sources, other public media and informative days, fairs and open days in schools

Chart 4.22 shows that, in general, Latvian students obtain information to inform their decisions from parents (29 percent), media including online information (27.1 percent) and promotional events (26.6 percent).

Chart 4.22: Information sources influencing the decision on the current programme (in percent)



Question: A5 How important were the following information sources when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Further analysis shows that girls more often define their parents (Table 4.15) as an important source of information than boys.

Table 4.15: Information sources identified by pupils as influencing their decision (in percent)

Parents or family members		Information days / fair / open days at school. Online information and/or other public media (e.g. newspapers)						Job centre			
Female	Male	Female	Male	Grades			Service	Industry	Born in		
				Good	Merit	Fair			Latvia	Other EU	Non-EU
33	26	33	22	36	27	21	30	22	8	39	0

Question: A5 How important were the following information sources when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

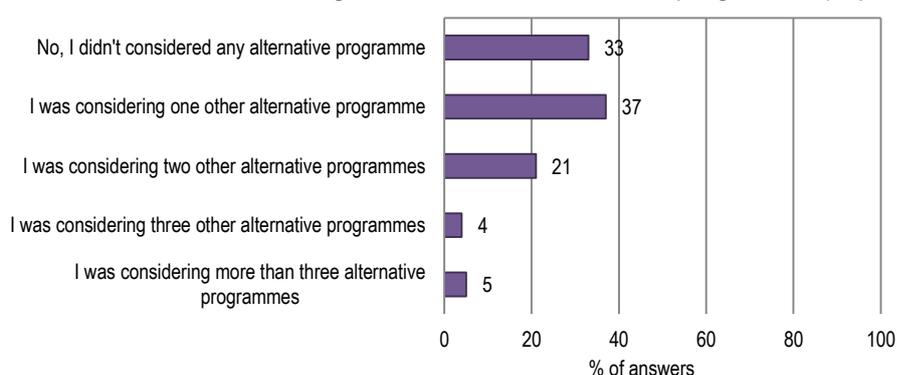
Moreover, sources like information days, fairs, open days in school as well as online information and other public media, e.g. newspapers, are more important for female than for male pupils. Regarding the last set of information sources, it is necessary to point out that they were more important for pupils enrolled in programmes related to services than for pupils enrolled in programmes related to industry. The better the pupils' grades the more often they mentioned this source of information as being important for their decision (Table 4.15).

Despite the fact that job centres have a less important influence on decision making in general (Chart 4.22), for pupils born in a country other than Latvia they were the second most important source of information.

*Most students in the process of enrolling in VET also considered an alternative programme*

Chart 4.23 shows that in the majority of cases students considered at least one alternative programme.

*Chart 4.23: Alternation during the decision on the current programme (in percent)*



Question: A6 Did you consider any alternative programme when you were selecting your current one?

Pupils born in Latvia less often stated that they did not consider any alternative programme than pupils born in another EU country while more than half of pupils born in non-EU countries did not consider an alternative programme (Table 4.16). Also pupils from country villages or farms were less likely to consider any alternatives compared to pupils from any other place of residence.

*Table 4.16: Alternation during the decision on the current programme (in percent)*

No, I didn't consider any alternative programme						I was considering one other alternative programme							
Born in			Living on family's present income			Living on family's present income							
Latvia	Other EU	Non-EU	Cities	Towns	Farms	Comfortably	Coping	Difficult	Very difficult	Comfortably	Coping	Difficult	Very difficult
33	39	53	30	32	38	37	31	34	28	34	41	39	30

Question: A6 Did you consider any alternative programme when you were selecting your current one?

The income of the family also affects the process of programme choice. 37 percent of students whose families are comfortably off did not consider any alternatives but only 28 percent of those whose families find living on their incomes difficult. At the same time, pupils from families except those living comfortably more often considered one additional alternative programme when selecting the programme in which they are currently enrolled.

#### 4.3.4 Vocational Curricula, Teaching Learning and School Success

*Vocational Curricula (school-based and practical training)*

The strategic aims of vocational (upper) secondary education and vocational programmes are: to prepare pupils for activity in a certain profession, to support their development into a morally and physically well-developed, free, responsible and creative personality; to promote the learning of knowledge and skills, the creation of attitudes, thus ensuring the acquisition of a 2nd or 3rd level professional qualification (see below); to promote his/her competitiveness in changing socio-economic conditions; to promote a positive attitude towards peers and the state; to promote self-confidence and

the ability to undertake the tasks of a citizen of Latvia; and to create motivation for professional growth and further training, ensuring the possibility of the continuation of studies in professional higher education. In Latvia all VET curricula have been competence-based since 1999.

Compulsory subjects include: Latvian, foreign language(s), mathematics, natural and technical sciences, information technology, social sciences, cultural education, history, business studies and sport. The ratio of general subjects to vocational subjects varies according to the type of school. Educational institutions should also provide optional subjects. All educational programmes should include cross-curricular themes on health education, environmental education, work safety and civil defence.

The outcomes for each vocational subject are developed in relation to professional (occupational) standards in Lithuania. The three levels of professional standards are divided as follows:

1st level – theoretical and practical training which provides an opportunity to perform simple tasks in a specific sphere of practical operation;

2nd level – theoretical and practical training which provides an opportunity to independently perform qualified artisan work; and

3rd level – higher theoretical preparedness and professional skills which provide an opportunity to perform specific artisan duties, including the planning and organising of work to be implemented.

Vocational upper-secondary education curriculum focuses on the knowledge and skills necessary for the 3rd professional qualification level. The curriculum includes the general education subjects up to the standard required to give access to higher education.

Curricula (educational programmes) are developed by the school in accordance with national standards, and approved by the school head and education provider. When setting out compulsory subjects and the number of hours to be dedicated to each subject, schools may choose to follow the published model upper-secondary education curriculum and model core curriculum. The school curriculum reflects both school aims and the national standards set for each subject.

It is the school's responsibility to set out the number of hours for each subject as well as the lesson schedule. Schools are constrained by national regulations on the number of hours to be dedicated to each subject and also the minimum and maximum number of hours per week on the whole. Each particular curriculum has to be licensed and registered in the Education Institutions Register. The programme has to be accredited by the Ministry of Education and Science within two years of registration.<sup>37</sup>

The national standard prescribes how time is to be distributed between theoretical learning and practical learning. Practical learning includes skills development in workshops and laboratories.<sup>xxvii</sup>

Apprenticeship (*mācekļu apmācība*) in Latvia involves long-term training with alternating periods in a school or training centre and at the workplace. The apprentice is contracted to the employer and may receive remuneration. The employer assumes responsibility for providing the trainee with training leading to qualification for a specific occupation according to education programmes developed by the Chamber of Crafts and the Ministry of Education and Science.<sup>38</sup> Apprenticeship programmes are designed by craft and professional associations and approved by the Council of the Chamber of Crafts. The duration of a programme depends on the particular craft association which leads to considerable variation.

---

<sup>37</sup> Structures of Education and Training Systems in Europe. Latvia.

<sup>38</sup> Vocational education and training and employment services in Latvia.

In addition to apprenticeships, there are programmes for journeymen and master craftsmen. The theoretical courses for master craftsmen candidates usually last two months and are offered by the relevant Chamber.<sup>39</sup>

#### *Assessment and progression arrangements*

In all upper-secondary education (including vocational secondary education) pupils' educational achievements are assessed on a 10-grade scale or with a "pass/fail" judgement. Assessment criteria include the volume and quality of acquired knowledge, skills and attitudes to learning and development. Teachers carry out the regular assessment of pupils' educational achievements. At the end of each semester, pupils receive a record sheet with marks for each subject.<sup>40</sup>

Students have to achieve a minimum grade of 4 in all their courses, theoretical and practical. In addition, they have to pass the state examinations in Latvian, foreign language, mathematics and one other subject.

Students who complete vocational school programmes receive a certificate of vocational education (*atestāts par arodizglītību*) which qualifies them to enter the labour market or enter general or vocational secondary education. Students who complete secondary vocational programmes receive a diploma of vocational secondary education (*diploms par profesionālo vidējo izglītību*) together with an achievement sheet (*sekmju izraksts*). The diploma qualifies graduates to either commence employment or progress to higher or further education. A certificate of professional qualification (*profesionālas kvalifikācijas apliecība*) confirms the received professional qualification (*profesionālā kvalifikācija kvalifikācija*).

#### *Survey results*

##### *Students evaluated their programmes as worthwhile according to a wide range of criteria*

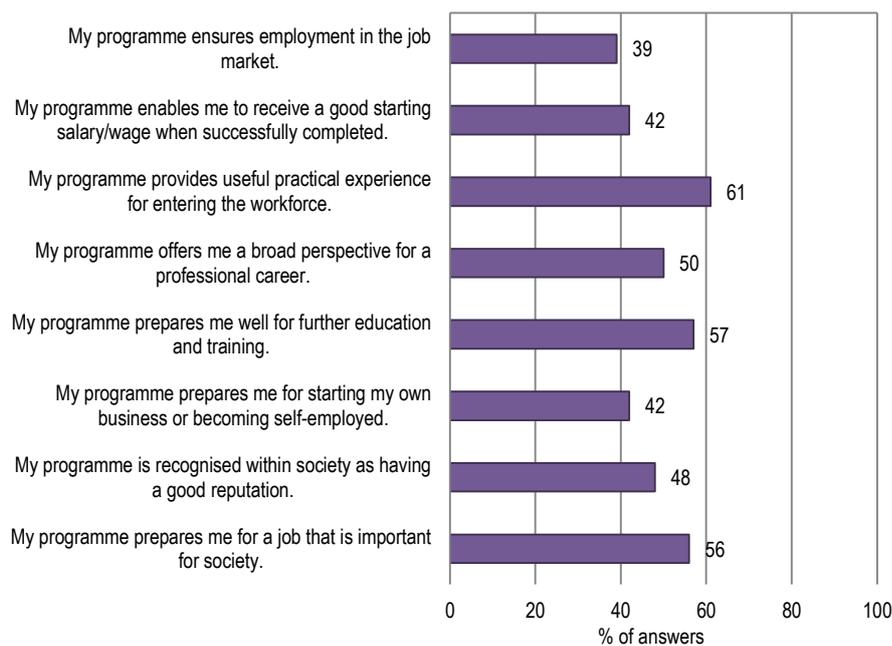
As can be seen in Chart 4.24, even the less influencing satisfaction with the present programme and the school factor (ensuring employment in the job market) are mentioned as important in 39 percent of cases.

---

<sup>39</sup> Vocational education and training and employment services in Latvia.

<sup>40</sup> Structures of Education and Training Systems in Europe. Latvia

Chart 4.24: Pupils' views on their programme (in percent)



Question: B4 Now that you know your programme well, to what extent do you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

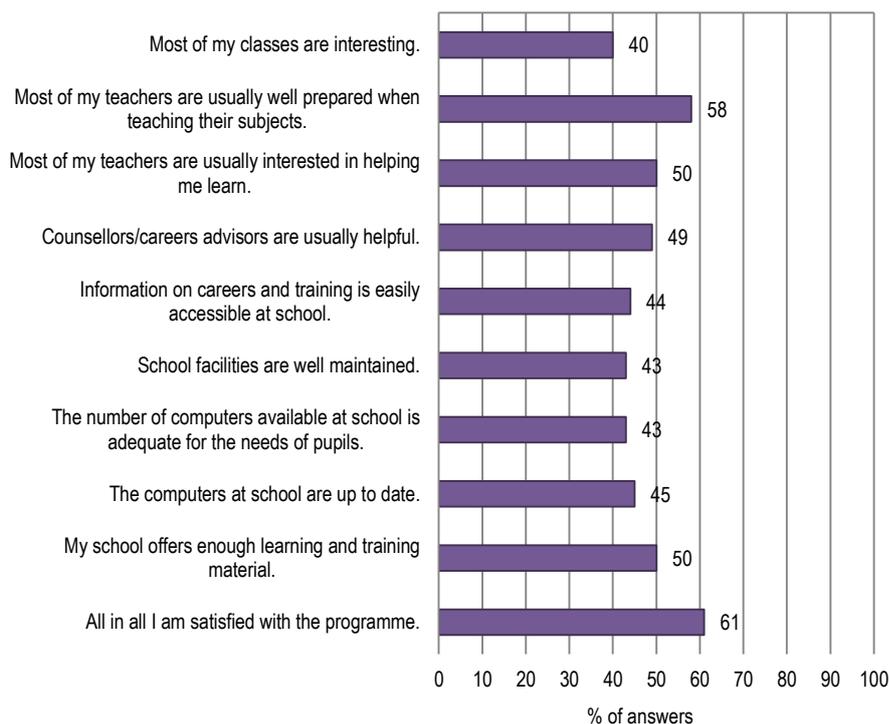
While not dominant, the factors most often mentioned are the provision of useful practical experience for entering the workforce (60.8 percent) and preparation for further education and training (57.3 percent). It is quite unexpected that more than half of the pupils (56 percent) believe that their programme prepares them for a job that is important for society.

Female pupils' evaluations of the enrolled in programme are sufficiently higher than male pupils' (differences from 5 to 9 percent) in almost all aspects proposed for consideration, except employment in the job market where their visions coincide. Pupils from the service sector appreciate their programme more than from the industrial sector absolutely regarding all aspects (differences from 7 to 9 percent). The level of agreement that the programme ensures employment in the job market also depends on one's socio-economic background – the lower the value of the SES index, the lower the evaluation of this aspect (49 percent in families with an above-average level, 40 percent in families with an average level and 36 percent in families with a socio-economic level below the average).

*VET students in Latvia are overall satisfied with their programme*

As Chart 4.25 shows, students have positive opinions about all the considered aspects influencing satisfaction with their school facilities, teachers, computer equipment and with their programme in general.

Chart 4.25: Pupils' satisfaction with school (in percent)



Question: B5 This question is about your satisfaction with your school. Please indicate to what extent you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Satisfaction with the programme (Table 4.174.17) is higher for female pupils and for pupils in service-oriented programmes rather than for industry-oriented ones.

Nearly 40 percent state that most of the attended classes are interesting; meanwhile, female pupils agree to a greater extent than males. Pupils with higher grades also agree here more often than pupils with merit and fair grades.

Further, a higher proportion of pupils who were not born in Latvia evaluate most of their classes as interesting compared to pupils who were born in Latvia and the level of agreement is also higher for those pupils from families with a higher SES than for pupils from families with a lower SES.

Table 4.17: Pupils satisfied by their programme and classes (in percent)

All in all, I am satisfied with the programme				Most of my classes are interesting								
Female	Male	Service	Industry	Female	Male	Grades			Born in Latvia		SES	
						Good	Merit	Fair	Yes	No	Higher	Lower
67	57	65	58	44	37	53	42	32	39	49	43	34

Question: B5 Please indicate to what extent you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

More than half the pupils (58 percent) agree with the statement that most of their teachers are usually well prepared when teaching their subjects. The results in 4.18 show that female pupils agree to a greater extent with this statement than male pupils as well as pupils living in country villages or farms compared to pupils from towns or small cities and big cities or their suburbs. The same applies to socio-economic background – the higher the level, the higher the appreciation of teachers' preparedness.

**Table 4.18: Pupils considering that teachers are well prepared (in percent)**

Female	Male	Cities	Towns	Farms	SES		
					Below	Average	Above
62	55	53	59	62	54	59	66

Question: B5\_2 Please indicate to what extent you agree with the following statements? Most of my teachers are usually well prepared when teaching their subjects. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Half the pupils agree that most of their teachers are usually interested in helping them to learn; meanwhile (Table 4.19) female pupils feel this more strongly than males. Further, pupils with higher grades more often appreciate their teacher's readiness to help. Even more differences become visible when the country of origin of the pupils is taken into account.

**Table 4.19: Pupils considering that teachers are helping to learn (in percent)**

Female	Male	Grades			Born in			SES		Countryside	Big cities and their suburb
		Good	Merit	Fair	Latvia	Other EU	Non-EU	Above	Average and below		
55	46	60	52	44	50	13	72	60	50	53	47

Question: B5\_3 Please indicate to what extent you agree with the following statements? Most of my teachers are usually interested in helping me learn. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

The majority of pupils born in non-EU countries are satisfied with the learning and training material provided by schools, while only half of Latvian born pupils and pupils born in an EU country other than Latvia are much less satisfied (Table 4.20). The perception of this aspect is also influenced by the place where a pupil lives. Pupils from the countryside are more satisfied with their learning and training materials than pupils from big cities and their suburbs.

It is also necessary to stress that pupils from the countryside agree to a greater extent with the statement that most of their teachers are usually interested in helping them learn (Table 4.19), compared with pupils from big cities and their suburbs as well as pupils from families with a good socio-economic background appreciate teachers' readiness more compared with those with an average and below-average SES.

**Table 4.20: Pupils satisfied by their school's learning materials and facilities (in percent)**

My school offers enough learning and training material						School facilities are well maintained						
Countryside	Big cities and their suburbs	Pupil born in			Both parents born in		Both parents born in		Farms	Rest of the country	Female	Male
		Latvia	Other EU	Non-EU	Other EU	Non-EU countries	Latvia	Non-EU countries				
53	45	50	22	73	69	39	42	73	48	42	47	41

Question: B5 This question is about your satisfaction with your school. Please indicate to what extent you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

The perception that schools offer enough learning and training material is also influenced by parents' countries of origin. Pupils from families where both parents were born in an EU country other than Latvia agree to a much greater extent with this statement than pupils from families where both parents were born in non-EU countries (Table 4.20). However, pupils of Latvian-born parents agree less with the statement that school facilities are well maintained than pupils of parents from non-EU countries. Differences regarding this perception can also be detected between pupils from country villages and farms comparing such considerations with pupils from the rest of the country (big cities, their suburbs, towns and small cities). Like with almost all of the considered aspects, female pupils agree more with this statement than males (Table 4.20).

Female pupils also agree to a higher extent that computers at schools (Table 4.21) are up to date; however, regarding the statement that “The number of computers available at school is adequate for the needs of pupils” both female and male pupils were in harmony (43 percent of both female and male pupils agree with it). Herewith, pupils from families with an average and below-average socio-economic background agree to a lesser extent that the number of computers at school and their conditions is sufficient compared with families with an above-average SES.

Table 4.21: Pupils satisfied by computers and information regarding career (in percent)

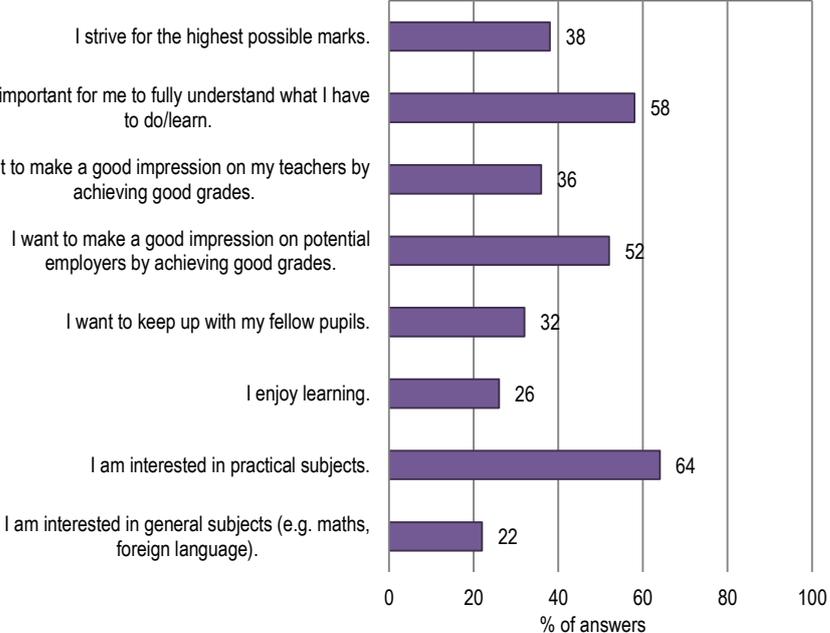
The computers at school are up to date		The number of computers available at school is adequate for the needs of pupils			Information on careers and training is easily accessible at school			
Female	Male	Socio-economic background			Living on family's present income			
		Below	Average	Above	Comfortably	Coping	Difficult	Very difficult
49	40	43	41	53	43	38	38	47

Question: B5 This question is about your satisfaction with your school. Please indicate to what extent you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

As the main aim of the project is to understand the factors influencing pupils' decisions regarding educational paths, it is quite important to evaluate the availability of information regarding careers and further training at schools. Overall 45 percent of the respondents agree that such information is easily accessible at schools. However, it is interesting that pupils from opposite sides of the family income scale (both living comfortably on the present income and those finding it very difficult) evaluate the accessibility of such information higher than families in the middle of the scale.

The most important factors motivating students are interest in practical subjects, wanting to understand, and the desire to make a good impression on potential employers by achieving good grades. For the most important goals (Error! Reference source not found.) there are no big differences between the girls' and boys' considerations, with the exception of being concerned to understand what to do/learn – this goal is slightly more important for the female than for the male pupils (Table 4.22).

Chart 4.26: Pupils' study behaviour (in percent)



Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

More than every third pupil strives for the highest possible marks and for female pupils this is more important than for males.

*Table 4.22: Influence of gender and grades on study behaviour (in percent)*

It is important for me to fully understand what I have to do/learn			I strive for the highest possible marks			I want to keep up with my fellow pupils		I enjoy learning		I am interested in general subjects (e.g. maths, foreign language)					
Female	Male	Grades			Female	Male	Female	Male	Female	Male	Female	Male			
		Good	Merit	Fair									Good	Merit	Fair
65	53	81	61	43	43	33	66	39	21	35	30	31	21	25	20

*Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

Almost one-third state that they want to keep up with their fellow pupils, with female pupils stating this more often than males.

Despite the fact that the female pupils seem to enjoy learning more than the males (Table 4.22), the overall rate of pupils who like to learn is very low (just one out of four). Interest in general subjects is low. Also, despite the overall picture that female pupils are a little more interested in general subjects (e.g. maths, foreign language) than males (Table 4.22), this factor is the least important for VET students – actually a little more than one out of five pupils expresses some interest in general subjects.

This shows that pupils with higher grades state a higher motivation for all the listed aspects than pupils with merit grades, e.g. regarding striving for the highest possible marks, the importance of understanding what to do/learn and so on.

*In Latvia, most pupils rate the amount of practical training within their programme as good or average*

Table 4.23 shows how students rated the proportion of practical training within their current programme.

*Table 4.23: Pupils' ratings of the amount of practical training within the programme (in percent)*

Overall (total) rating					Average			Good									
Poor	Fair	Average	Good	Excellent	Grades			Born in			Female	Male	Grades		Born in		
					Good	Merit	Fair	Latvia	Other EU	Non-EU			Good or merit	Fair	Latvia	Other EU	Non-EU
3	6	27	59	6	20	25	32	26	56	30	64	55	62	55	60	4	38

*Question: C3 How would you rate the amount of practical training within your programme?*

In Latvia, most pupils rate the proportion of practical training as good or average, with good ratings coming more often from female than male pupils. Meanwhile, just 6 percent state the amount is fair and only 3 percent rate the proportion of practical training as poor without any big differences among female and male opinions. On the other hand, of the total male and female considerations just 6 percent of pupils evaluate the amount of practical training as excellent.

Pupils with good or merit grades more often evaluated the amount of practical training as good than pupils with fair grades, whereas the share of pupils evaluating the amount of practical training as average is higher among pupils with fair grades compared to pupils with merit and good grades.

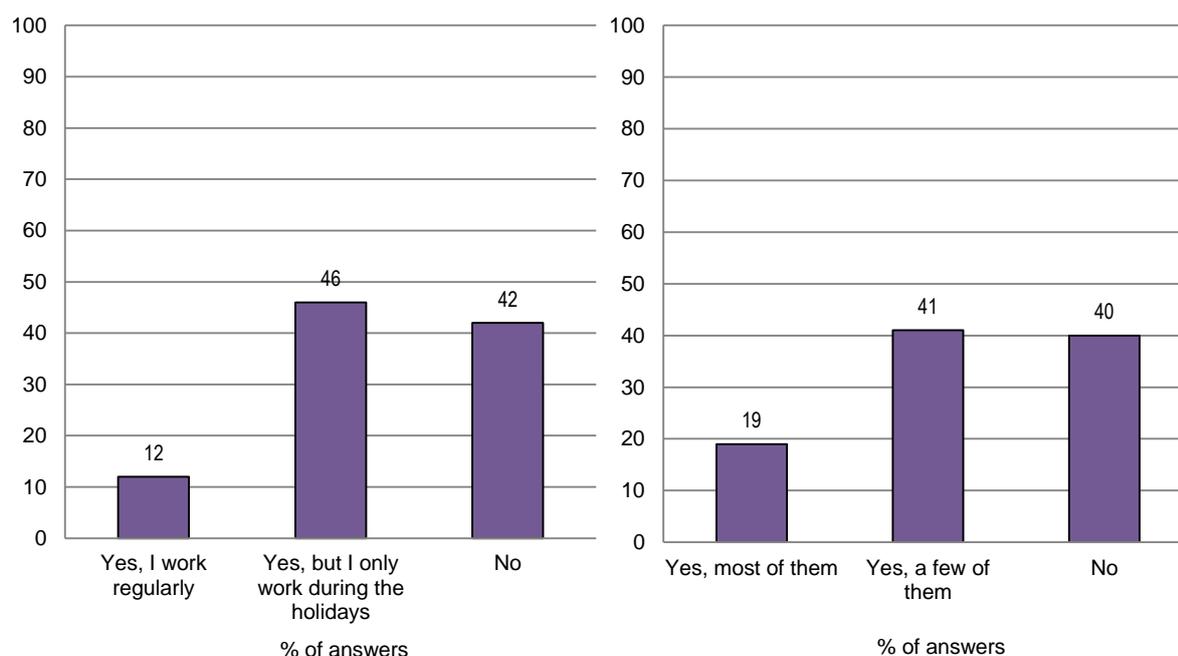
This result shows that the evaluation of the appropriateness of the practical training highly depends on the country of the pupils' origin: the majority of pupils born in Latvia consider the amount of practical training as good and one in four as average, whereas more than half the pupils born in an EU country other than Latvia rate it just as average and one in four as fair and only a small 4 percent consider it as good. The differences in the percentages of pupils born in non-EU countries rating the amount of prac-

tical training as average or good are smaller (30 percent and 38 percent, respectively), whereas the percentage of pupils rating the amount as excellent is much higher for pupils from non-EU countries (19 percent) than those born in Latvia (6 percent) or another EU country (9 percent).

*More than half the VET students in Latvia hold another job outside their programme*

Much more than half the pupils (58 percent) held another job during the last year outside their programme (left part of Chart 4.27).

**Chart 4.27: Paid job that is not part of the programme (in percent)**



Questions: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)?

C6c Are the tasks of this work similar to those you undertake during your programme?

However, around one-fifth of working students declare that they work regularly, while another four out of five answer that they worked for payment but only during the holidays. More male pupils hold down a paid job outside the programme than female pupils. This is true for both regular work (Table 4.24) and working only during the holidays (Table 4.25). The number of non-working pupils (Table 4.24) is much higher in service-related programmes than in industry-related ones. Students whose parents were born outside Latvia but within the EU were less likely to be employed than other students.

**Table 4.24: Working and non-working pupils (in percent)**

Have a paid job (regular or during holidays)		Have regular work						Non-working pupils								
Female	Male	Female	Male	Parents born				Service	Industry	Parents born				SES		
				Both in Latvia	One in Latvia	Both in other EU	Both in non-EU			Both in Latvia	One in Latvia	Both in other EU	Both in non-EU	Below Average	Above	
48	66	9	14	11	17	8	5	47	32	42	48	23	45	38	42	54

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Possible answers 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

The majority of pupils whose parents were both born in an EU country other than Latvia just have occasional work during the holidays (Table 4.25) while more children of Latvian-born parents have regular work compared to children of foreign-born parents (Table 4.24).

Table 4.25: Pupils working only during the holidays (in percent)

Female	Male	Parents born				SES		
		Both in Latvia	One in Latvia	Both in other EU country	Both in non-EU country	Below	Average	Above
39	52	46	36	69	49	50	46	37

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answer 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

Socio-economic status has little impact upon the level of regular employment, however it does affect whether pupils work occasionally or not at all. The lower the SES, the more often pupils work during their holidays (Table 4.25). In turn, the higher SES the more often pupils do not work at all outside their programme (Table 4.24).

When considering how this work (outside the programme) is similar to that which pupils undertake during their programme (right part of Chart 4.27), it is interesting (Table 4.26) that partial similarity is more often seen for industry-related programmes while more working pupils in the service sector are occupied with tasks other than those in their programme compared with working pupils from industry-related programmes.

Table 4.26: Similarity of tasks within and outside the programme (in percent)

Tasks are partially similar		Tasks differ		Tasks are completely similar			
Service	Industry	Service	Industry	Living on family's present income			
				Comfortably	Coping	Difficult	Very difficult
36	47	45	31	22	20	17	11

Question: C6c Are the tasks of this work similar to those you undertake during your programme?

The family's financial conditions also influence the similarity of work within and outside the programme. The more comfortably families are living on the present incomes, the more often pupils during their outside work are involved in the same tasks they have within the programme. This suggests that students from these families have been able to obtain employment which complements their education rather than employment which may perhaps compete with it.

### 4.3.5 Career Guidance and the Progression of IVET Graduates

#### *The National System of Career Guidance*

In Latvia, careers guidance and counselling are provided by the State Employment Agency, the Professional Careers Counselling State Agency, the National Resource Centre for Vocational Guidance in Latvia and numerous private enterprises.<sup>41</sup> To optimise the system of guidance and counselling within the labour sector, the former Professional Career Counselling State Agency (*Profesionālās karjeras izvēles valsts aģentūra, PCCSA*) was incorporated into the State Employment Agency (*Nodarbinātības valsts aģentūra, SEA*) in September 2007. According to the current legislation, the SEA is responsible for the provision of guidance and counselling to all individuals irrespective of their age and social status (including the employed, the unemployed, and students from age 16).

<sup>41</sup> Latvia. VET in Europe – Country Report.

Vocational guidance during basic education is available to all pupils. In most cases, the choice of career is one of the themes discussed in the so-called class hour. The teacher may also work with representatives of the State Professional Career Counselling Agency (operating under the supervision of the Ministry of Welfare) which offers various tests for detecting pupils' vocational aptitudes, interests, preferences and abilities.<sup>42</sup>

Greater attention to careers is given during the last two years of basic education.<sup>43</sup> Students learn about the various opportunities for study through annual exhibitions and the annual publication "Where to study further" as well as in newspapers and periodicals.<sup>44</sup> There is relatively little provision of career education and guidance for students in upper-secondary vocational schools.

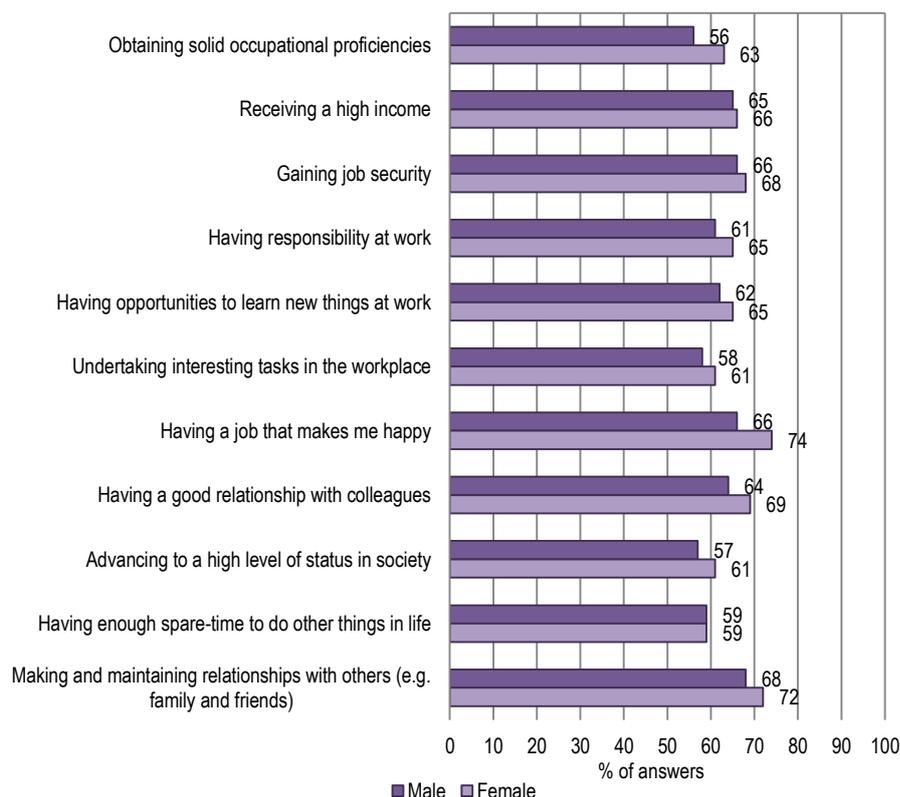
An ESF National Programme project called "Fostering the Implementation of Vocational Guidance Provision and Careers Education in the Educational Sector" (*Karjeras izglītības programmas nodrošinājums izglītības sistēmā, 2005-2008*) aimed to improve the accessibility and quality of vocational guidance provision and careers education at schools.<sup>45</sup>

### Survey results

*Learners are striving for a wide range of goals, in particular good social relationships and happiness through their work.*

All of the objectives explored (Chart 4.28) are more important for the females than for the males.

Chart 4.28: Pupils' professional and life goals (in percent)



Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

<sup>42</sup> Latvia. VET in Europe – Country Report.

<sup>43</sup> Structures of Education and Training Systems in Europe. Latvia.

<sup>44</sup> Latvia. VET in Europe – Country Report.

<sup>45</sup> Vocational education and training and employment services in Latvia.

Moreover, absolutely all of the considered aspects are more important for the service-sector programme pupils than for those in the industrial sector. For instance, with the last two described aspects – “having a job that makes one happy” and “having a good relationship with colleagues” (Table 4.28). The same applies to making and maintaining relationships with others (e.g. family and friends) (Table 4.29).

*Table 4.27: Pupils’ professional and life goals (in percent)*

Obtaining solid occupational proficiencies			Undertaking interesting tasks in the workplace						Having enough spare time to do other things in life				
Female	Male	SES			City	Town	Farm	SES			SES		
		Below	Average	Above				Below	Average	Above	Below	Average	Above
63	56	57	60	69	63	58	56	56	61	66	54	60	69

Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1=“Not at all” to 5=“Completely”

The desire to “undertake interesting tasks in the workplace” slightly depends on the place of residence since for inhabitants of big cities or their suburbs it is more important than for pupils from towns or small cities and pupils from country villages or farms (Table 4.27).

*Table 4.28: Pupils’ professional and life goals (in percent) – continued*

Having a job that makes me happy					Having a good relationship with colleagues								
Female	Male	Service	Industry	SES			Female	Male	Service	Industry	Born in		
				Below	Average	Above					Latvia	Other EU	Non-EU
74	66	73	65	69	72	79	69	64	71	63	67	34	81

Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1=“Not at all” to 5=“Completely”

The country of a pupil’s origin essentially influences their attitude to having a good relationship with colleagues (Table 4.28) – just one in three pupils born in an EU country other than Latvia thought that it is quite or very important, while this is believed by two out of three pupils born in Latvia and even 81 percent of pupils born in a non-EU country. Almost the same proportion consider they are\*\* advancing to a high level of status in society (Table 4.29).

*Table 4.29: Pupils’ professional and life goals (in percent) – end*

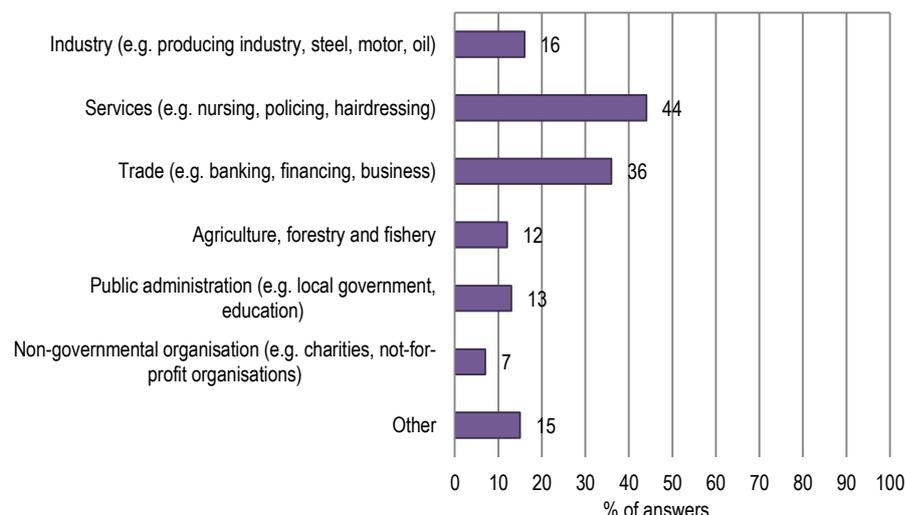
Advancing to a high level of status in society							Making and maintaining relationships with others (e.g. family and friends)	
Born in			Living on family’s present income				Service	Industry
Latvia	Other EU	Non-EU	Comfortably	Coping	Difficult	Very difficult		
59	41	94	63	56	56	64	73	67

Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1=“Not at all” to 5=“Completely”

*In Latvia the majority of students would like to work in the service or trade sectors*

When the pupils were asked about the sector they would like to work in, the answer option “service sector (e.g. nursing, policing, hairdressing)” was cited the most, followed by trade (e.g. banking, financing, business). Other sectors that were considered are far away from the two leaders (Chart 4.29).

Chart 4.29: Sector in which pupils would like to work in the future



Question: D5 Which sector would you like to work in the most?

For male pupils, the trade sector is the most quoted (33 percent), although female pupils' desire to work there is even stronger – 40 percent (Table 4.30).

Table 4.30: Preference for trade and agriculture (in percent)

Trade (e.g. banking, financing, business)			Agriculture, forestry and fishery							
Female	Male		City	Town	Farm	Female	Male	City	Town	Farm
40	33		42	36	29	5	18	7	10	20

Question: D5 Which sector would you like to work in the most?

For male pupils, after trade (33 percent) and services (30 percent) the third most popular sector is industry (e.g. producing industry, steel, motor, oil). While 26 percent of the male pupils said they would like to work in this sector, only 4 percent of the female pupils stated they are striving to work in the industrial sector (Table 4.31) – this sector is the least popular among female pupils. Almost the same attitude is seen for agriculture, forestry and fishery (Table 4.30).

Table 4.31: Preference for industry and services (in percent)

Industry (e.g. producing industry, steel, motor, oil)		Services (e.g. nursing, policing, hairdressing)											
Female	Male	Grades			Female	Male	Born in			Living on family's present income			
		Good	Merit	Fair			Latvia	Other EU	Non-EU	Comfortably	Coping	Difficult	Very difficult
4	26	11	15	22	60	30	45	14	32	39	44	52	49

Question: D5 Which sector would you like to work in the most?

Opposite to the attitudes to industry are the perceptions of non-governmental organisations (e.g. charities, not-for-profit organisations) – with 10 percent this sector is the fourth most popular for the females and with just 5 percent the least popular among the male pupils (Table 4.32).

Table 4.32: Other options (in percent)

Public administration (e.g. local government, education)		
City	Town	Farm
15	13	9

Question: D5 Which sector would you like to work in the most?

Non-governmental organisation (e.g. charities, not-for-profit organisations)					
Female	Male	Living on family's present income			
		Comfortably	Coping	Difficult	Very difficult
10	5	5	8	12	5

Question: D5 Which sector would you like to work in the most?

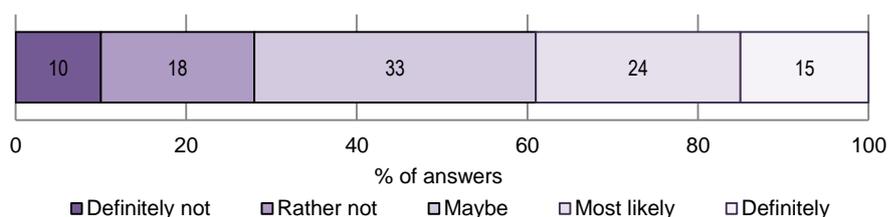
With regard to the service sector (Table 4.31), pupils born in Latvia more often chose this sector than those born in a non-EU country and pupils born in an EU country other than Latvia.

Pupils from big cities or their suburbs more often than pupils from towns or small cities and even more often than pupils from country villages or farms strive towards trade (Table 4.30). The same concerns the sector of public administration (Table 4.32), whereas for agriculture, forestry and fishery the situation is the opposite – just 7 percent of big city inhabitants are thinking of becoming involved in this sector, while 10 percent of pupils from towns or small cities and 20 percent of pupils from country villages or farms are going to be occupied there.

In Latvia, 4 out of 10 pupils intend to continue their education while one-third is still unsure

Chart 4.30 shows pupils' intentions regarding continuing schooling or participating in further education after they have finished their current vocational programme. In Latvia, in total 39 percent of the pupils strive to continue their education while 33 percent are still not sure.

Chart 4.30: Pupils' intentions to continue education (in percent)



Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example, doing a specialised programme)?

The higher the achieved grades, the stronger the willingness to continue education (Table 4.33) and Table 4.344.34).

Table 4.33: Pupils reporting they are most likely to continue education (in percent)

Female	Male	Grades			Service	Industry	City	Town	Farm	SES		
		Good	Merit	Fair						Below	Average	Above
27	21	30	24	17	27	19	30	22	18	19	24	34

Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example, doing a specialised programme)? Presented answer 4 on a scale from 1="Definitely not" to 5="Definitely"

**Table 4.34: Pupils reporting they will definitely continue education (in percent)**

Female	Male	Grades			Service	Industry	City	Town	Farm	SES		
		Good	Merit	Fair						Below	Average	Above
19	12	40	16	11	16	11	18	16	12	13	17	24

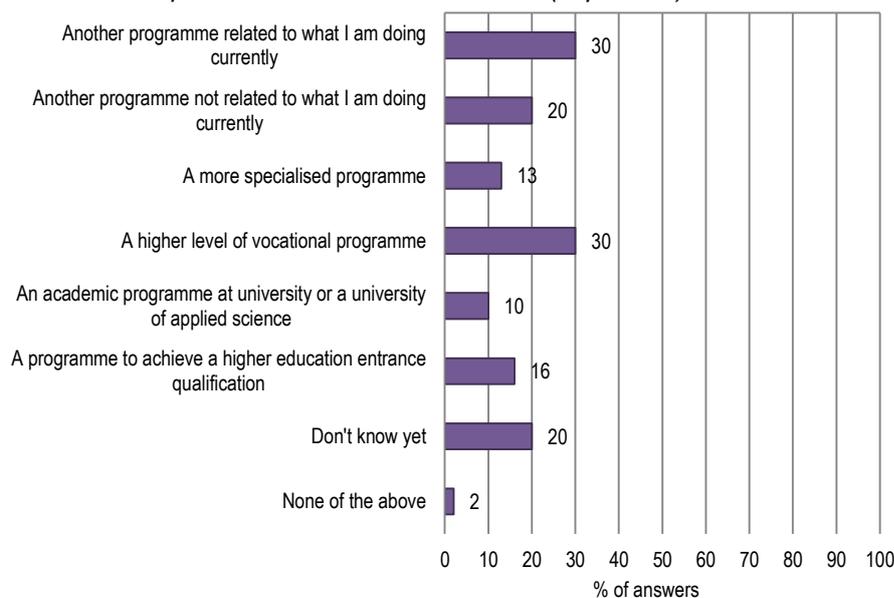
Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example, doing a specialised programme)? Presented answer 5 on a scale from 1="Definitely not" to 5="Definitely"

Also pupils taking programmes relating to the service sector are more likely to plan to continue their education than those from the industry sector (43 percent vs. 30 percent). Pupils from big cities or their suburbs more often desire to continue their education (48 percent) than those from towns or small cities (38 percent) who in turn are more willing to continue education than pupils from country villages or farms (30 percent). The intention to continue education is also strongly associated with differences in socio-economic status. The percentage of pupils willing to continue education is much higher in families with an above-average SES (58 percent) than those with an average (41 percent) or below-average SES (just 31 percent).

*"Another programme related to what students are doing currently" or "a higher level of vocational programme" are the most popular intended pathways for those desiring to continue education*

Chart 4.31 shows which qualification pupils would choose if they were to continue learning.

**Chart 4.31: Pupils' choice of further education (in percent)**



Question: D7 What would you choose to continue learning?

The preferences for the different pathways (Table 4.35) vary between the male and female pupils. While male pupils more often consider another programme related to what they are doing currently, female pupils are more likely to be interested in a higher level vocational programme or another programme unrelated to what they are currently doing.

**Table 4.35: Pupils' preferences for different pathways (in percent)**

Another programme related to what I am doing currently		Another programme unrelated to what I am doing currently		A more specialised programme			A higher level vocational programme									
Female	Male	Service	Industry	Female	Male	Born in			Living on family's present income		SES		Grades			
						Latvia	Other EU	Non-EU	Very difficult	Other cases	Below	Average	Above	Good	Merit	Fair
27	33	24	33	23	17	12	56	41	25	13	27	31	40	43	31	19

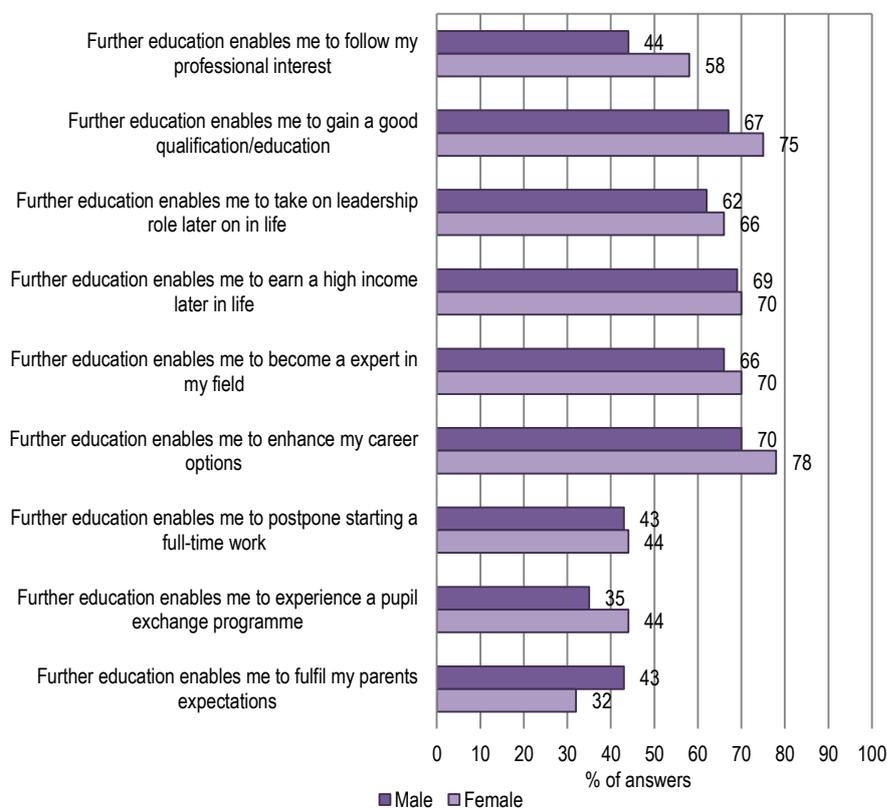
Question: D7 What would you choose to continue learning?

Pupils achieving high grades were more likely to plan to progress to a higher level vocational programme – which suggests that current success is confirming and enabling progression within the chosen vocational pathway. Pupils in industry-related programmes are more likely to plan progression within their current vocational field than students in service-related programmes. Pupils born in an EU country other than Latvia or a non-EU country more often than pupils born in Latvia prefer a more specialised programme. This type of continuing education is stated more often by pupils from families with financial difficulties than from any of the other groups. A higher level vocational programme is more attractive to pupils from families with an above-average socio-economic status than for those with an average or below-average SES.

*Students are motivated to continue their education by a variety of objectives; students with high grades and girls are generally more motivated than students with lower grades and boys*

Chart 4.32 shows students' considerations regarding the enablers of advanced training or studying.

**Chart 4.32: Pupils' opinions regarding what further education enables them to do (in percent)**



Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). To what extent do you agree with the statements below about undertaking further education (or participating in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

More male pupils than females agree with the statement that further education enables them to fulfil their parents' expectations (Table 4.36), however for the rest of the considered factors female pupils agree more than males with, e.g. "to gain a good qualification/education" (Table 4.37), "to enhance career options" (Table 4.38), "to experience a pupil exchange programme" (Table 4.36). However the most vital difference regards professional interest (Table 4.39).

**Table 4.36: Pupils considering exchange programmes and parents expectations (in percent)**

Experience a pupil exchange programme				Fulfil my parents' expectations							
Female	Male	Service	Industry	Female	Male	Service	Industry	Parents born			
								Both in Latvia	One in Latvia	Both in other EU country	Both in non-EU country
44	35	44	36	32	43	37	43	36	46	52	50

Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). To what extent do you agree with the statements below about undertaking further education (or participating in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Pupils with higher grades more often agree with almost all the considered statements compared to pupils with lower grades, e.g. a higher percentage of such pupils agreed that further education enables them to follow their professional interest (Table 4.39); that further education enables them to gain a good qualification/education (Table 4.37) and so on. The single exception is the consideration that further education enables pupils to earn a high income later in life (Table 4.37). Here there are no differences between the visions of pupils with good and merit grades, although they are higher than for pupils with fair grades.

**Table 4.37: Pupils considering a good qualification and a high income (in percent)**

Gain a good qualification/education							Earn a high income later in life					
Female	Male	Grades			Service	Industry	Born in			Grades		
		Good	Merit	Fair			Latvia	Other EU	Non-EU	Good	Merit	Fair
75	67	85	73	52	72	65	71	68	25	73	74	56

Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). To what extent do you agree with the statements below about undertaking further education (or participating in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Except for fulfilling parents' expectations where the industry sector students agree more than pupils from the service sector, all of the other considered aspects of further education are more appreciated by the service sector students. For instance, "becomes an expert in my field" (Table 4.39), "gain a good qualification/education" (Table 4.37), or "experience a pupil exchange programme" (Table 4.36) and "enhance my career options" (Table 4.38). The biggest difference in opinions of students from service and industry sectors regards the ability of further education to follow a pupil's professional interest (Table 4.39). Here, 56 percent of the service sector students consider it as an enabler of further education while just 44 percent of the industry sector students share this opinion.

**Table 4.38: Pupils considering career options and starting full-time work (in percent)**

Enhance my career options						Postpone the start of full-time work							
Female	Male	Service	Industry	Born in			City	Town	Farm	Living on family's present income			
				Latvia	Other EU	Non-EU				Comfortably	Coping	Difficult	Very difficult
78	70	78	68	75	46	35	49	40	41	49	43	39	33

Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). To what extent do you agree with the statements below about undertaking further education (or participating in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

A higher proportion of pupils who were born in Latvia agree with the statement that further education enables them to gain a good qualification/education (Table 4.37) compared to pupils who were born in another EU country and even more compared to pupils born in a non-EU country. Almost the same proportion can be detected for the opinion that further education enables oneself to enhance career options (Table 4.38). While the fulfilling of parental expectations is more important for pupils whose parents were both born in an EU country other than Latvia, pupils with both parents born in Latvia agree much less with this statement (Table 4.36).

Table 4.39: Pupils considering professional interest and becoming an expert (in percent)

		Follow my professional interest									Become an expert in my field	
Female	Male	Grades			Service	Industry	City	Town	Farm	Service	Industry	
		Good	Merit	Fair								
58	44	73	52	34	56	44	57	48	48	71	65	

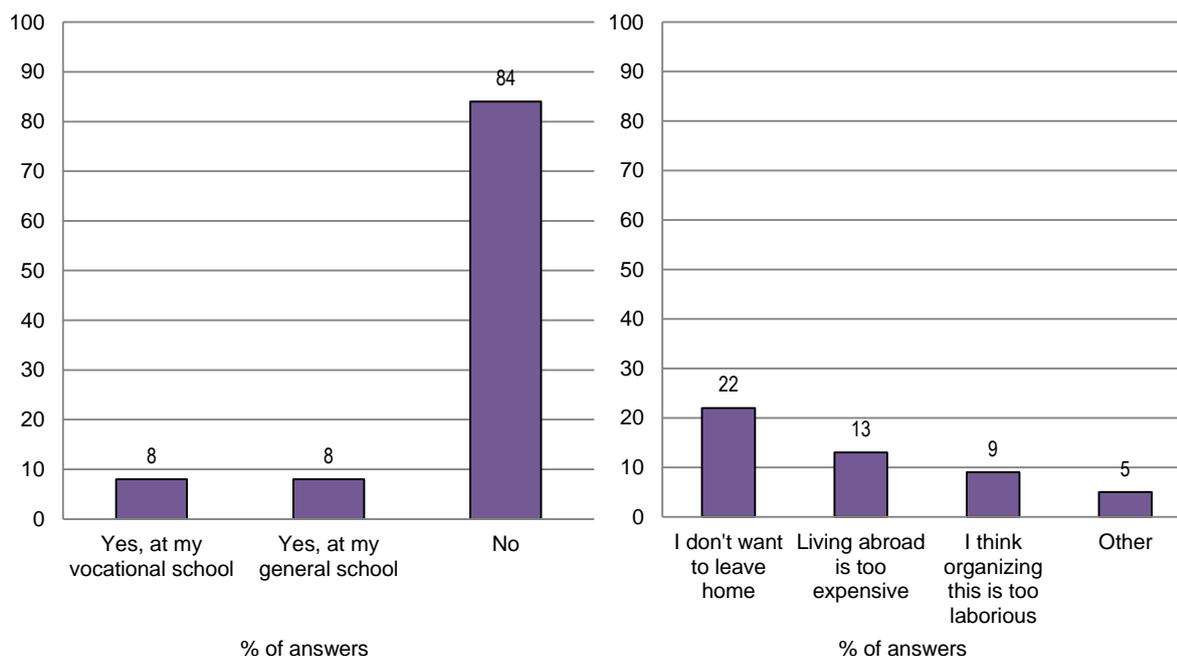
Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). To what extent do you agree with the statements below about undertaking further education (or participating in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

All aspects of further education are slightly more important for the inhabitants of big cities or their suburbs than for pupils living in towns, small cities, country villages or farms. This is especially true for following a pupil's professional interests and the ability to postpone the start of full-time work (Table 4.38). Agreement regarding the ability to postpone the start of full-time work is also higher for pupils from families living comfortably than for pupils from families finding it very difficult to live on the present income with an almost linear distribution for intermediary cases (Table 4.38).

Only a small minority of VET students in Latvia participate in international exchange programmes

The left part of Chart 4.33 shows students' answers to the question about whether they have ever participated in an international exchange programme for pupils and, if not, the right part of Chart 4.33 shows why they did not participate.

Chart 4.33: Pupils' participation in an international exchange programme (in percent)



Questions: D9a Have you ever participated in an international exchange programme for pupils?  
D9d If you would rather not or definitely not: why not?

As Table 4.40 shows, the majority of pupils in Latvia have never participated in an exchange programme for pupils – 79 percent of females and 89 percent of the male pupils. For vocational schools there is no big difference in participation rates between girls and boys. However, females stated more often that they have participated in an exchange programme at their general school than their male counterparts (11 percent vs. 5 percent). Achieved grades do not influence participation, however pupils from industry-related programmes participated in an international exchange more often than those from the service sector. Pupils born in an EU country other than Latvia participated in international exchanges more often than those born in non-EU countries, while pupils born in Latvia show the lowest percentage.

*Table 4.40: Pupils who participated in an international exchange at vocational or general schools (in percent)*

Female	Male	Service	Industry	Born in			Parents born				SES		
				Latvia	Other EU	Non-EU	Both in Latvia	One in Latvia	Both in other EU country	Both in non-EU country	Below	Average	Above
21	11	6	12	15	84	31	13	20	36	20	20	13	10

*Question: D9a Have you ever participated in an international exchange programme for pupils? Presented answers 1="Yes, at my vocational school" 2="Yes, at my general school"*

Participation in international exchange programmes also depends on the parents' country of origin – 36 percent of pupils where both parents were born in an EU country other than Latvia participated in an exchange and only 20 percent of pupils whose parents were both born in a non-EU country or where one parent was not born in Latvia. For the children of Latvian-born parents this rate is just 13 percent.

Again, while in vocational schools socio-economic conditions have no influence on participation in international exchange programmes, for general schools this is the case. The lower the socio-economic background, the more often pupils participated in an exchange programme at the general school. For pupils with above-average socio-economic conditions this figure is just 3 percent, while for the average level it is 6 percent and for the below-average level 12 percent.

When asking those pupils who were not interested in participating in an international exchange programmes about the reasons for that (the right part of Chart 4.33), the aspect most mentioned is that they do not want to leave home; however here there is no visible influence of socio-biographic characteristic on the consideration. Although just a little over 8 percent of pupils consider that organising an international exchange is too laborious, it is interesting that the male pupils stated this more often than the females and the industry sector students more often than the service sector ones (Table 4.41). Even more interesting is that pupils from families with more extreme income levels (both living comfortably and finding the family financial situation very difficult) agree less with this statement than pupils from families with more average incomes.

*Table 4.41: Pupils considering that organising an international exchange is too laborious (in percent)*

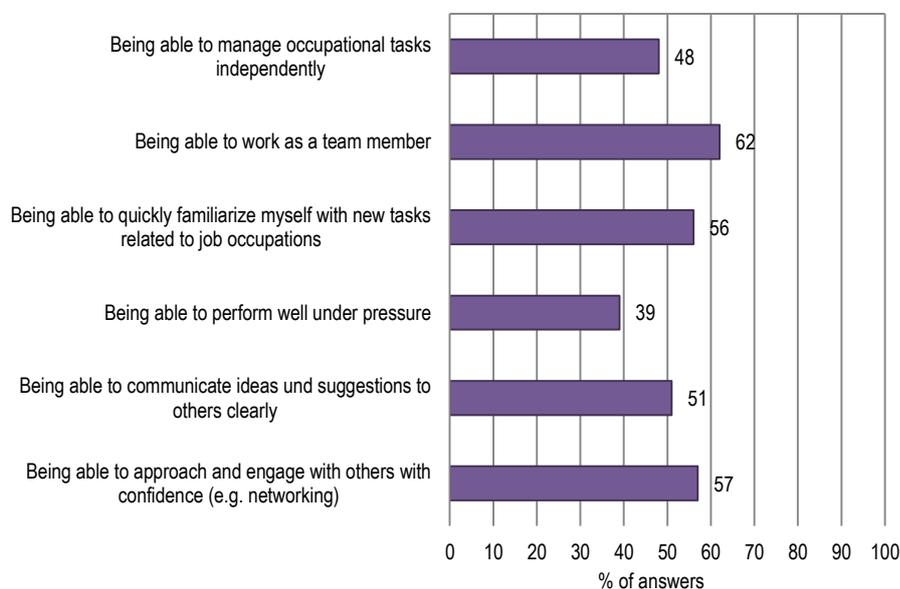
Female	Male	Service	Industry	Living on family's present income			
				Comfortably	Coping	Difficult	Very difficult
5	11	5	11	4	13	11	4

*Question: D9d If you would rather not or definitely not (for D9c Would you like to participate in an international exchange programme especially for vocational pupils?): why not? Presented answer: "I think organising this is too laborious"*

Female VET students in Latvia assess their own competencies more highly than male students and students in service-related programmes assess their own competencies more highly than those in industry-related programmes.

Learners were invited to assess their own levels with respect to a number of competencies which are relevant for work (Chart 4.34).

Chart 4.34: Pupils' perceptions that the acquired skills and abilities enable them to



Question: E1a The following question asks for your perception of certain skills and abilities which are listed below. Please assess your current level of these abilities. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

Gender and the sector in which the pupils are undertaking their programme have an influence on the assessment of skills. Female pupils assessed themselves more highly than males regarding all of the competencies explored, e.g. "manage occupational tasks independently" (Table 4.42), "approach and engage with others with confidence" (Table 4.45) and the highest difference is seen in the assessment of the ability to work as a team member (Table 4.45).

Table 4.42: Pupils' perceptions of managing occupational tasks independently (in percent)

Female	Male	Born in			Parents born				SES		
		Latvia	Other EU	Non-EU	Both in Latvia	One in Latvia	Both in other EU country	Both in non-EU country	Below	Average	Above
51	46	49	26	22	50	51	52	21	57	51	45

Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

Pupils from the service sector estimate themselves more highly than those from the industry sector for all of the proposed soft skills. This foremost concerns the ability to network, work as a team member (Table 4.45) and become quickly familiarised with new tasks related to job occupations (Table 4.43).

**Table 4.43: Pupils' perceptions of their ability to quickly familiarise themselves with new tasks related to job occupations (in percent)**

Grades			Service Industry	Born in			City	Town	Farm	SES			
Good	Merit	Fair		Latvia	Other EU	Non-EU				Below	Average	Above	
70	59	45	61	53	57	55	45	61	56	53	66	58	51

Question: E1a\_3 Please assess your current level of these abilities. Being able to quickly familiarise myself with new tasks related to job occupations. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

As a rule, it can be stated that the higher the achieved grades, the higher the pupils' self-assessment in the case of acquired skills and abilities; for instance, regarding the ability to quickly familiarise themselves with new tasks related to job occupations (Table 4.43). Moreover, these differences regard the ability to communicate ideas and suggestions to others clearly (Table 4.44).

**Table 4.44: Pupils' perceptions of the ability to communicate ideas and suggestions to others clearly (in percent)**

Grades			Service Industry	City	Town	Farm	Living on family's present income				
Good	Merit	Fair					Comfortably	Coping	Difficult	Very difficult	
65	53	38	54	48	55	52	48	56	49	51	42

Question: E1a\_6 Please assess your current level of these abilities. Being able to communicate ideas and suggestions to others clearly. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

The ability to manage occupational tasks independently is more often stated by pupils born in Latvia than those born in a non-EU country, while pupils born in an EU country other than Latvia estimated it even lower (Table 4.42). The same tendency can be detected for quickly familiarising with new tasks related to job occupations (Table 4.43) and the ability to work as a team member (Table 4.45). It is interesting that the self-assessment of the ability to manage occupational tasks independently also depends on the country of the parents' origin (Table 4.42) – pupils whose parents were both born in a non-EU country evaluate themselves much lower than all other pupils.

**Table 4.45: Pupils' perceptions of other skills and abilities (in percent)**

Being able to work as a team member						Being able to approach and engage with others with confidence (e.g. networking)							
Female	Male	Service	Industry	Born in			Female	Male	Service	Industry	City	Town	Farm
				Latvia	Other EU	Non-EU							
66	58	67	59	62	45	28	61	55	63	53	62	57	53

Question: E1a The following question asks for your perception of certain skills and abilities which are listed below. Please assess your current level of these abilities. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

Students living in the countryside or in towns assessed their competencies less highly than those living in cities, for example with respect to networking skills, taking on new tasks and communicating (Tables 4.44 and 4.43).

Further, the income status of the family also affects the self-assessment of the pupils. Pupils from families with a difficult economic situation assess themselves less often as skilled in certain abilities than pupils from families with a secure financial situation. For example, pupils who report living comfortably on the present income rate their skill to communicate ideas and suggestions to others higher than pupils who find it very difficult on the present income (Table 4.44).

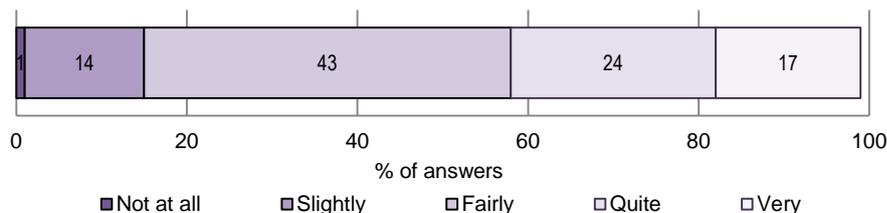
The socio-economic status index is also associated with the level of competence – the higher the socio-economic background, the higher the perception of acquired competencies. This is particularly true for the ability to manage occupational tasks independently (Table 4.42). Even more differences

can be detected regarding the ability to quickly familiarise oneself with new tasks related to job occupations (Table 4.43).

*VET students with higher grades, females and those in service-related programmes are more likely to believe that their programmes are contributing to the development of their competencies*

Students were asked to make a judgement about the extent to which their current programmes were contributing to the development of their competencies (Chart 4.35).

**Chart 4.35: Pupils' perceptions of the development of soft skills by current programme (in percent)**



Question: E1b Overall, to what extent does your current programme prepare you for these activities?

Pupils with higher grades appreciate their programme's ability to develop the necessary soft skills more – a total of 56 percent of pupils with good grades consider that their current programme does this quite or very well, while the same opinion is shared by pupils with merit grades and just 29 percent of pupils with fair grades (Table 4.46).

**Table 4.46: Pupils who appreciate their programmes (in percent)**

Female	Male	Grades			Born in			SES		
		Good	Merit	Fair	Latvia	Other EU	Non-EU	Below	Average	Above
27	22	33	26	16	24	17	20	22	26	33

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answer 4 on a scale from 1="Not at all" to 5="Very"

Female	Male	Grades			Service	Industry
		Good	Merit	Fair		
20	15	23	18	13	21	16

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answer 5 on a scale from 1="Not at all" to 5="Very"

There is a difference regarding the assessment of the programme between boys and girls. Male pupils more often assess that the current programme fairly well develops the desired soft skills than female pupils (Table 4.47) and, in turn, females more often consider that the programme does this quite or very well (in total 47 percent vs. 37 percent, see Table 4.46). Service-oriented students more often than industry-oriented ones consider that their current programme helps them to develop the necessary soft skills very well (Table 4.46).

**Table 4.47: Pupils not appreciating their programmes (in percent)**

Born in		
Latvia	Other EU	Non-EU
1	9	15

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answer 1 on a scale from 1="Not at all" to 5="Very"

Grades			Born in			SES		
Good	Merit	Fair	Latvia	Other EU	Non-EU	Below	Average	Above
10	12	19	14	46	6	18	12	5

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answer 2 on a scale from 1="Not at all" to 5="Very"

Female	Male	Grades			Born in		
		Good	Merit	Fair	Latvia	Other EU	Non-EU
40	46	34	42	50	43	28	41

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answer 3 on a scale from 1="Not at all" to 5="Very"

Pupils born in Latvia more often stated that the programme prepares them fairly or quite well (43 percent and 24 percent, respectively) than did pupils who were born in another EU country (28 percent and 17 percent, respectively). In contrast, the percentage of pupils born in Latvia who stated that their programme prepares them slightly is much smaller than the share of pupils born in another EU country (14 percent vs. 46 percent). The share of pupils who consider that their current programme does not help to train their soft skills at all is much higher among those born in non-EU countries compared to those born in an EU country other than Latvia, whereas such views are held by few if any pupils born in Latvia.

Socio-economic background also influences the assessment of a programme's appropriateness to develop the necessary soft skills. While pupils from families with a below-average SES more often than others consider that the programme slightly helps to develop these skills (Table 4.47), pupils from families with an above-average socio-economic status more often than others consider that the programme promotes the necessary soft skills quite well (Table 4.46).

### 4.3.6 Conclusion

The biggest differences regarding gender were found in involvement in paid work that is not part of the programme. Half of the female pupils do not do paid work, whereas only one out of three male pupils is not engaged in paid work that is not part of their programme.

The examination of a number of factors shows that parental influence is more important for girls than for boys in the majority of cases. The influence of parents on pupils' decisions is stronger when both parents were born in an EU country other than Latvia, whereas the weakest dependence on parents is when both parents were born in Latvia.

The most important information sources for pupils when choosing their programme are parents and family members, online information and other public media, e.g. newspapers, followed by informative days, fairs and open days at schools, whereas teachers' suggestions and job centres are the least important for pupils when they are choosing a programme. Friends' advice is more important for pupils

born in an EU country other than Latvia than for those born in non-EU countries and is the least important for pupils born in Latvia.

The findings show that whether a student is involved in a service- or industry-related programme makes a difference for some factors, but not all. However, the surveyed students were actually participating in some 200 different programmes and a more detailed analysis at the programme level could reveal stronger relationships (as for example in Austria).

The analysis confirms the common-sense expectation that current achievement (grades) is strongly associated with key differences in terms of: decision making, motivation, objectives and intentions. Similarly, whether students are living in a city, town or the countryside is a pervasive factor. In general, students living in larger agglomerations have higher aspirations.

The analysis reveals that a pupil's country of origin and that of their parents is associated with unexpectedly high differences; for example, with respect to motivation, objectives and intentions. This finding raises the further question of how to explain such differences: whether they can be attributed to differences in the mentality of these groups or to differences in the quality and type of VET that these groups receive.

Socio-economic status was found to be associated with differences; for instance, with respect to motivation and intentions. In general, the higher the socio-economic status of a family, the more motivated a pupil. However, it was surprising to find that sometimes pupils from the extreme socio-economic groups (either living comfortably or in great difficulty) appear to have more in common than groups with more average incomes. This is the case, for example, with respect to the extent to which students consider alternatives when making choices.

Marek Fuchs and  
Simon Laub

## 4.4 Germany

### 4.4.1 General Education System Characteristics

Although the federal authority has overall responsibility for education, according to the Basic Law it is the regional states, the *Länder*, that exercise responsibility for the school sector, higher education as well as adult education and continuing training and learning (Eurydice 2010a: 27). Although this decentralisation of authority to the *Länder* results in quite a heterogeneous education system, the *Länder* share a common structure.

*Pre-primary* education exists in the form of Kindergarten mainly aimed at children aged 3 to 6 years (Eurydice 2010b: 16). Even though visiting a day-care institution is not mandatory, over 90 percent of the 3–6-year-olds are enrolled in these institutions.

Compulsory full-time schooling in Germany starts at age 6. Children have to attend a *primary school* (*Grundschule*) lasting four years or, in certain *Länder*, six years (Eurydice 2010b: 20.)

*Secondary* education starts at age 10 (or at age 12) and usually continues to age 16. Schooling in Germany is characterised by strong tracking where, in many *Länder*, pupils are separated according to

their learning abilities and individual specialisations. The main institutional types found across the Länder are:

Secondary general schools (*Hauptschulen*) which prepare pupils to enter vocational training in the dual system or participate in vocational basic education within the transition system (Hippach-Schneider 2007).

Secondary intermediate schools (*Realschulen*) which prepare pupils to enter vocational training within the dual system or a full-time vocational school.

Grammar schools (*Gymnasien*) which lead to the *Abitur*, a leaving certificate that qualifies pupils for studies in the tertiary sector, for example at a university. However, a reasonable proportion of pupils with an *Abitur* choose to continue their upper-secondary education in a vocational school or enter the dual system.

Comprehensive schools (*Gesamtschulen*) which aim to offer all kinds of programmes to learners of all abilities. *Gesamtschulen* may combine different kinds of schools working in partnership or they may operate as a fully integrated institution (Eurydice 2010a: 101).

The *Länder* try to maintain an open system giving pupils the option to transfer from one school type to another if their achievement warrants such a move (Eurydice 2010b: 29).

*Upper-secondary* education starts at age 15 and continues to age 18 or 19. Young people can continue the general education track if they attend the upper level of *Gymnasium*. Alternatively, a number of different institutions offer initial vocational education. The most important providers of initial vocational education are: part-time vocational schools (*Berufsschulen*) which, in partnership with training provided by employers, form the dual system; full-time vocational schools (*Berufsfachschulen*); vocational secondary schools (*Fachoberschulen*); and vocational grammar schools (*Fachgymnasien* or *Berufliche Gymnasien*).

Compulsory education in Germany lasts until the age of 18. Therefore, pupils leaving lower-secondary education at age 15 or 16 have to attend some kind of vocational school. Traditionally, most of these students would have entered the dual system: part-time vocational school combined with an apprenticeship. Yet, over the last few years, Germany has seen a considerable expansion of provision within what is known as the transition system. These programmes, the pre-vocational training year (*Berufsvorbereitungsjahr*) and the basic vocational training year (*Berufsgrundbildungsjahr*), were established for pupils who were unable to obtain training positions within the dual system. Most of the transition programmes are embedded into the vocational schools but similar programmes are offered by employment agencies and private organisations.

In addition, schools for nurses, midwives and other occupations in the healthcare sector (*Schulen des Gesundheitswesens*) train pupils for non-academic healthcare positions. Often, these schools are associated with full-time vocational schools (Hippach-Schneider 2007: 22).

In Germany, we can identify a further set of educational programmes that can be described as post-secondary, non-tertiary education. Night schools (*Abendgymnasien*) offer a choice of educational programmes for people of all ages and the full-time vocational programmes also offer continuing vocational education and training. In addition, senior vocational schools (*Berufsoberschulen*) provide a higher education entrance qualification for pupils who have already successfully completed education and training in the dual system (Cedefop 2010: 45).

The *tertiary* level includes traditional multi-subject universities (*Universitäten*) and universities of applied sciences (*Fachhochschulen*). In Bavaria, vocational academies (*Berufsakademien*) specialise in provide vocational higher education for graduates from upper-secondary education.

The German education system is known internationally for its high standards and broad acceptance of the dual system. However, it is also a highly diversified system which offers considerable opportunities for progression to higher education for vocational learners.

#### **4.4.2 Fundamental principles and legislative framework**

Vocational education and training in Germany at the upper-secondary level is highly differentiated. Not only are there several different types of schools, but there is also a wide range of educational programmes differing extensively in their content, length and type of leaving certificate. Some vocational programmes not only offer a vocational qualification but also give learners the opportunity to achieve a general educational certificate. Recent policy initiatives have tried to make the system more flexible and permeable. In addition, as the *Länder* have considerable autonomy, their institutions and programmes of vocational education and training differ considerably. Although part-time vocational schools, working as part of the dual system are the single most important type of provision, full-time vocational schools also play an important role. In recent years, the transition system, which provides one year pre-vocational programmes for pupils who are unable to attain a training position in the dual system, has grown in size.

The Education Acts and the Compulsory Schooling Acts of the 16 *Länder* are the basis for the school regulations (*Schulordnungen*) that not only define the curriculum but give detailed provisions regarding the organisation of education. With regard to the enterprise-based part of vocational education, the Vocational Training Act (*Berufsbildungsgesetz*) of 1969 as well as the Handicrafts Act (*Gesetz zur Ordnung des Handwerks*) from 1953 provide the legal framework for in-company training. Here, the “rights and obligations of trainees and trainers” (Eurydice 2010a: 97) are precisely codified. Another important legislative act is the Protection of Young Persons at Work Act (*Jugendarbeitsschutzgesetz*) securing the protection of young workers (Eurydice 2010a: 97).

##### *4.4.2.1 Admission requirements*

In principle, admission to vocational programmes is based on the achievement of the school leaving certificate and the availability of open positions for trainees in enterprises or free places at full-time vocational schools. Young people seeking an apprenticeship in the dual system have to apply at a company or enterprise that offers a training position. Enterprises use tests and interviews to find out if an applicant is a suitable trainee. Larger firms operate assessment centres in order to select large numbers of trainees and match them to appropriate positions. In addition to test results, candidates are expected to demonstrate the personal traits and dispositions that are judged necessary for particular enterprises or occupations.

##### *4.4.2.2 Quality of Education*

Institutionalised quality assurance in education was not introduced until the 1980s in Germany. In 2002 national educational standards (*Bildungsstandards*) were implemented focussing mainly on schools. The Federation and the *Länder* started a joint system of quality reporting in 2006. Their second report was presented in 2008 and focused explicitly on the transition from general schools into vocational education and training. Quality standards in Germany are based upon a framework developed by the standing Conference of Ministers of Education which includes four dimensions: participation in international comparative studies of pupil achievement; central review of the achievement of educational standards in a comparison between the *Länder*; comparative studies within the *Länder* in order to review the efficiency of individual schools; and the joint education reporting of the Federation and the *Länder* (Eurydice 2010a: 232).

The sphere of in-company vocational education shows a broad range of instruments for quality assurance and control. Laws and regulations as well as recommendations from the board of the Federal Institute of Vocational Training (BIBB) act as the main frameworks (Eurydice 2010a: 234). Although the Vocational Training Act (*Berufsbildungsgesetz*) emphasises the importance of quality control, it also calls for a “flexibilisation of the training quality control instruments and their supplementation by a number of new quality assurance guidelines, amongst other measures” (Eurydice 2010a: 239). In addition, the *Länder* and the vocational training committees are expected to control and improve the quality of the vocational education and training.

#### 4.4.2.3 *Involvement of the social partners*

The social partners play an important role within the system of vocational education. Especially in the dual system training, partners from commerce, industry and the service sector perform much of the practical vocational training of pupils. The chambers of the different sectors are the most important coordinating authority next to the Federal Authority and the *Länder*. Their responsibilities span from advising companies in relation to vocational training and the formal registration of trainees to the approval of examinations. Further, they provide a platform for communication at the regional level and take an active role in many VET committees. Unions and employers cooperate in the main committee of the Federal Institute of Vocational Education and Training (BIBB) and in the VET committees run by various government ministries and chambers (Hippach-Schneider et al. 2007: 20).

Depending on the legislative level, the responsibilities of the social partners differ. At the national level, they help to develop training standards and make recommendations for the development of VET. At the regional level, they offer advice and supervision of training provision in enterprises, implement examinations and award qualifications. At the sectoral level, the partners negotiate the provision of training places and collective agreements on remuneration for training. At the company level, they help to plan and implement in-company training (ibid.: 20).

The cooperation of the social partners ensures that the training truly reflects the requirements and needs of employers and the workforce. The role of the social partners is closely associated with the legally binding training regulations developed for all state-recognised occupations requiring formal training (*anerkannte Ausbildungsberufe*). These regulations formulate precisely which knowledge, skills and competencies should be acquired by the pupils within their vocational training. These regulations are formulated, updated and validated with the assistance of the social partners (Eurydice 2010b: 37).

### 4.4.3 **Socio-demographic Characteristics and the Transition to IVET – Comparative Aspects of VET Structures**

German VET is characterised by a wide variety of VET institutions:

#### 4.4.3.1 *Part-time vocational schools (Berufsschule)*

*Berufsschulen* educate more students than any other type of upper-secondary school in Germany. The *Berufsschulen* provide part-time education which combines with enterprise-based education to form the dual system. Traditionally, students attend the *Berufsschule* at least one day per week; they spend the majority of their time in the training enterprise. Apprenticeships usually last 2 to 3 years. In most cases, apprentices are aged 16-18; however, some are older having already completed an Abitur.

Companies cover the cost of on-the-job training and the trainee’s remuneration, which is on average one-third of the starting pay for a trained skilled worker. The educational curriculum for the in-company

training should correspond to the training regulation defined by the Federal Ministry for Education and the *Länder*. Autonomous industrial bodies (Local Chambers of Industry) monitor the suitability of training enterprises, the training personnel and the assessment of the trainees. Small and medium-sized enterprises are sometimes unable to supply all of the training requirements due to a lack of suitable training personnel. This problem is addressed by educational institutions that offer inter-company training periods (inter-company vocational training centres – ÜBS), which are approved/accredited by the Federal Ministry for Education. Companies also collaborate to create shared training provision (*Ausbildungsverbände*) in which more than one company share the time and the cost of vocational training (Cedefop 2010: 40).

#### 4.4.3.2 Full-time vocational school (*Berufsfachschule*)

*Berufsfachschulen* provide full-time vocational training. *Berufsfachschulen* sometimes have an occupational specialism: there are schools for commercial occupations, occupations involving foreign languages, craft occupations, household and caring occupations, healthcare occupations and artistic occupations. The pupils are usually 16 to 18 years old when they start in this school form and they have to hold a lower-secondary education certificate or an intermediate secondary school leaving certificate in order to be accepted in full-time vocational schools. Studies in full-time vocational schools last one to three years, depending on the specialisation and the educational programme.

Graduates of *Berufsfachschulen* attain ISCED level 3. In cases where full-time vocational schools do not provide their graduates with a full vocational qualification, the attendance at a full-time vocational school can be credited as the first year of vocational training in the dual system if certain conditions are met. In addition, certain *Berufsfachschulen* also offer students the possibility to attain a qualification allowing entrance to a university if they attend additional classes (Cedefop 2010: 38).

#### 4.4.3.3 Senior technical school (*Fachoberschule*)

*Fachoberschulen* (senior technical schools) offer vocational training to students that hold a final certificate from intermediate school or an equivalent qualification. *Fachoberschulen* are divided into the following specialisations: business and administration, technical skills, healthcare and welfare, design, nutrition and home economics, and agronomy. Studies in senior technical schools last 2 years; the first year includes learning and on-the-job practical training in local companies, while the second year involves general and specialised learning in school (e.g. German, foreign languages, mathematics, natural sciences, economics and social science). After senior technical schools, the graduates can continue their studies in universities of applied science (*Fachhochschulen*) (ibid.: 38).

#### 4.4.3.4 Gymnasium with a vocational bias (*Berufliches Gymnasium* or *Fachgymnasium*)

Depending on the *Land*, gymnasias with a vocational bias are known as vocational grammar schools (*Berufliches Gymnasium*) or technical grammar schools (*Fachgymnasium*). Besides general education, these vocational/technical gymnasias offer vocational training in a range of vocational subjects, such as business, technical skills, nutrition and home economics, agronomy, healthcare and welfare, and information and communication technology. Admission is dependent on a lower-secondary education certificate. These programmes last 3-4 years. The graduates of a gymnasium with a vocational bias acquire a higher education entrance qualification (*Allgemeine Hochschulreife - Abitur*), which gives them the opportunity to continue in tertiary education (colleges, universities or universities of applied science) (ibid.: 38).

#### 4.4.3.5 Senior vocational schools (*Berufsoberschule*)

Senior vocational schools offer training to 19- to 22-year-old students in several fields, such as technical skills, business, agronomy, nutrition and home economics, social affairs and design. Students are allocated to senior vocational schools according to the training orientation they have followed in

their initial vocational training or the occupation they have already worked in. The training programme lasts for two years in full-time *Berufsoberschulen*, although some of them offer part-time education with a longer duration. Graduates of *Berufsoberschulen* acquire a subject-restricted higher education entrance qualification (*Fachgebundene Hochschulreife*) or a higher education entrance qualification (*Allgemeine Hochschulreife*) if they attend courses where they acquire a second foreign language (ibid.: 45). At tertiary level, VET is offered by vocational academies (*Berufsakademien*) and universities of applied sciences (*Fachhochschulen*).

#### 4.4.3.6 Continuing Education and Training

In Germany the structure of continuing education “is characterised by receptiveness, flexibility, and ongoing changes” (Hippach-Schneider 2007: 34). The regulative function of the state involves a ‘light touch’ and a diversity of providers, mostly from the private sector, offer a broad spectrum of courses and programmes.

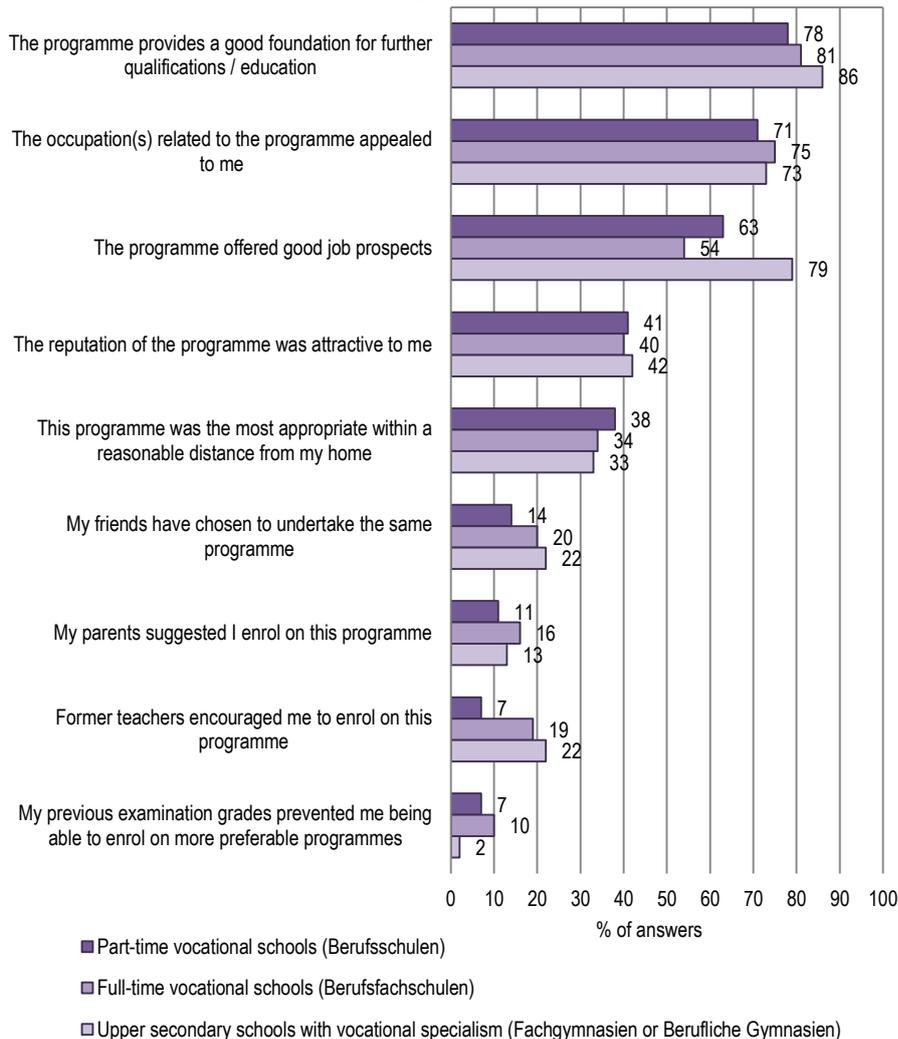
General adult education is mainly organised by *Volkshochschulen*, local adult education centres. Adults who want to acquire a school leaving certificate can attend evening classes in special schools (*Abendhauptschule* or *Abendgymnasium*) or a *Kolleg*. Continuing Vocational Education and Training (CVET) is provided by *Fachschulen* that offer advanced training courses to people with a completed vocational education. Graduates from the *Fachschule* are entitled to add the title “state-certified” to their occupational title, for example state-certified technician (*staatlich geprüfter Techniker*). These qualifications are offered for a number of different occupations (ibid.: 55). Another important component of continuing education is distance learning. A variety of courses are aimed at people looking for a chance to obtain a higher qualification, both general and vocational. These are usually part-time programmes.

#### 4.4.3.7 Findings from the 7EU VET survey: Socio-demographic characteristics and the transition to VET

The findings of the 7EU VET survey as presented below refer solely to and are based on the target population of 17- to 18-year-old students. Since the German VET system is also often attended by students with *Abitur*, many survey participants are not included in the following presentation of findings.

The basis of all decision-making processes regarding the choice of a suitable VET programme is subjectively identifying the most critical criteria. There are three predominant factors influencing students’ decisions on a particular VET programme. As depicted in *Chart 4.36*, the provision of a good foundation for further education is the most important category, cited by 80 percent of the German target population.

Chart 4.36: Factors influencing programme choice by vocational school type (in percent)



Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Second to this lead criterion, with a 72 percent approval rate, is that the occupations related to the programme must themselves be appealing. The third most important factor (63 percent) are the job prospects after successful completion of the VET programme. The fact that insufficient previous examination grades might prevent their enrolment in a specific programme has the least important influence on students' decision-making process with a mere 7 percent approval rate. Taking a more in depth view of factors in the decision for a VET programme, one can observe some differences between students of either part-time, full-time or upper-secondary schools. The influence of: (1) good job prospects; (2) previous grades; (3) teacher's encouragement; and (4) friends' enrolment in the same VET programme is significantly ( $p=.001$ ) different among the three VET school types.

Moving on to gender-specific differences in relation to programme choice, there are a few significant variations, as seen in Table 4.48.

*Table 4.48: Factors influencing programme choice by vocational school type & gender (in percent)*

	Part-time vocational schools (Berufsschulen)	Full-time vocational schools (Berufsfachschulen)	Upper secondary schools with vocational specialism (Fachgymnasien or Berufliche Gymnasien)
<b>Male</b>			
The programme offered good job prospects	64	54	78
My previous examination grades prevented me being able to enrol on more preferable programmes	7	12	((4))
My parents suggested I enrol on this programme	11	16	20
The occupation(s) related to the programme appealed to me	72	73	70
The programme provides a good foundation for further qualifications / education	79	80	84
My friends have chosen to undertake the same programme	14	23	24
The reputation of the programme was attractive to me	39	41	45
Former teachers encouraged me to enrol on this programme	8	22	19
This programme was the most appropriate within a reasonable distance from my home	41	42	36
<b>Female</b>			
The programme offered good job prospects	61	53	81
My previous examination grades prevented me being able to enrol on more preferable programmes	7	8	((1))
My parents suggested I enrol on this programme	11	16	10
The occupation(s) related to the programme appealed to me	70	77	74
The programme provides a good foundation for further qualifications / education	76	81	88
My friends have chosen to undertake the same programme	13	17	21
The reputation of the programme was attractive to me	43	39	40
Former teachers encouraged me to enrol on this programme	7	17	23
This programme was the most appropriate within a reasonable distance from my home	34	28	32

*Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*  
 () n is less than 10, (( )) n is less than 5

The decision for a specific VET programme made by upper-secondary VET schools' female and male students is differently influenced by their parents. While 20 percent of male students in upper-secondary VET schools took into account their parents' suggestion to enrol in a particular VET programme, a mere 10 percent of their female schoolmates did the same.

Another factor of greater influence on male VET students is the distance between their home and their respective educational institution(s). 41 percent of male students enrolled in dual VET programmes (42 percent in full-time vocational school programmes) considered commuting distances to be an important aspect in their decision process. Only 34 percent of female part-time VET school students (28 percent in full-time vocational school programmes) took this view.

#### 4.4.4 Vocational Curricula, Teaching Learning and School Success – Results from the Large-Scale Survey

##### 4.4.4.1 Vocational Curricula (school-based and practical training)

The main goal and duty of vocational schools of any kind is to supply young people with the skills and competencies they need to enter an occupation. In the dual system, the vocational school works towards this goal together with the training enterprise. Trainees in the dual system develop their practical skills and experience through their work in the training enterprise. Vocational part-time schools focus on broader vocational knowledge and, in addition, they provide general subjects like mathematics and German (Pahl 2007: 400). Vocational full-time schools have to offer practical training to furnish the students with the necessary practical skills.

The KMK (Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder*) has the responsibility for developing framework curricula for vocational schools for each vocational programme.

“They are structured in accordance with areas of instruction so as to support the acquisition of vocational knowledge, skills and competences. Areas of instruction contain a complex statement of objectives orientated around typical vocational acts, as well as references and time guidelines as regards content, i.e. references to the time of communication in the course of education as well as to the number of lessons” (Eurydice 2010a: 117).

Those frameworks not only function as guidelines for schools, but they also ensure that qualifications from schools are comparable between the *Länder*. However, each *Land* adapts the framework to create its own curriculum which then becomes binding for its vocational schools (ibid.:386).

At vocational full-time schools, students have to participate in a minimum of 30 periods per week in two areas of instruction (general and occupational-specific subjects). Vocational schools offer a variety of programmes: a full occupational qualification, a general school certificate or a partial qualification. For programmes with a partial qualification, the KMK regulations function as the main structuring element. For programmes that offer a full occupational qualification, additional standards apply. The Ministers of Education have drawn up framework agreements for certain occupations which set out objectives, the duration of the training, entrance requirements, the content of training and assessment regulations. Programmes that lead to a state-certified technical assistant certificate are structured by the framework agreements (Pahl 2007: 407).

Vocational part-time schools, like full-time schools, offer general as well as occupationally-related subjects. Trainees spend 12 hours per week in class, where most of this time is dedicated to content that is specific to the occupation they are pursuing. Four hours are dedicated to general subjects like German, religion or a foreign language. Teaching is guided by the curriculum set by each *Land*, which itself is an adaptation of the national framework set for part-time vocational schools by the KMK. The knowledge, skills and competencies expected from the enterprise-based training are defined in a separate set of training regulations. Every recognised occupation requiring formal training has an explicit training regulation. These regulations are developed and controlled by the Ministries of Education and Cultural affairs in close cooperation with the social partners (e.g. Chambers of Crafts and Chambers of Industry and Commerce and trades unions). This cooperation “ensures that the training regulations take account of what has been learnt from experiences in the working world and in the vocational schools, as well as the results of employment and occupational research and the results of pilot schemes of the Federal Institute of Vocational Education and Training (*Bundesinstitut für Berufsbildung* – BIBB)” (Eurydice 2010a: 117).

#### 4.4.4.2 Assessment and progression arrangements

Vocational students are assessed on the basis of their achievement in class with regard to their written, oral or practical participation. Written exams and extended homework are spread out through the whole school year and the curriculum formulates what abilities and achievements are expected from the students at any given stage. In contrast to general schools, students at vocational schools do not repeat classes. Instead, the period of their training and education may be extended if necessary (Eurydice 2010a: 118-120).

In the dual system, the national training regulations and the regional curricula define explicitly the different steps of trainees' assessment. An intermediate examination consisting of written, oral and practical tests assesses not only the content taught at school, but it particularly focuses on the competencies the trainee is expected to have developed through their in-company training. The final examination at the end of the programme, the *Gesellenprüfung*, is an extended version of the intermediate examination (Eurydice 2010a: 125). Students attending a programme at a vocational full-time school complete their education with a final examination. Depending on the programme chosen, they can achieve a general and/or vocational qualification (Eurydice 2010a: 118 et seq.).

#### 4.4.4.3 Teaching, Learning and Student Success

The average time students spend at school varies among the three types of VET schools in Germany. As can be seen in *Table 4.49*, there are only small differences regarding the mean time spent at school between students of full-time vocational schools and upper-secondary schools. However, due to the leading role of dual VET programmes in the German VET System, there are many students who spend much less time at school, spending a bigger part of the week at their training companies.

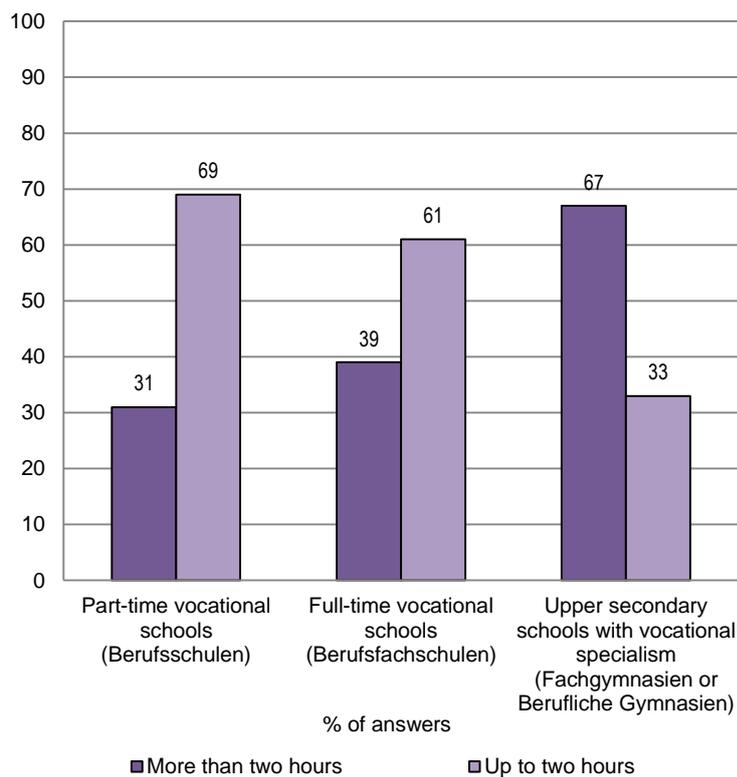
*Table 4.49: Mean time spent at school by gender, economic sector & school type*

	Part-time vocational schools (Berufsschulen)	Full-time vocational schools (Berufsfachschulen)	Uppersecondary schools with vocational specialism (Fachgymnasien or Berufliche Gymnasien)
Overall	18.7	30.1	31.7
Male	21.0	30.4	31.5
Female	16.2	29.8	31.8
Industry	21.3	28.6	36.2
Service	17.1	30.6	31.3

*Question: B3 How many school hours per week do you spend at school?*

On average, German VET students spend roughly 24 hours per week at their respective VET schools. The number of hours per week reported for students at part-time vocational schools is about three quarters of the time students spend in full-time schools. As depicted in *Table 4.49*, there is also a difference between male and female students who are enrolled in part-time vocational schools. This difference is most likely due to characteristics of programmes which are gendered in their recruitment.

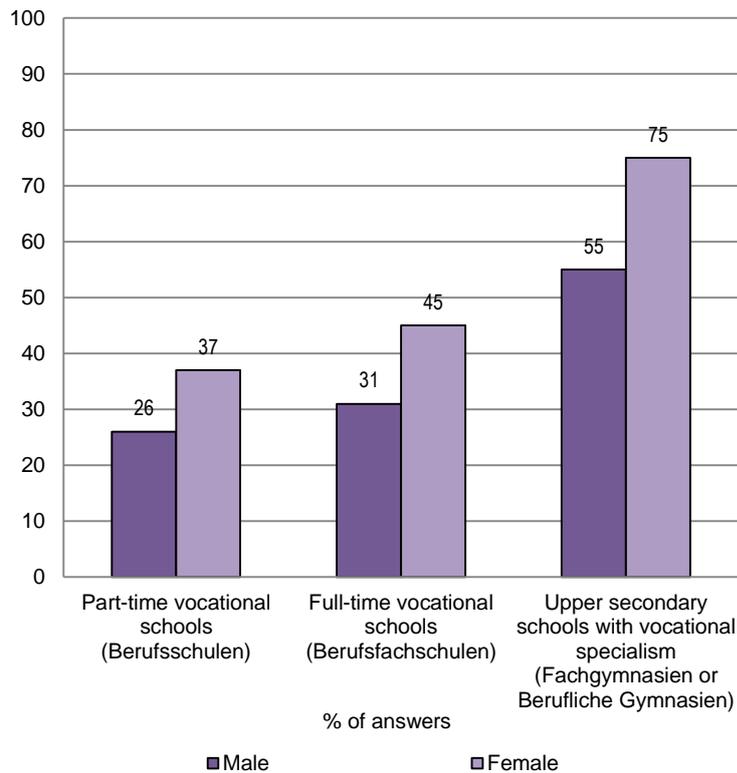
Table 4.50: Time per week spent studying outside school by school type (in percent)



Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?

The amount of time spent on homework and other school-related activities away from school (Table 4.50) premises is significantly dependant ( $p < .001$ ) on the kind of school attended. 69 percent of students in dual VET schools do not spend more than two hours studying outside school per week. The answers of full-time vocational school students only slightly deviate from that, with 61 percent not spending more than two hours studying outside school. Students in upper-secondary schools with a vocational bias, however, are considerably more burdened by homework. Conversely to students in part-time vocational schools, two-thirds (67 percent) regularly spend more than two hours a day on studying outside school.

*Table 4.51: Students spending more than two hours studying outside school by school type & gender (in percent)*



*Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"*

However, it must be considered that the time spent on learning activities outside school is also significantly influenced by other variables. As seen in *Table 4.51*, female students are prone to spend more time on, for instance, homework across all school types. The most striking difference is found with students in upper-secondary schools with a vocational bias where 75 percent of female students spend more than two hours per week on out of school study, whereas just 55 percent of male students do so.

The study behaviour of male and female students was remarkably different among those enrolled in part-time vocational school programmes. *Table 4.52* displays study behaviour by type of school programme, for example whether they express an interest in practical subjects. With a significant ( $p < .05$ ) difference of 16 percentage points, male students (77 percent) in dual VET programmes are more interested in these subjects than their female counterparts (61 percent). Female learners are, however, more ambitious than male students, with 67 percent striving for the best marks possible (male students: 59 percent). Further, 73 percent of female VET students find it important to fully understand what they need to learn, outweighing male students who concurred with this statement in only 66 percent of cases.

*Table 4.52: Students' motivation for studying by school type & gender (in percent)*

	Part-time vocational schools (Berufsschulen)	Full-time vocational schools (Berufsfachschulen)	Upper secondary schools with vocational specialism (Fachgymnasien or Berufliche Gymnasien)
<i>Male</i>			
I strive for the highest possible marks.	59	61	58
It is important for me to fully understand what I have to do/learn.	66	68	67
I want to make a good impression on my teachers by achieving good grades.	38	46	23
I want to make a good impression on potential employers by achieving good grades.	77	82	76
I want to keep up with my fellow pupils.	52	49	51
I enjoy learning.	7	17	11
I am interested in practical subjects.	77	65	64
I am interested in general subjects (e.g. maths, foreign language)	23	29	30
<i>Female</i>			
I strive for the highest possible marks.	67	61	67
It is important for me to fully understand what I have to do/learn.	73	74	76
I want to make a good impression on my teachers by achieving good grades.	36	44	34
I want to make a good impression on potential employers by achieving good grades.	84	85	88
I want to keep up with my fellow pupils.	45	46	48
I enjoy learning.	9	13	14
I am interested in practical subjects.	61	68	72
I am interested in general subjects (e.g. maths, foreign language)	20	23	33

*Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

The influence of students' grades on their respective study behaviour, engagement or goals should not be underestimated. *Table 4.53* impressively demonstrates this interdependency. Whilst 77 percent of students with high grades are actually striving for good results, only 48 percent of those with low grades are putting in effort to obtain the highest grades possible. This result may be interpreted by saying that three out of four succeeding students are actually achieving their goal, while half of those students with low grades were actually striving for better results.

**Table 4.53: Students' motivation for studying by school type & school success (in percent)**

	Part-time vocational schools (Berufsschulen)	Full-time vocational schools (Berufsfachschulen)	Upper secondary schools with vocational specialism (Fachgymnasien or Berufliche Gymnasien)
<i>Low grades</i>			
I strive for the highest possible marks.	46	50	50
It is important for me to fully understand what I have to do/learn.	59	70	70
I want to make a good impression on my teachers by achieving good grades.	28	43	25
I want to make a good impression on potential employers by achieving good grades.	74	77	81
I want to keep up with my fellow pupils.	45	44	47
I enjoy learning.	4	14	(8)
I am interested in practical subjects.	70	68	70
I am interested in general subjects (e.g. maths, foreign language)	16	28	27
<i>High grades</i>			
I strive for the highest possible marks.	74	79	85
It is important for me to fully understand what I have to do/learn.	73	80	85
I want to make a good impression on my teachers by achieving good grades.	39	41	31
I want to make a good impression on potential employers by achieving good grades.	83	92	89
I want to keep up with my fellow pupils.	53	53	62
I enjoy learning.	10	20	26
I am interested in practical subjects.	72	73	68
I am interested in general subjects (e.g. maths, foreign language)	29	36	45

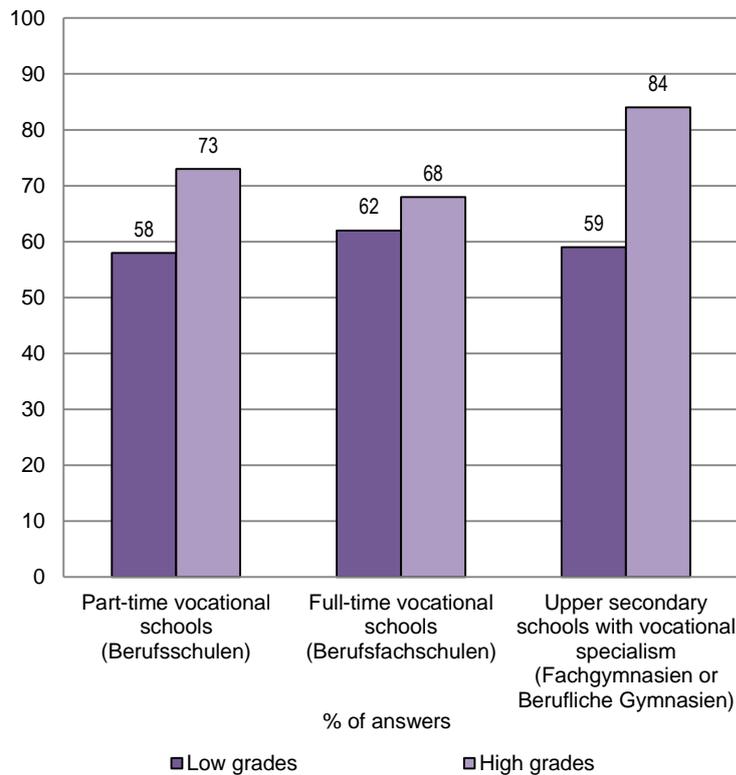
Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

( ) n is less than 10, (()) n is less than 5

In general, two-thirds of all German VET students are satisfied with their VET programme. Considering types of schools, students in full-time vocational school programmes are a little less content with their programme (61 percent) than students in other school types (dual VET: 68 percent; sec. voc. school: 66 percent).

Looking at the respondents' school grades (Table 4.54), it is obvious that less achieving students, particularly in dual VET and upper-secondary vocational schools, are less often satisfied with their programme. However, the difference in satisfaction between students with high and low grades is not significant within full-time vocational VET programmes.

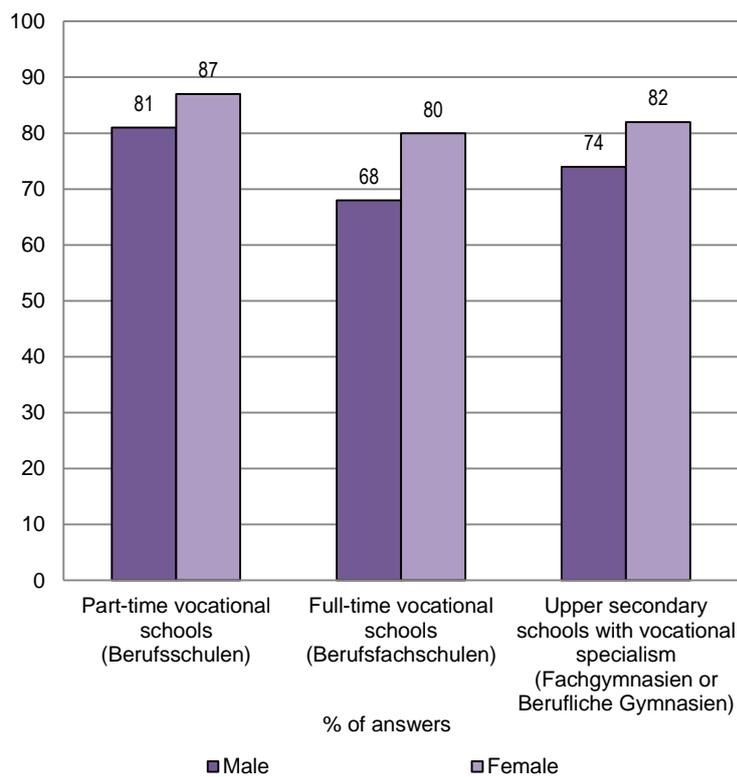
Table 4.54: Students' satisfaction with their respective programme by school type & school success (in percent)



Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

As Table 4.55 shows, 81 percent of all students believe they are able to manage occupational tasks independently. Female students are more often sure of their ability to work on their own (84 percent) than their male schoolmates (77 percent). The difference between male and female students is significant ( $p < .05$ ) in part-time and full-time vocational schools. Students in upper-secondary schools with a vocational bias do show the same tendency, but the variance is not significant.

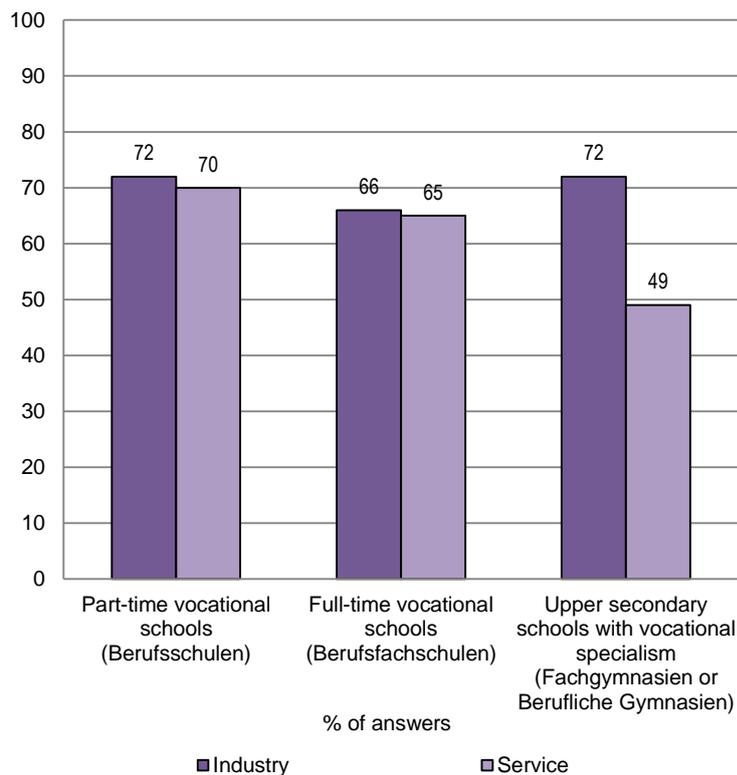
Table 4.55: Students' self assessment on the ability to work independently by gender (in percent)



Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

Comparing students in VET programmes related to the industry sector and the service sector (Table 4.56), there is, generally speaking, little difference in the extent to which students feel prepared for the above mentioned tasks. Yet there is one exception: students of upper-secondary schools with a vocational bias. Students enrolled in VET programmes connected to the service sector feel significantly ( $p < .05$ ) less well prepared for taking on professional tasks (49 percent) on their own than their schoolmates in industry-sector programmes (72 percent).

Table 4.56: Students' perceived quality of preparation for working independently by economic sector (in percent)



Question: E1b Overall, to what extent does your current programme prepare you to these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

#### 4.4.5 Career Guidance and the Future Career Aspects of IVET Graduates

##### 4.4.5.1 National System of Career Guidance

In Germany, careers education and educational guidance are provided by a range of public and private agencies. Next to employment agencies, the general schools and social partners play a key role in this area. The employment agencies offer career guidance and support in choosing a suitable occupation or getting in touch with potential employers. They provide information about alternative training opportunities and help to find an employer who offers an apprenticeship. Guidance counsellors play an active role by going into the schools and giving lectures on different topics related to career guidance. Larger employment agencies have a Career Information Centre (*Berufsinformationszentrum – BIZ*) offering a wide range of information about occupations and training opportunities. Whole school classes, usually in grade 8 or even later, are taken to make use of these centres.

Most schools have incorporated educational guidance and especially careers education into their curriculum. In general schools, it is mostly embedded into a subject like economics or social sciences. Schools may also offer work placements where students can gain hands-on experience of an occupation they are interested in. In addition, schools are in close contact with the local employment agencies.

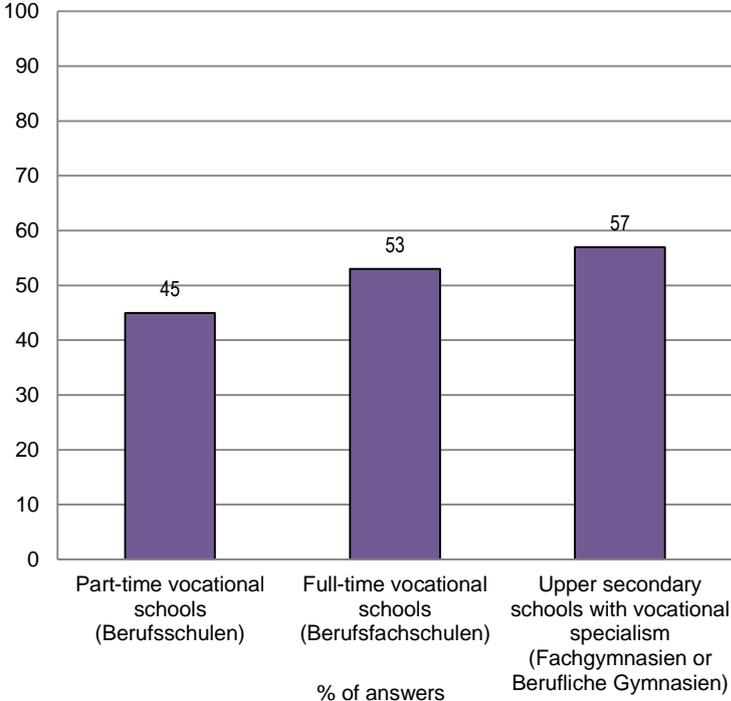
Social partners like trade unions, the chambers and private enterprises participate in careers fairs which are organised by social partners and by regional and federal agencies.

Online portals have gained in importance in the area of career guidance over the last decade and one of the most important providers is the Federal Employment Agency. There, individuals can find comprehensive material about occupations, educational and training opportunities, an online job exchange and information about higher or academic education (Cedefop 2010: 75 et seq.).

**4.4.5.2 Future Career Aspects of IVET Graduates**

Taking a look at the future plans of German VET students, one can detect (Chart 4.37) that when considering all types of VET programmes half (49 percent) of them are planning to continue their education after the initial VET programme is completed. The lowest propensity to undertake further education can be observed with part-time vocational school students (45 percent) in the dual VET system, followed by full-time vocational school students with 53 percent and upper-secondary school students with 57 percent planning to do so.

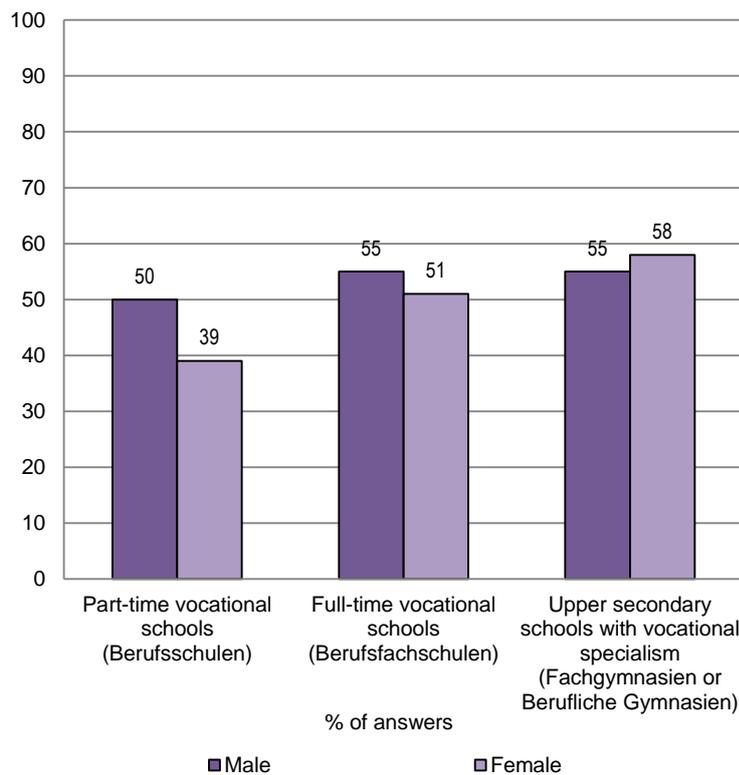
*Chart 4.37: Students' propensity for further education after programme completion by school type (in percent)*



*Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"*

We can infer from Chart 4.38 that there is a notable discrepancy between male and female students enrolled in dual VET programmes regarding their intention to continue their education. 50 percent of male dual VET students plan to engage in further education, while a mere 39 percent of female students are inclined to do so. Interestingly, this discrepancy varies across school types. Female students in upper-secondary schools are slightly more inclined to continue schooling than their male school-mates.

*Chart 4.38: Students' propensity for further education after programme completion by school type & gender (in percent)*

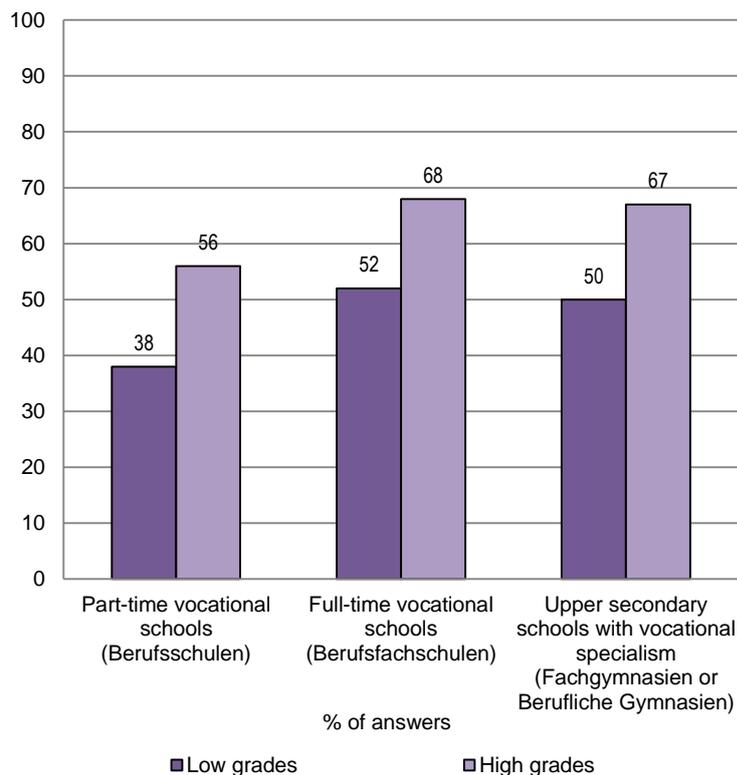


*Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"*

Students' grades seem to exert a strong influence on their plans for further education or schooling. The results shown in *Chart 4.39* suggest that, particularly in dual VET programmes, students with low grades (38 percent) are less prone to engage in further steps to qualify themselves than those attaining higher grades (56 percent).

This finding is also true for full-time vocational school students as well as upper-secondary vocational school students. Overall, 44 percent of VET students with low grades have plans for further education, while those with better grades are more often planning to do so (60 percent).

Chart 4.39: Students' propensity for further education after programme completion by school type & school success (in percentage)



Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

#### 4.4.6 Conclusion

The structure of vocational education in Germany is complex and dynamic. The dual VET system is closely associated with regulated occupations, however, it has adapted to change by developing new training pathways and revising old ones. There are now nearly 350 recognised training occupations. Further flexibility has been provided by the development and expansion of other types of vocational schools and other types of vocational programmes. In particular, the transition system and the full-time vocational schools (*Fachgymnasium* or *Berufliches Gymnasium*) have expanded to meet particular VET needs. Other institutions, such as technical or vocational grammar schools have also expanded with a specific mission to prepare students for vocational or technical higher education.

Results of the 7EU VET survey provide an insight into students' rationale when deciding on a VET programme. It has been established that German VET students are to quite a high degree factoring in the future prospects of VET programmes. Good job prospects and a promising foundation for further education are among the top three reasons to choose a VET programme. On the other end of the spectrum, bad grades are rarely a reason to choose a programme. No big differences regarding students' gender could be observed with the exception of female VET students being more reluctant to accept long commuting distances.

When reviewing the results of the 7EU VET survey, one has to keep in mind the complexity of the VET school system explained above. Aside from the fact that the survey's target population was limited to 17- and 18-year-old students, it is necessary to take into account the fundamental differences between the groups defined here of dual VET schools, full-time vocational schools and upper-secondary schools with a vocational specialism.

These systemic differences become conspicuously apparent, for instance, when comparing the amount of time students spend on homework. It is obvious that upper-secondary schools are closer to the general education school system than full-time vocational schools. Concurring with this, the propensity for further education is increasing from dual VET over full-time vocational to upper-secondary school students.

In conclusion, it must be established that the narrow target population included in this observation allows a limited but still informative insight into VET from German VET students' perspective.

Julian Stanley

## 4.5 United Kingdom

### 4.5.1 General Education System Characteristics

Different traditions and institutions have long existed in the four nations that make up the UK, but these differences have increased since devolution which has given additional powers to the national governments in Wales and Scotland with respect to assessment, curriculum and institutions. In England, a number of government departments look after England's educational and training affairs (e.g. the Department for Education and the Department for Business, Industry and Skills, for policy on education and training; the Department for Work and Pensions (DWP) for welfare and employment programmes etc.). The Scottish Parliament and Scottish Government (the administrative organisation for the Scottish Parliament) have wide powers regarding social policies, including education and training. The Government of Wales and the Northern Ireland Assembly also have extensive powers over education and training. In the past, funding and management of schools were delegated to elected local authorities but in recent times central agencies have been set up to fund and support schools. Educational institutions are accountable to governing bodies whose members are partly elected and partly appointed.

*Primary schools* serve 4–11 year olds. Many also offer pre-school child care (nursery provision). The majority of *secondary schools* (11- to 16-year-olds) in England have become academies. Academies are schools financed directly by the central government and which are allowed considerable independence with respect to their curriculum and governance. Academies must be sponsored by non-governmental organisations, for example, businesses, churches or universities – although the level of financial support from these organisations may be modest. Many secondary schools have been encouraged to convert to academy status in the last two years. Academies are stated-funded schools but they have enhanced independence with regard to governance, funding and curriculum. University technical schools (UTS) are intended to provide a vocationally-oriented education for 14–18 year olds. They were introduced by the Labour government in 2010. Studio schools were launched in 2008 – there are currently just two. Studio schools have an emphasis on creativity and a work-related curriculum.

Most secondary schools are comprehensive, although there is a small number of selective grammar schools. There is a national curriculum, but this permits some free choice options. Most secondary schools offer some pre-vocational programmes to 14–16 year olds, for example, business studies.

There are also independent schools, most of which are selective. Independent schools receive no public funding although they benefit from charitable status. They are largely financed by fees paid by parents.

Two- or three-year programmes for *post-compulsory* students aged 16–19 are offered by the majority of schools in their sixth forms. However, full-time and part-time post-compulsory education is also offered by further education (FE) institutions. General further education colleges are usually large institutions which provide vocational and general courses. They generally offer vocational qualifications up to Levels 4 and 5. Sometimes they have a specialism in a particular vocational area, such as construction or catering. Specialist colleges only provide courses in a limited curriculum area, such as agriculture or art. Sixth-form colleges focus on full-time general education programmes (A Levels) but they usually offer some vocational programmes. Tertiary colleges bring together the functions of a sixth-form college and a Further Education college. Legislation has been introduced that will require all students to remain in education or training until age 17 by 2013 and until age 18 by 2015.<sup>46</sup>

Recent years have seen a considerable expansion of work-based IVET in the form of apprenticeships. Normally an apprenticeship implies a contract between the apprentice and an employer and includes work-based and some off-the-job training in a FE college or at specialist training providers. Apprenticeships combine vocational knowledge with practical skills development. Training providers may be private companies or they may be third-sector organisations; in addition to providing apprenticeships they may also deliver other vocational programmes, sometimes specialising in a particular employment sector.

*Higher education institutions* are independent, self-governing bodies. In 2008 there were 133 higher education institutions (HEIs) in total (of which 90 met the criteria to be identified as universities). Some universities have a particular focus on technical and vocational undergraduate and postgraduate degrees, for example, Aston University, although they do not have a different status from general universities. Some 10 percent of degree-level students study in FE colleges, though the degrees are awarded by a university or national awarding body. The Further Education and Training Act [2007] permitted FE colleges to apply for powers to award one kind of degree, the Foundation Degree, independently.

IVET in the UK has a problematic and contentious character. There are questions about the status and recognition of some IVET institutions and qualifications and concerns about the way general and vocational education relate to one another.

#### **4.5.2 Fundamental principles and legislative framework**

As mentioned above, education and training is nationally devolved within the UK: there are different systems with England, Scotland, Wales and Northern Ireland. Within England, a variety of institutions are involved in the provision of vocational education and training: a mixture of multi-purpose 11–19 schools, specialist post-16 vocational schools, multi-purpose post-16 providers, private training companies and private businesses involved in training. Historically, VET has developed in an ad hoc, bottom-up way, rather than through central planning. The last 30 years have seen greater intervention by the state with funding and legislation to create new kinds of institutions with a view to increasing standards, competition, diversity and specialisation.

The conceptualisation of vocational education in the UK has been influenced by the development of outcomes approaches and by broader more progressive and 'liberal' thinking about vocational education. The former approach led to the development of national vocational qualifications (and Scottish national vocational qualifications) which are closely linked to occupational standards. The expectation is that such 'occupational qualifications' would be (mainly) delivered in the work place and that assessment consists of the demonstration of competence through the performance of work tasks in work situations. The latter approach has led to 'broad vocational qualifications' such as BTECs and GNVQ.

---

<sup>46</sup> Education and Skills Act 2008

These are (mainly) delivered in schools and colleges and they generally relate to an employment sector rather than a specific occupation. Usually, but not always, they include general subjects, such as mathematics, English and IT and qualify for admission to higher education as well as employment. In England, these two types of qualification offer two alternative routes; in practice, the situation is more complex as the different qualifications are also associated with different educational institutions and different employment sectors.

Provision is regulated by a variety of legislation and statutory orders which establish and control the various institutions, qualifications and funding. The government Department for Business, Innovation and Skills (BIS) has the overriding responsibility, but key responsibilities are allocated to arms-length governmental agencies that deal with funding, qualifications, quality and professional development and support. The dynamics of educational policy change has resulted in frequent changes to these bodies, which has led to concerns about excessive change.<sup>47</sup>

Central government funding for vocational education is extremely complex.<sup>48</sup> Funding is used as a mechanism to steer providers and students towards achieving national targets that have been set, in particular that 80 percent of the cohort should achieve Level 2 qualifications by 2012. Funding has been achieved per qualification, for recognised qualifications modified by a set of factors relating to age, length of course and geographical area.<sup>49</sup> Funding arrangements have been repeatedly fine-tuned to meet new policy objectives or correct problems or loopholes that the system has given rise to.

#### *Admission requirements*

ISCED level 2 vocational programmes are usually open to all students, although there may be minimum requirements for mathematics and English. ISCED level 3 vocational programmes, such as the popular BTEC Nationals, are administered by schools and colleges that set the entry requirements. Depending on the programme and the institution, students may be required to demonstrate minimum standards in mathematics and English or commit to achieving such standards during their vocational programme.

Entry to apprenticeships is controlled by enterprises and training providers. Where there is high demand, selection will depend upon prior qualifications, personal attitudes and skills and recommendations.

There is no charge for courses for 17- or 18-year-olds but the choices of students may be restricted by what local schools, enterprises or further education colleges offer.

#### *Involvement of the social partners*

The involvement of the social partners in VET in England tends to be either voluntary or based on market relationships, e.g. contracting to supply apprenticeship places. Enhanced employer engagement in English VET has been a key policy of recent governments. There has also been a tradition of seeking to involve trade unions in skills and training, particularly under Labour governments. However, the level of involvement is weaker than in many European countries – there is no legal requirement that social partners are consulted or contribute to the design or delivery of VET.

The Confederation of British Industry represents large business. It contributes to consultations and is represented in the development of new qualifications. It regularly sets out the views of its members and voices demands in relation to training, skills and education. The Federation of Small Businesses

---

<sup>47</sup> E. Keep. 2006. 'State Control of the English VET System – Playing with the Biggest Trainset in the World', *Journal of Vocational Education and Training*, Vol. 58, No. 1, 47-64.

<sup>48</sup> A. Wolf (2011) *Review of Vocational Education – The Wolf Report*, London: Department for Education

<sup>49</sup> The Coalition government has committed to revising this system.

performs a similar role for SMEs. The British Chamber of Commerce is an umbrella for the Local Chambers of Commerce which bring together local businesses and provide training, coaching and support. The Chambers of Commerce provide advice in relation to workforce development and training, however, they do not have any influence on qualification development or the shape of local vocational programmes.<sup>50</sup>

The UK Commission for Employment and Skills (UKCES) conducts research and provides advice on the strategies and policies needed to increase employment, skills and productivity. Sector Skills Councils for each employment sector are responsible for forecasting labour market needs, identifying skills gaps, improving productivity, helping to develop training provision, contributing to the development of National Occupational Standards, Apprenticeships Frameworks and the quality assurance of vocational qualifications. National Skills Academies are partnerships of employers and different kinds of training partners which have a responsibility for developing and coordinating additional training provision for particular sectors. A number of policies and subsidies encourage companies to support the development of skills for all of their employees.<sup>51</sup> Trade unions are involved in the development of policy, in delivery of the training and qualifications for their members. Independent awarding bodies, sometimes third-sector and sometimes profit-making companies, play a major role in the development and award of qualifications and the operation of assessment.

The growth of apprenticeships has enhanced the role of employers in the provision of vocational training.

#### *VET structures: Schools and programmes*

Diversity in the VET system in England is due to the variety of vocational qualifications at the different levels which are available. Not only is there a variety of types of vocational qualification at each level, but because there are many awarding bodies there is a variety of different versions of each type of qualification. Providers have considerable autonomy to decide which versions of qualifications they will offer, although their decision will be affected by funding, student demand and employer demand. The range of institutions providing vocational education at upper-secondary level is considerable: school sixth forms, sixth-form colleges, tertiary colleges, further education colleges, and training providers.

#### *Lower-Secondary Vocational Education*

Schooling is currently compulsory from age 5 to 16 (4 to 16 in Northern Ireland). All publicly funded schools must provide the National Curriculum which continues to 16. This occupies most of the curriculum time, leaving relatively little space for vocational programmes.

#### *Upper-Secondary Vocational Education and Training*

Students remaining in education or training after 16 (participation for 16 to 18-year-olds was 87 percent in 2009–10) may continue in school or move to a sixth-form college or Further Education college or take up an apprenticeship which is work-based. 33 percent of the age cohort takes General Certificate of Education (GCE) A-levels (level 3) only; that is, they pursue a general education rather than a vocational education. 6 percent take a mixture of A Levels and vocational qualifications at Level 3. However, some 18 percent of the cohort take Level 3 vocational qualifications (of which 85 percent are BTEC Level 3 Awards) Nationals either in FE colleges or sixth-form colleges or in school sixth forms. 30 percent take vocational and educational programmes at levels 2 and below.

Broad vocational courses are designed to prepare for employment or further training in relation to an employment sector, such as construction or health care. Examples of such programmes are the voca-

---

<sup>50</sup> <http://www.britishchambers.org.uk/zones/skills/find-a-course.html>

<sup>51</sup> <http://www.bis.gov.uk/policies/further-education-skills/engaging-employers/skills-pledge>

tional A Levels, the new Diplomas and most of the BTEC Nationals and BTEC Diplomas (an extended version of the BTEC National). These are usually two-year programmes at Level 3. There is a wide variety of Level 2 broad vocational programmes which serve to introduce learners to an employment sector. These programmes usually last one year and are aimed at students who have not received the minimum GCSE requirements to enter Level 3 courses, for example, they have not obtained a C grade in mathematics or English.

In contrast, occupational programmes are offered by FE colleges and training providers that permit entry to a particular trade or profession (an occupation). Such programmes may result in a NVQ qualification although there is a variety of other qualifications that perform this licensing function in different occupations, for example, City and Guilds qualifications. These same qualifications can also serve Continuing Vocational Education and Training (CVET) because they are based on national occupational standards and over time they have gained credibility with employers.

### *Apprenticeships*

Apprenticeship is intended to be a mixture of theoretical and practical learning which combines vocational learning with minimum requirements in English, mathematics and IT. It usually involves both work-based learning and school-based education. Apprentices are paid employees under a contract, but they usually spend around one day per week in a FE college or another training institution. The Apprenticeship Framework is referenced against a specific occupation. The Framework is designed and validated by the Sector Skills Council corresponding to the relevant employment sector. Sector Skills Councils are government-funded bodies which are tasked to represent employers, carry out research into skills needs and design and validate qualifications. Apprenticeships are extremely variable in time – they can last from 6 to 36 months. Apprenticeship is the dominant mode of IVET for selected industries, for example, construction, gas industry, hairdressing. The government subsidy for apprenticeships has increased which has encouraged a sharp growth in the provision of places. The apprentice receives a wage whether they are at work or training. Since October 2010, apprentices aged 16-18 are covered by the National Minimum Wage.

Training providers are private companies (or third-sector organisations) that work with private and public companies to jointly provide apprenticeship training. With the growth of apprenticeships there has been considerable growth in the number of training providers. Training providers are also involved in the provision of CVET and specialised programmes such as Foundation Learning.

### *Continuing Education and Training (CET)*

CET in England is understood to include a wide range of vocational and general education, outside of compulsory and higher education. CET in England encompasses:

1. remedial education and training programmes aimed at young people who have left education but lack qualifications and skills relating to particular occupations or in relation to employment in general (employability skills);
2. Adult and Community Learning (ACL) – learning programmes available to adults, for example, languages, basic skills, ICT and leisure courses (these programmes may be offered outside of formal education institutions);
3. the recognition and certification of prior and ongoing learning, for example, through NVQs in the workplace (recognition of prior learning is encouraged through the new Qualification and Credit Framework which requires providers of qualifications to recognise prior learning where appropriate); and
4. professional and trade based training and qualifications, which may serve to advance or update vocational or occupational knowledge or skills. These programmes may be provided formally or informally, in the work place, online or in formal educational institutions. Much of this

training is provided as on-the-job training or short professional development courses and paid for by employers.<sup>52</sup>

#### *Quality Assurance*

Schools and FE colleges are subject to a number of performance standards. Attainment for schools is published in annual Performance Tables which include attainment in vocational qualifications. However, according to recent announcements the value of many vocational qualifications in performance table calculations will be greatly reduced in the future. Funding has also been used as a tool to drive quality, with funding being linked to the achievement of designated qualifications. However, this practice is believed to encourage providers to recruit students to easy rather than worthwhile programmes and is to be discontinued. Schools and further education colleges operate their own quality assurance systems and are also subject to inspections from Ofsted, a non-ministerial government department. Ofsted inspections are guided by a common framework for inspection that sets out the principles and practices for all inspections. The notice period for inspections ranges from no notice to a maximum of 20 days. Grading is made on a four-point scale ranging from outstanding to inadequate. Providers are graded on overall effectiveness, outcomes for learners, leadership, value for money etc. Self-evaluation is encouraged; it is supposed to inform inspection and help institutions prepare for inspection. The quality of self-evaluation is itself graded.

The English initial VET system is characterised by the institutional and economic context in which it operates. The labour market is largely unregulated so much depends on how employers in particular employment sectors value vocational qualifications. Only a minority of vocational learners follow programmes or apprenticeships which lead to employment in a specific occupation. More popular are sector-related vocational programmes (general vocational qualifications) which at higher levels prepare for employment or for higher education and, at a lower level, serve partly for orientation and partly to provide basic skills or general employability capability within the context of an employment sector. The VET sector has been subject to repeated attempts to reform: qualifications, institutions and governance.

#### **4.5.3 Socio-demographic Characteristics and the Transition to IVET – Comparative Aspects of VET Structures**

Table 4.57 below reveals a trend of increased numbers of 16- to 18-year-olds in education and training in England from 2001 to 2011. Higher education (Level 4 and above) has enjoyed significant growth – this age band includes young people in their first year of university degrees. Further Education includes young people aged over 16 taking programmes at all levels below Level 4 – whether vocational, academic or mixed. Work-based Education includes apprenticeships where there is an employment contract (though there is likely to be an element of part-time ‘college’ education as well).

In percentage terms, 70.5 percent of the population participated in 2011, of whom 9.3 percent were in higher education, 61.2 percent in further education and 5.8 percent in work-based learning.<sup>53</sup>

Table 4.57 reveals that increased numbers of 16- to 18-year-olds follow programmes in new kinds of upper-secondary schools, in particular Academies (accounting for 16.5 percent of the cohort by 2011). A large number of schools have transformed into Academies to bring this about in a very short time period.

---

<sup>52</sup> Felstead et al. (2007) Skills at Work 1986-2006, SKOPE

<sup>53</sup> SFR, Statistical First Release 2011. Participation in Education, Training and Employment by 16-18 Year Olds in England, DfE., <http://www.education.gov.uk/rsgateway/DB/SFR/s001072/index.shtml>

*Table 4.57: Participation in full-time education of 16–18 year olds by highest qualification aim and institution type, and work-based learning, England, 1985 onwards*

End of calendar year	end 2001	end 2006	end 2010	end 2011 prov
Full-time education	1.037.400	1.234.800	1.379.100	1.345.700
Higher Education (Level 4 and above)	137.200	159.100	171.700	177.400
Further Education	900.200	1.075.600	1.207.500	1.168.400
State-funded schools	332.600	379.000	434.000	434.300
Local Authority Maintained schools	329.200	372.100	381.000	238.200
Sponsor Academies and City Technology Colleges	3.400	6.900	53.000	36.400
Converter Academies				159.400
Free Schools				300
Independent schools	75.200	79.100	85.100	86.300
Sixth form colleges	116.200	139.700	147.600	148.400
General FE, tertiary and specialist colleges	367.300	467.200	534.500	492.900
Higher education institutions	8.900	10.500	6.200	6.400
Level 3	690.200	799.600	919.900	906.900
GCE/VCE A/AS levels	591.400	595.400	636.500	628.600
NVQ 3 and equivalents	98.800	204.200	283.400	278.200
Level 2	144.800	173.100	159.700	148.800
GCSE/Intermediate GNVQ	73.400	38.500	28.100	29.200
NVQ 2 and equivalents	71.300	134.700	131.500	119.600
Level 1	35.600	66.100	84.100	72.000
Foundation GNVQ	10.800	1.800	200	0
NVQ 1 and equivalents	24.800	64.300	83.900	72.000
Other courses	29.600	36.800	43.800	40.800
Work Based Learning (WBL)	156.600	135.700	111.400	111.200
Advanced Apprenticeships (AAs)	51.900	32.400	32.200	34.200
Apprenticeships (As)	68.500	85.100	73.300	76.800
Population	1.848.300	2.013.000	1.952.400	1.910.000

*Source: Statistical First Release 2011. Participation in Education, Training and Employment by 16-18 Year Olds in England, DfE*

Aside from upper-secondary schools that cater for students aged 12–18 or 14–18, sixth form colleges provide programmes for 11.9 percent of 16–18 year olds while General Further Education, tertiary and specialist colleges cater for 31.5 percent of the cohort. Numbers attending these types of institutions – which focus upon vocational programmes – have expanded from about 367,000 in 2001 to almost 493,000 in 2011.

The data do not consistently distinguish learners following vocational programmes from those following academic programmes. However, it is clear that there has been a particularly strong increase in all Level 3 programmes up from 690,200 to 906,200. The number of learners taking Level 2 programmes has remained relatively constant. Numbers in Level 1 programmes have increased substantially, roughly doubling over the period. Within these broad categories there have been significant changes in the popularity of different types of programme. This reflects the development of new kinds of qualification and changes in funding regimes. The high level of change in terms of which programmes and qualifications are provided within the English VET system was commented upon by the experts in our research. While this change reflects efforts to improve the match between provision and the needs of stakeholders, it also creates confusion, risk and additional development work.

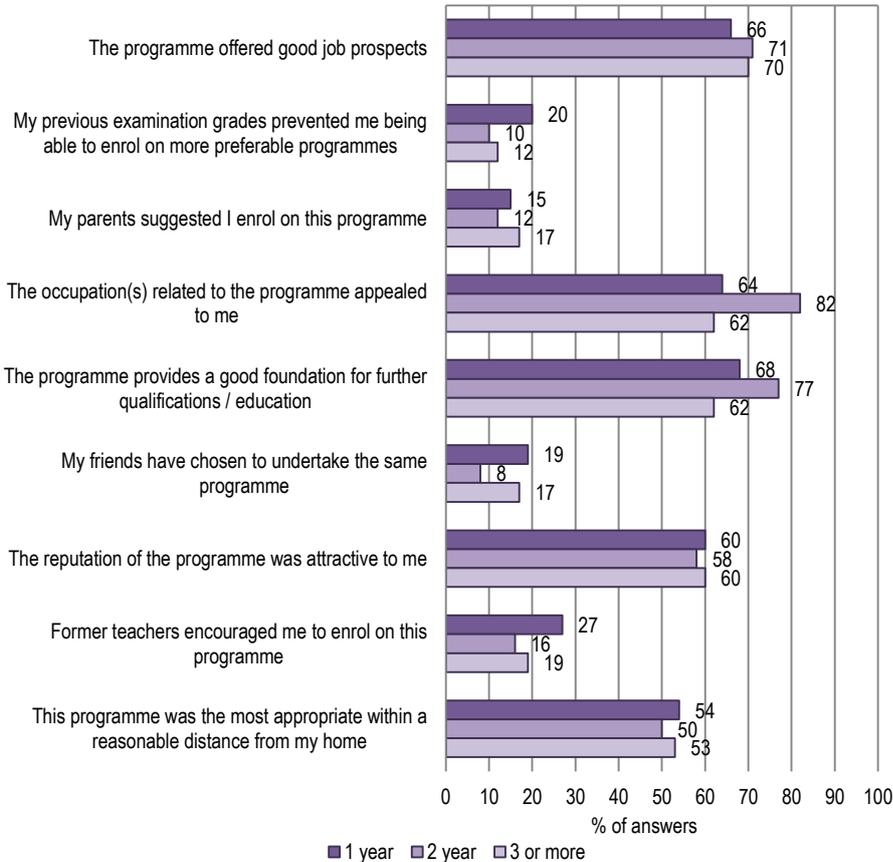
The data also show a decline in the number of 16- to 18-year-olds participating in work-based learning, in particular in apprenticeships of different kinds. This trend shows the difficulty – up to this point in time – in realising the policy ambition of expanding provision and take up of apprenticeship places for 16- to 18-year-olds. However, there has been a considerable increase in the provision of apprenticeships for older trainees. An implication of this is that the English system requires full-time college-based vocational programmes to provide the practical experiences of work tasks and work organisations that might otherwise be provided by extended placements in enterprises during an apprenticeship.

*Survey Results*

The English education and training system is characterised by a break at age 16. Students study various programmes which end when they are 16 years old. Depending on the outcomes of their assessment, they may then choose to continue their studies in the same institution or change institutions to continue their studies for another one or two years. This break continues to cause debate and concern among stakeholders and experts. Concerns were expressed by the experts interviewed that young people do not have adequate advice or information to select institutions and programmes or that decision making might suffer from the consequences of institutions competing to recruit students (and gain funding). Some college principals expressed concerns about how ‘second best’ choices or lack of choice could influence the motivation to study.

The survey included questions on decision making in the transition in order to investigate these issues.

*Chart 4.40: Factors influencing programme choice by programme length (in percent)*



*Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

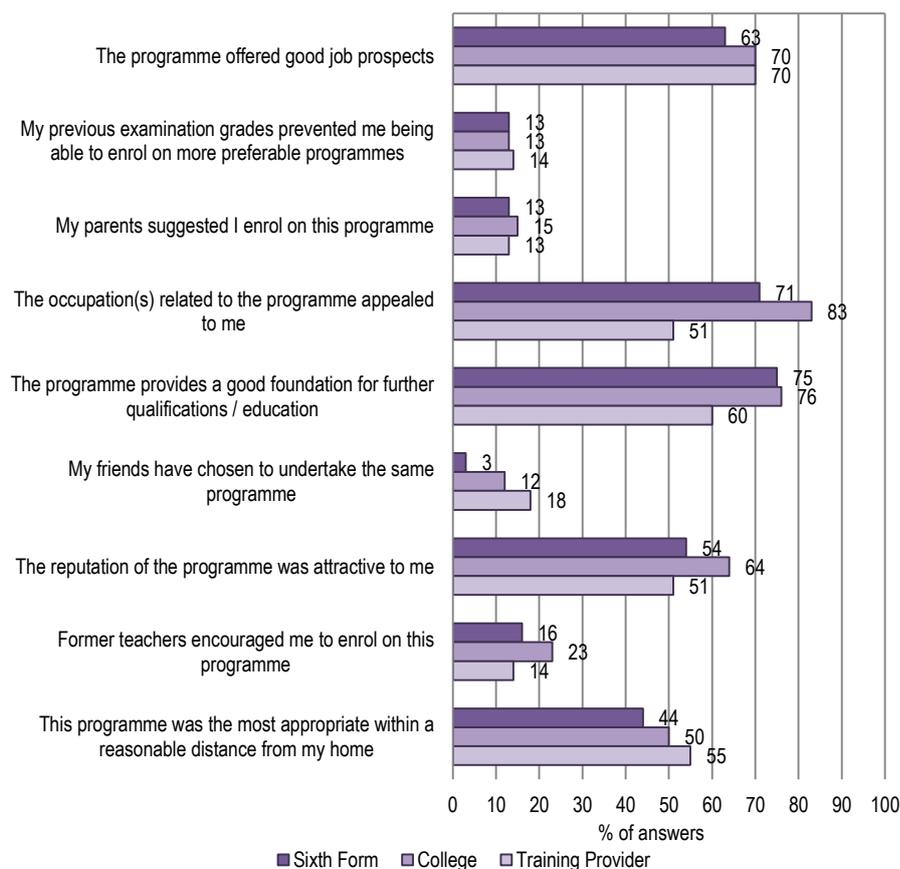
*When students choose their programmes they are seeking both an attractive occupation and a good foundation for further education.*

The survey suggests that student decision making is influenced both by labour market outcomes and further education prospects. The most important choice factors were the appeal of the occupation (rated as important or very important by 76 percent of all respondents) and the belief that the programme would provide a good foundation for further education/qualification (73 percent) of respondents. However, these factors were somewhat less important for students in one-year programmes than for those in two-year programmes. The influence of parents, former teachers and friends was important or very important for only a minority of students; but it was greater for students in one-year programmes than it was for those in two-year programmes. For example, 19 percent of students following one-year programmes rated the choices of friends as an important or very important factor against only 8 percent of students in two-year programmes. These differences suggest that the selection of one-year programmes (often at Level 1 or Level 2) reflects a somewhat different balance of influences than the selection of two-year programmes (often at Level 3).

*Choosing to study at a college is associated with a commitment to a vocation*

The survey also permits us to investigate decision making in relation to different types of destination institutions (See Chart 4.41). Students choosing to go to college rather than sixth form or training providers were more likely to be driven by the appeal of an occupation – 83 percent described this factor as at least important. This provides confirmation of the view, expressed by some experts, that further education colleges are most attractive for young people who have a prior vocational commitment. According to students, the influence of friends was weakest for those who remain within their existing institutions, passing into sixth form (3 percent reported that the choices of their friends were important), and greater for those who decide to attend programmes at colleges (12 percent) or at training providers (18 percent). This suggests that the example of friends is particularly important for students who choose or are compelled to change institution. The data also show that the influence of teachers upon choices is more likely to be perceived as important by students at college (23 percent) in comparison to those in sixth forms (16 percent) and training providers (14 percent). This finding questions the view that teachers are likely to discourage students from leaving schools and going to colleges rather than progressing to sixth forms.

*Chart 4.41: The importance of choice factors for students attending different kinds of institutions (in percent)*



Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

*Geography is constraining choices for learners in one-year programmes in households where fathers are not fully employed*

50 percent of the students reported that provision being a "reasonable distance from home" was an important factor in their choice. This figure was somewhat higher for students whose fathers were not fully employed/part-time/unemployed and significantly higher for such students if they were taking one-year programmes as opposed to longer programmes (66 percent vs. 48 percent).

*Students in different institutions value different sources of information with respect to programme choice.*

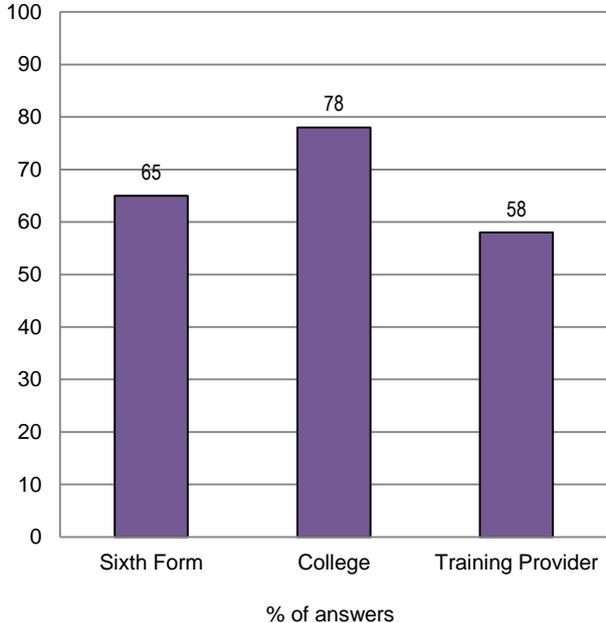
The survey asked students which information sources they rated as important. Teachers were rated as important by students in sixth forms (46 percent) and colleges (42 percent) but less so by students in training provision (20 percent). This provides some confirmation for the view that some teachers are not knowledgeable about progression options, such as apprenticeship, which take place outside of schools and colleges. Students in training provision rated family (35 percent) and friends (36 percent) as relatively important information sources. Students in colleges rated Information Days (31 percent) and public media (29 percent) as relatively important. Sixth-form students were less likely to rate information sources highly, apart from teachers.

*Only 50 percent of English vocational students considered an alternative programme when making their choice.*

Only 50 percent of English students considered at least one alternative programme when choosing programmes in comparison to 68 percent of all the students across the seven countries. Female students were more likely to have considered alternatives (55 percent) than male students (47 percent). There was little variance between programme type. It appears that choices have either been made earlier or that choices are not seen as available by about half of the cohort. It is possible that students do not consider alternatives because they are content with their first option.

Students were also asked whether they would choose the same programme if they were making their choice again. A relatively high proportion confirmed that they would, but a significant minority stated they would not. Broken down by institution type: 35 percent of those in sixth form colleges, 22 percent of those in colleges and 42 percent of those in training providers responded that they would not choose the same programme again (see Chart 4.42).

Chart 4.42: Would you choose the same programme again? By institution type (in percent)



Question: B7 Looking back, if you were to choose again would you choose the same programme? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

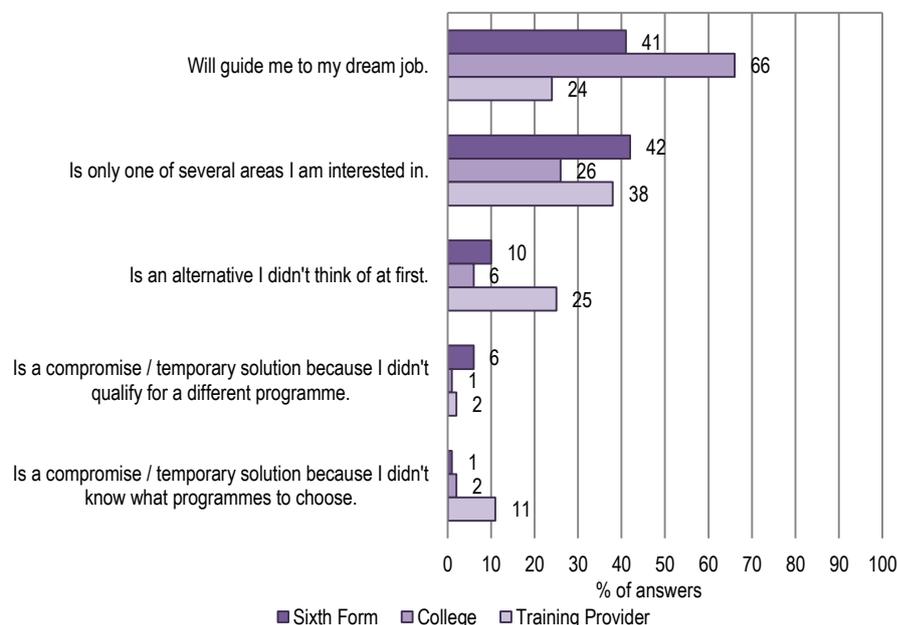
*Vocational earners may be more or less developed in their commitment to vocations and their decision making may be provisional or experimental*

The survey also showed that 30 percent of the students are either uncertain whether they are on the right course or believe that they are not which, together with the above data, raises concerns about whether the decision-making process is working well for some – particularly for those choosing training providers.

It must be recognised that for many students choices and programmes are provisional at this stage in their lives. Students were asked to reflect upon how they understood their current programme in relation to their priorities and choices. 66 percent of college students believed their programme would guide them to their 'dream job', but only 41 percent of those in sixth forms and just 24 percent of those in training providers. Students in training providers and sixth forms were more likely to see their current programme as one of a number of vocational areas they were interested in, these students appear to be less vocationally committed. 25 percent of students in training providers reported that their current programme was an alternative that they had not thought of at first. These differences suggest

that learners may be more or less developed in their commitment to vocations and that their decision making may be provisional or experimental – particularly with respect to certain programmes or institutions.

Chart 4.43: Reflections on current programme in relation to institution type (in percent)



Question: B6 When you think about your programme, what statement do you agree to the most? My current programme...

#### 4.5.4 Vocational Curricula, Teaching Learning and Success in School

##### Vocational Curricula (school-based and practical training)

IVET in England is largely school-based and is shaped by qualifications that are developed and assessed by independent awarding bodies, so-called Vocationally Related Qualifications (VRQs). Vocationally Related Qualifications are, for the most part, broad, employment-sector-related qualifications. They are usually related to occupational standards and they may be referenced to them, but they are not intended to demonstrate that diploma holders have achieved occupational standards or that they are licensed to work.<sup>54</sup> These qualifications are available at Levels 1, 2 and 3 and they are delivered in schools, FE colleges, sixth forms, sixth-form colleges and by training providers.

Qualifications at Levels 1 and 2 serve as pre-vocational education programmes for 14- to 16-year-olds and as 'transition' programmes for 17-year-olds. They orientate the learner in relation to an employment sector, develop sector-related knowledge and some skills. They prepare learners for progression to more specialised school-based vocational programmes or work-based training.

The most popular choice post-16 is for non-vocational A Levels (taken by 33 percent of the 16- and 17-year-olds). 18 percent of the cohort take other Level 3 programmes – of whom 85 percent are taking BTEC Level 3 awards. Another 6 percent are taking programmes which include 1 or 2 A Levels and other programmes.<sup>55</sup> 30 percent of 16- to 17-year-olds are taking Level 2 or below courses – many of which will include VRQs. VRQ programmes at Level 3 usually serve as broad pre-entry quali-

<sup>54</sup> Vocational Certificates of Education (VCEs) are A Levels and they are not referenced to occupational standards. They follow an A Level structure and are primarily designed to support progression into higher education or apprenticeship.

<sup>55</sup> Participation of 16-18 year olds in full-time education by highest qualification aim and work-based learning, England, (2009) SFA.

fications in relation to an employment sector. Graduates of these programmes enter employment or progress to university or higher level vocation study such as HNDs, HNCs or Foundation Degrees.

However, some Level 3 VRQs are relatively narrowly focused on a range of occupations, e.g. BTEC National in Animal Management, whilst others offer many optional units so it is also possible for students to specialise in order to qualify for a particular occupation, for example BTEC National in Beauty Therapy Sciences. VRQs can therefore serve two purposes and different students may be taught side by side although they are seeking different outcomes from their programme.

The more popular and least occupational BTECs are taught in all post-16 institutions, school sixth forms, sixth-form colleges and FE colleges. The more specialised and occupationally-oriented BTECs are only taught in FE Colleges. Some of the most specialised BTECs are taught in specialised colleges, for example, Fish Management and Blacksmithing and Metalwork.

#### *National Vocational Qualifications*

National Vocational Qualifications are intended to qualify the holder to work in a particular occupation. NVQs function to recognise competence in relation to professional or trade standards. NVQs address the specific skills and knowledge that is required to accomplish the tasks that are associated with that particular occupation. This functionality is recognised in much of NVQ assessment where it is required that candidates demonstrate skills in an appropriate context. NVQs may be taught in FE colleges or in the work place or in training providers – or in a combination of these. The majority of NVQs taken are at Level 2, although they are also taken at Levels 1, 3 and 4. NVQs are used extensively in a relatively limited number of industries and occupations, e.g. construction.

#### *Assessment*

Assessment of English vocational programmes varies between qualification type. Those qualifications which are closely associated with occupational standards, for example, National Vocational Qualifications, are assessed largely through observation and the collection of evidence of performance, either in the work place or in a training environment. However, the assessment of most school-based vocational programmes, such as BTEC qualifications, has usually taken the form of extended tasks performed under controlled conditions in the school. In some programmes, this is supplemented by written examinations. One recent trend has been a move to assess a greater variety of performance, for example, oral presentations and services, as well as written performances and the formal outcomes of work. Assessment in England is the responsibility of independent awarding organisations which are accredited by a state regulator. The awarding bodies earn income by charging fees for assessment and they design and manage assessment activities and recognise and report the performance of students. The awarding bodies compete against one another to offer assessments to schools and colleges by offering support, developing new programmes and qualifications and providing support and training to the teachers who administer the assessment exercises.

#### *Findings from the 7EU VET survey: Teaching Learning and School Success*

The survey permits us to analyse student study behaviour and satisfaction in relation to programme duration and institution type.<sup>56</sup> English vocational learners reported that they were highly motivated by multiple drivers, in particular, making a good impression on employers was rated as important by 88 percent of all learners, achieving a full understanding by 84 percent and an interest in practical subjects by 83 percent. 71 percent of English vocational learners reported that they enjoyed learning. English students were markedly less attracted by 'general subjects', that is mathematics or foreign languages: only 34 percent regarded them as interesting. This latter finding is significant for VET re-

---

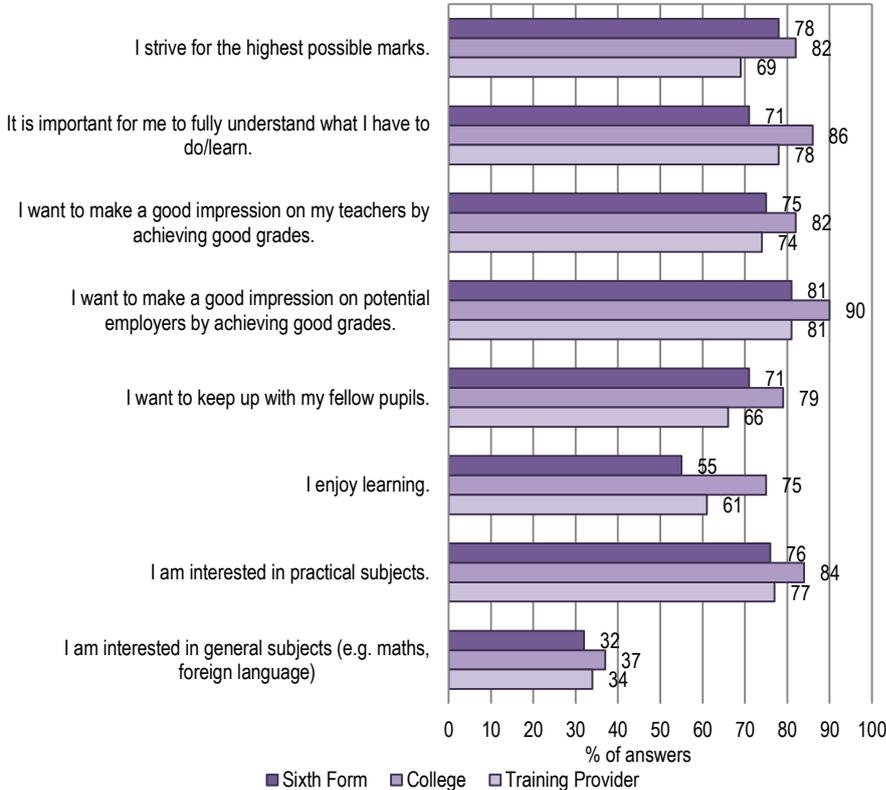
<sup>56</sup> At this point in time, we have not undertaken an analysis of students' responses in terms of the type of qualification that their programme leads to; however, we plan to carry out this analysis in the future.

form in England: there is a concern that English, mathematics and other general subjects are neglected in education and training for post-16-year-olds.<sup>57</sup> However, if the majority of 17- to 18-year-olds have little interest in general subjects this lack of interest is likely to prove to be an obstacle to reform.

*Students in colleges were the most highly motivated in every dimension*

If we analyse responses by school type, we find some significant relationships. Students in colleges were the most highly motivated in every dimension – see Chart 4.44. A possible explanation is that the better motivated student will make a positive choice to go to college where there is likely to be a wider range of vocational programmes. Alternatively, it may be that vocational students are more highly motivated by the vocational rather than academic culture of colleges. This finding deserves further investigation. Students in sixth forms and training providers were somewhat less driven than those in colleges, though trainees learning in training providers were significantly more likely to report that they enjoyed learning (61 percent) than students in sixth-form colleges (55 percent). Trainees were also more likely to rate full understanding as an important driver (78 percent vs. 71 percent).

Chart 4.44: Study behaviour of students by institution type (in percent)



Q C2. To what extent do you agree that the following characteristics apply to you. Presented answers 4='Quite' and 5='Completely'

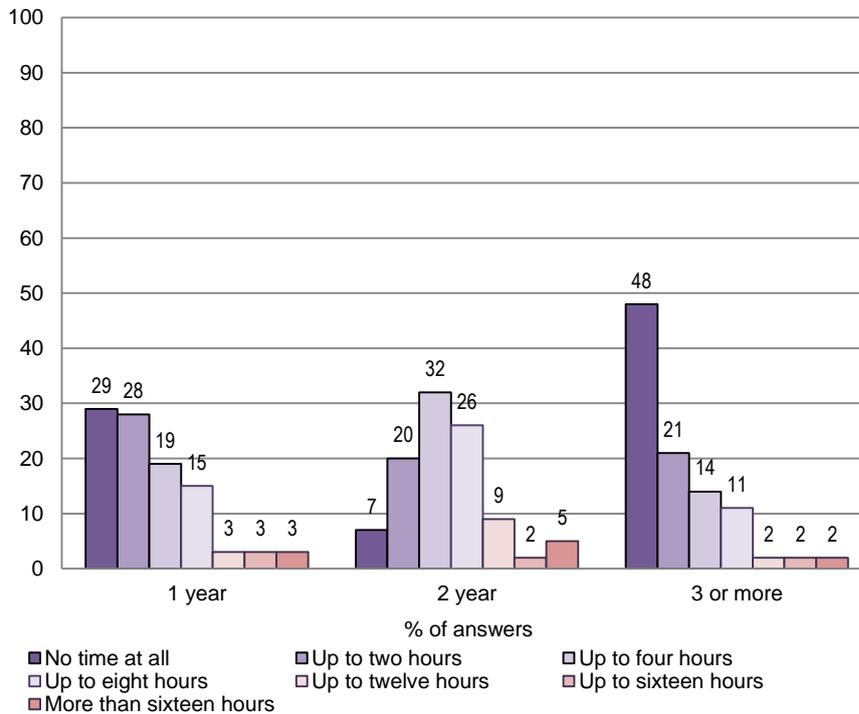
*Students in two-year programmes spend more hours on study outside of school/college*

Vocational students in England also study outside of school and college. Over 70 percent of students in two-year programmes commit over two hours additional study hours per week. Only 47 percent of students in one-year programmes and only 31 percent of students in three-year and longer programmes commit over two hours (Chart 4.45). These differences may reflect the different demands that programmes make and also different cultures or expectations. Students in three-year and longer programmes are more likely to be spending much of their time in work, which reduces the time they have for other study. There is other evidence that motivation for one-year programmes is lower than

<sup>57</sup> See, for example, Department for Education (2011), The Wolf Report. Op. cit.

for two-year programmes, e.g. 73 percent as against 81 percent of students say that they strive for the highest possible marks.

Chart 4.45: Study outside of school/college by duration of programme (in percent)

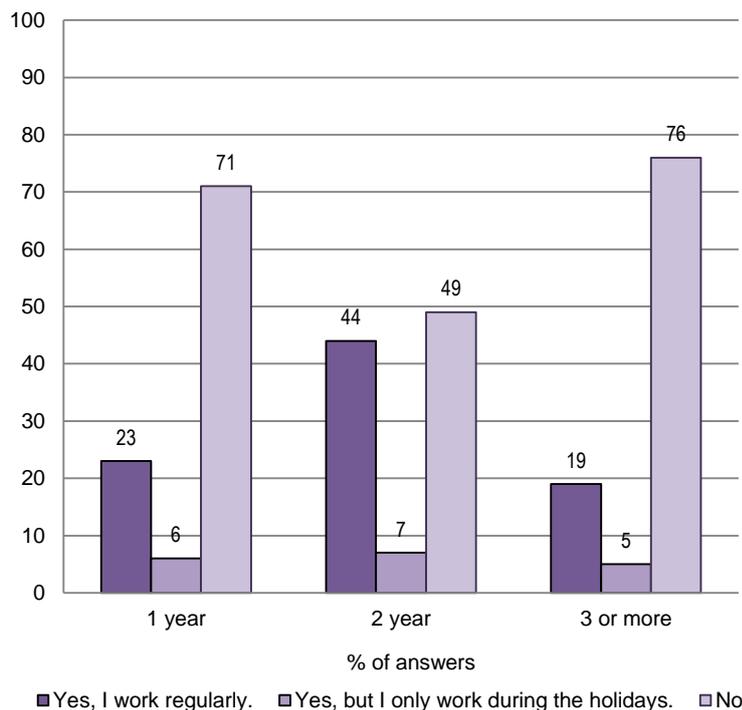


Question C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?

*Students in two-year programmes are more likely to be in paid employment during their studies*

44 percent of students in two-year programmes were in regular part-time employment compared to only 23 percent of students in one-year programmes (see Chart 4.46). It is possible that work competes with study, although the evidence presented above shows that these students also commit more time to study outside of college. Moreover, 53 percent of these working college students reported that most or at least a few of the tasks they undertook in their jobs were similar to those they did in their programme. It seems likely that these students are benefitting from employment which is complementary to their studies.

Chart 4.46: Experience of paid employment by duration of programme (in percent)

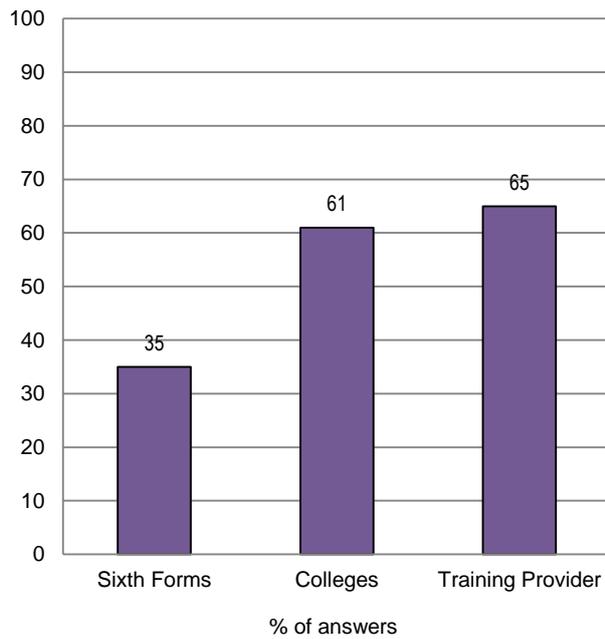


Question C6a The following questions are about paid work that is not part of your programme. Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)?

*Satisfaction with practical training and learning was higher in colleges and training providers than in sixth forms*

Practical training or learning can be delivered in either the classroom or the workplace. It is generally understood to be a vital part of vocational programmes: helping learners to develop and contextualise skills and knowledge. Where responses are analysed by type of institution, we found that students were far more likely to rate the amount of practical training within their programme as good or excellent if they were learning in training providers (65 percent) or colleges (61 percent) rather than in sixth forms (35 percent) – see Chart 4.47. This suggests that sixth forms are less successful, in the eyes of students, in providing an adequate practical element in programmes.

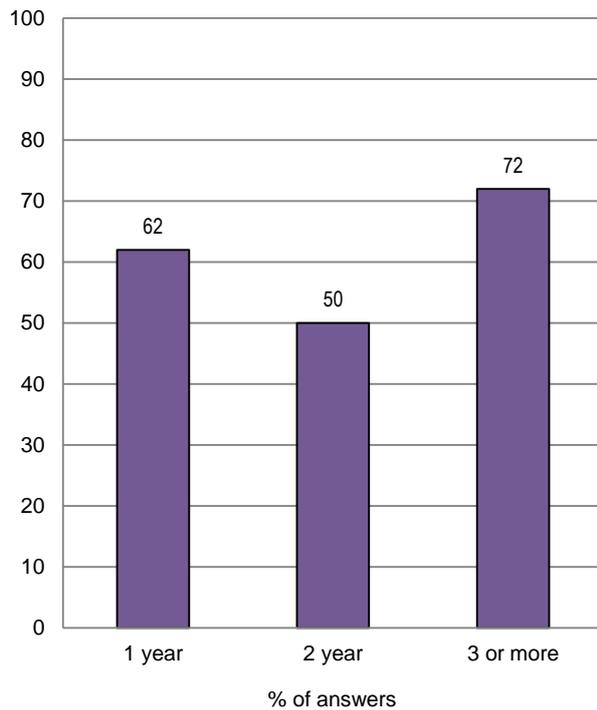
Chart 4.47: How do students rate the amount of practical training by type of institution (in percent)



Question: C3 How would you rate the amount of practical training within your programme? Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

If we analyse responses to this question by the duration of programme, then we find that 62 percent of students in one-year programmes, 72 percent of students in three-year and longer programmes, but only 50 percent of students in two-year programmes rated the amount of practical training in the programmes as good or better (Chart 4.48). This is probably explained by the fact that the two-year programmes are more likely to be higher level and to contain a greater proportion of knowledge and theoretical material.

Chart 4.48: How do students rate the amount of practical training by duration of programme (in percent)

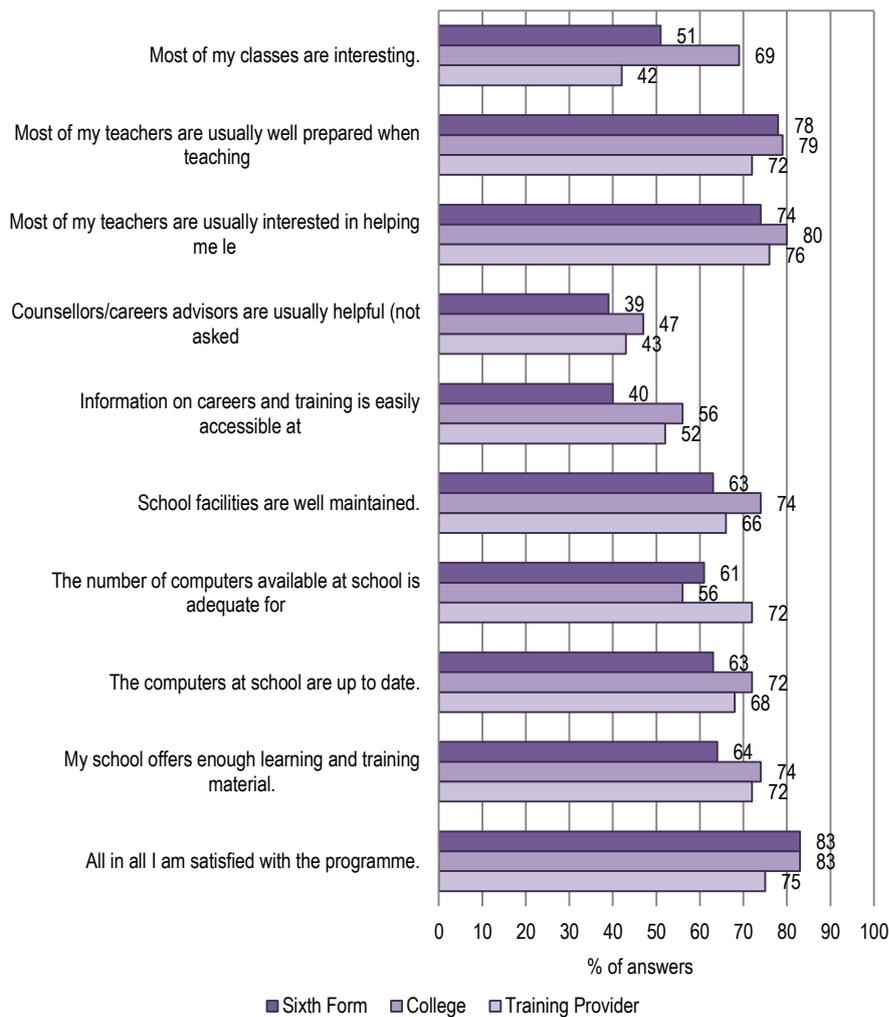


Question: C3 How would you rate the amount of practical training within your programme? Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

Satisfaction levels are generally high with respect to English VET programmes – but satisfaction is associated with perceptions of relative performance (grades) and, in turn, with perceptions of achieved competencies.

Satisfaction levels are generally high with respect to English VET programmes (see Chart 4.49), but there were significant differences in satisfaction levels between institution types for example with regard whether students found most of their class interesting: 69 percent of college students, 51 percent of those in sixth forms and 42 percent of those in training providers.

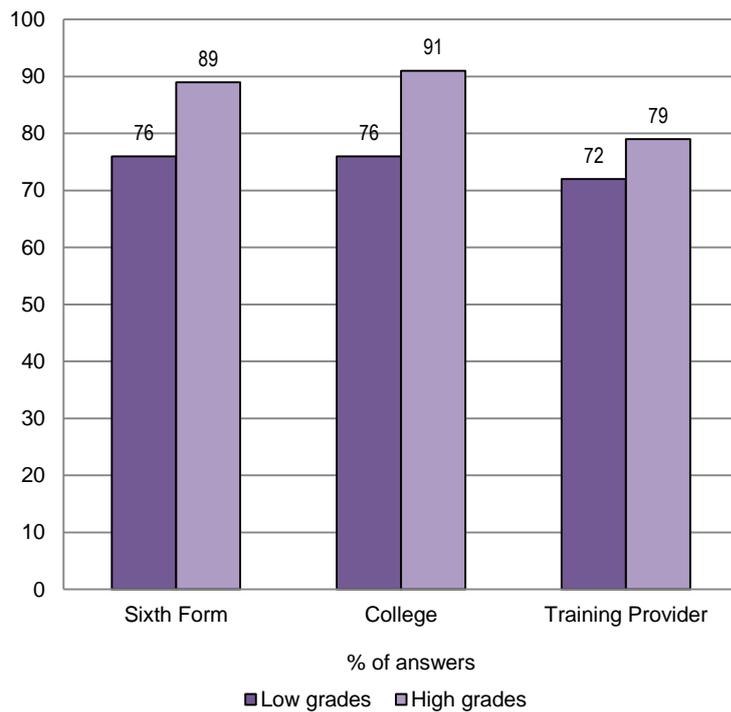
Chart 4.49: Satisfaction levels by institution type (in percent)



Question: B5\_Please indicate to what extent you agree with the following statements? Various measures of satisfaction. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

The responses of students suggest that perceived satisfaction is closely associated with perceptions of attainment. Chart 4.50 below shows that in all institutions students who were satisfied with their programmes were more likely to judge that their grades were relatively high.

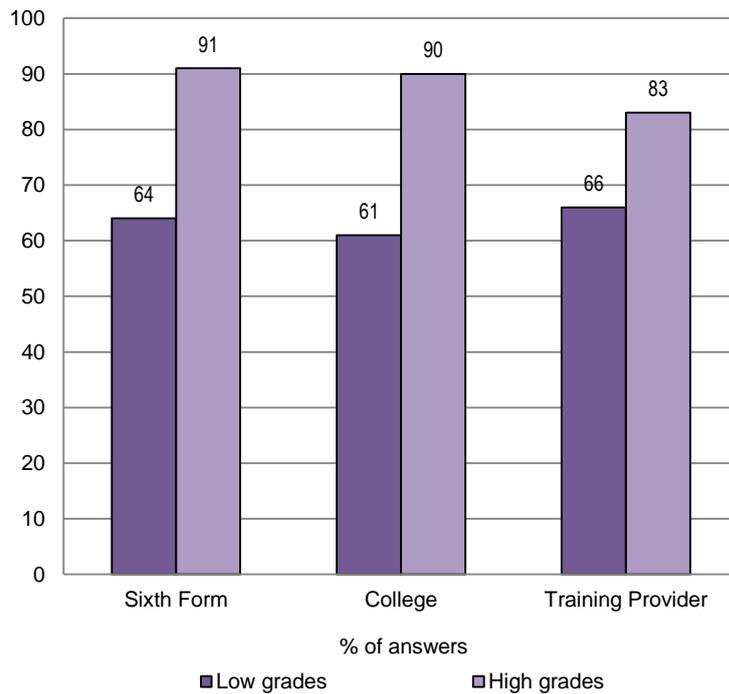
Chart 4.50: Satisfaction in relation to perceived performance by institution (in percent)



Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Students' perceptions of achievement were explored in further depth by asking them to rate particular competencies, for example, their capacity to manage occupational tasks independently. Students who judged their grades to be relatively high were generally more likely to judge that they had specific competencies to a high degree (See Chart 4.51).

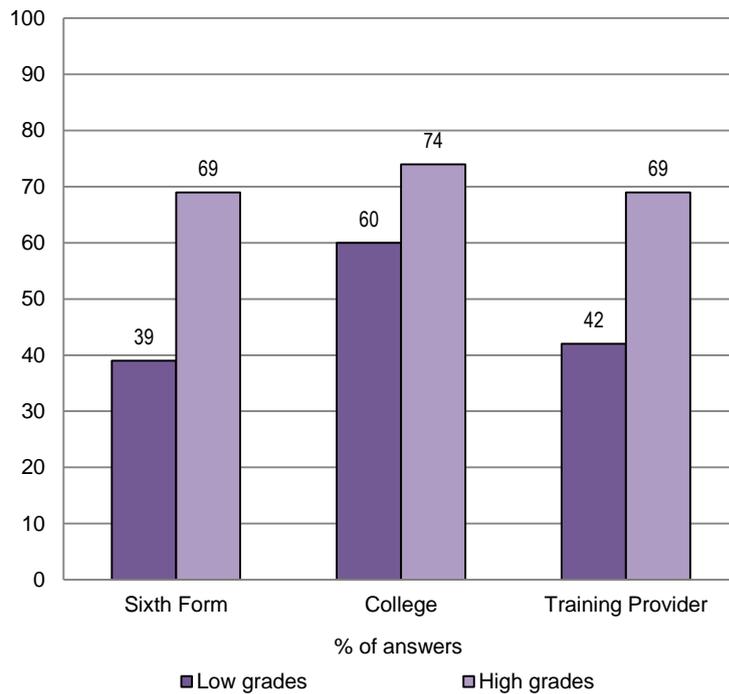
*Chart 4.51: Share of VET students who reported high skills in a selected competence by institution – being able to manage occupational tasks independently (in percent)*



*Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"*

Students were asked how well they thought that their programmes were helping them to develop these particular competencies. In all institutions, students who perceived themselves to be achieving relatively high grades were more likely to judge that their current programme was ‘good’ at helping them develop their competencies than students who judged their grades to be low. College students were more likely to judge they were being helped to develop these competencies well: 60 percent of low achieving and 90 percent of high achieving students in comparison to 64 percent and 91 percent, respectively, of sixth formers.

*Chart 4.52: Perception of the extent to which programme contributes to the development of competencies in relation to perceived grades by institution (in percent)*

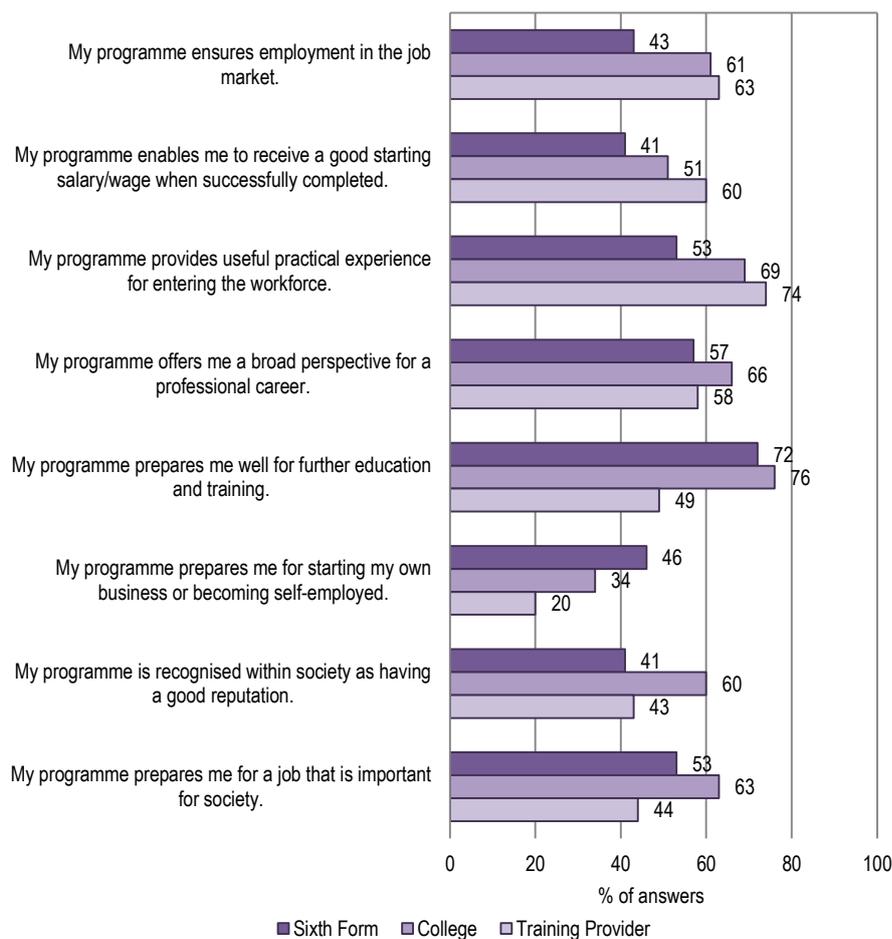


*Question: Overall, to what extent does your current programme prepare you to these activities? (manage occupational tasks, work as team member, familiarise myself with new tasks, perform well under pressure, communicate, engage with others). Presented responses 4 and 5 of 5 point scale where 5 = Very much and 1 = not at all*

*Learners in different institutions evaluated the status and value of their programmes in different ways*

The status and value of vocational education was identified as a key issue by the experts during the research. Students were invited to make judgments about the reputation and value of their programmes. There were significant differences in the way students in different institutions evaluated their programmes. In particular, 60 percent of college students as compared to 41 percent of sixth formers and 43 percent of learners in training providers judged that their programme had a good reputation in society. Students in training providers were the most confident that their programme would ensure employment and that it would generate a good starting salary. College and sixth-form students were most confident that their programmes prepared them for further education and training.

Chart 4.53: Perceptions of the value and status of programmes by institution (in percent)



Question: B4 Now that you know your programme well, to what extent you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

#### 4.5.5 Career Guidance and Progression of IVET Graduates

##### *National System of Career Guidance*

Since 1997, all secondary schools have been required to provide their students with an impartial careers education and guidance programme (Education Act 1997). From 2000, the Connexions service provided a national, integrated service to provide information, advice and guidance (IAG) to all young people aged 13–19. In 2003, the Department for Education provided statutory guidance on the curriculum for careers education and individual advice and guidance.<sup>58</sup> However, research suggests that that quality of provision has been highly variable between schools with a concentration on the needs of disadvantaged pupils.<sup>59</sup>

The Education Act (2011) places a duty on schools to secure independent careers guidance for their pupils in school years 9–11 (aged 13–16). The guidance must be impartial, it should include information on all post-16 training and education options including apprenticeships and it should promote

<sup>58</sup> Department for Education and Skills (2003). *Careers Education and Guidance in England: A National Framework 11–19: Guidance on Curriculum, Examinations and Assessment*. London: DfES. Department of Children, Schools and Families (2009) *Statutory Guidance: Impartial Careers Education*.

<sup>59</sup> Morris, M. (2011) *Careers education, advice and guidance*, in Huddleston, P and Stanley, J. *Work-related Teaching and Learning*, David Fulton.

the best interests of the pupils. It is for schools to decide whether to employ competent careers advisors to provide this service or whether they commission private or third-sector organisations to carry out this service. At this point in time, there is uncertainty about the implications of this reform.

Until recently, the Connexions service was available to students aged 16–19 whether they attended a sixth form or a further education college. Institutions were required to give Connexions advisers access to students. There was no requirement for schools or colleges to provide programmes of careers education to 16- to 19-year-olds, although there was non-statutory guidance about how they might incorporate careers, work-related learning and enterprise education into the curriculum. The Youth Cohort Study and Longitudinal Study of Young People in England (2009)<sup>60</sup> reported that the most common source of IAG for 18-year-olds was family and relatives (89 percent of those in full-time education had received advice in the last 12 months), followed by teachers (64 percent), Connexions (17 percent) and DirectGov (11 percent).

In 2012, the Government set up a new National Careers Service tasked with providing careers services to everyone aged 13 and over.<sup>61</sup> Those under 18 will be served by a mixture of online information combined with a helpline and webchat to provide advice and guidance in a flexible manner. The National Careers Centre will offer online career development tools and it is linked to a number of web-based and real-world projects to inspire and support young people as they seek to navigate from the world of education into employment. In addition, there will be walk-in centres (located in Jobcentres, libraries, community centres etc.) and based in further education colleges. Adults will be able to receive one-to-one support from advisors, delivered in a face-to-face setting.

#### *Findings from the Survey*

The survey sheds some light on students' plans and aspirations. It also explores their satisfaction with careers advice and information.

#### *Students were not satisfied with information and advice on careers.*

According to the survey, student satisfaction levels with respect to the availability of information on careers and training and with respect to the helpfulness of advisors were lower than general levels of satisfaction. This was particularly the case for sixth form students: 60 percent were not satisfied with information and 61 percent were not satisfied with the service provided by careers advisors – see Table SSS above. This data supports the view of the experts we interviewed that careers advice and information is a weakness of the English VET system.

#### *Intentions to continue schooling were associated with institution type and perceived achievement*

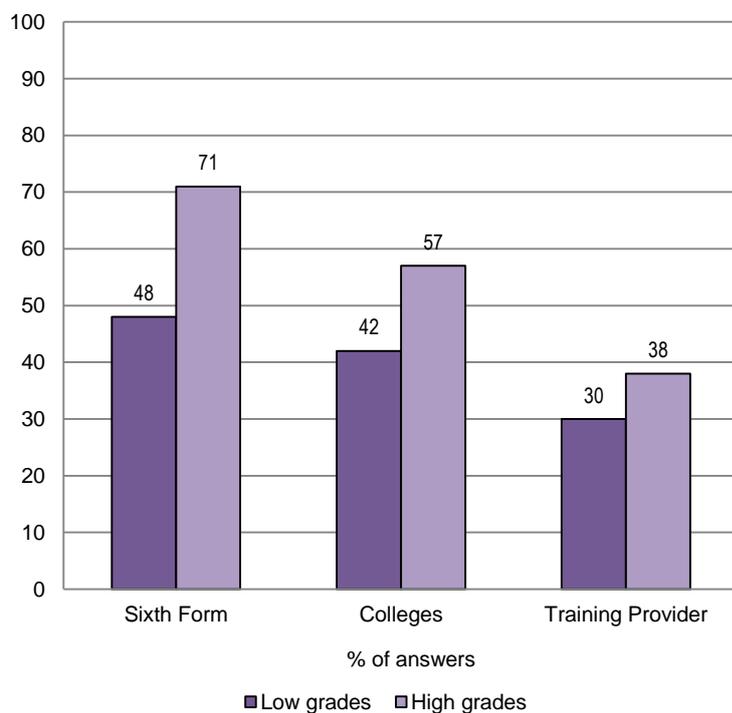
Students in sixth forms were more likely (59 percent) to report that they were likely to continue their education beyond their current programme than those in colleges (49 percent) or in training providers (34 percent). This may be partly as a result of the differential levels of satisfaction reported above, but it may also be connected with the kinds of programmes that students are taking. Intention to continue education was also associated with perceived achievement in terms of relative grades (see Chart 4.54).

---

<sup>60</sup> Youth Cohort Study and Longitudinal Study of Young People in England – 2009 (2010) Department for Education & National Statistics.

<sup>61</sup> <http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/n/12-677-national-careers-service-right-advice-right-time.pdf>

Chart 4.54: Intention to continue education in relation to perceived achievement by institution (in per cent)



Question d6\_r Do you plan to continue schooling or further education after your programme has ended? Presents 4 and 5 in five point scale where 1 = Definitely not and 5 = Definitely

Students in sixth forms were more likely to be aiming for employment in business, finance or public administration whilst employment in production was more popular for students in colleges and training providers.

There is some evidence that higher status service sector employment is more likely to be sought by vocational learners in sixth forms. 69 percent of sixth-form learners sought employment in banking/finance/business in comparison to 47 percent of those in training providers and 20 percent in colleges. This reflects the programme offer and take up by different institutions: none of the sixth-form students in the survey reported they were taking programmes related to industry.

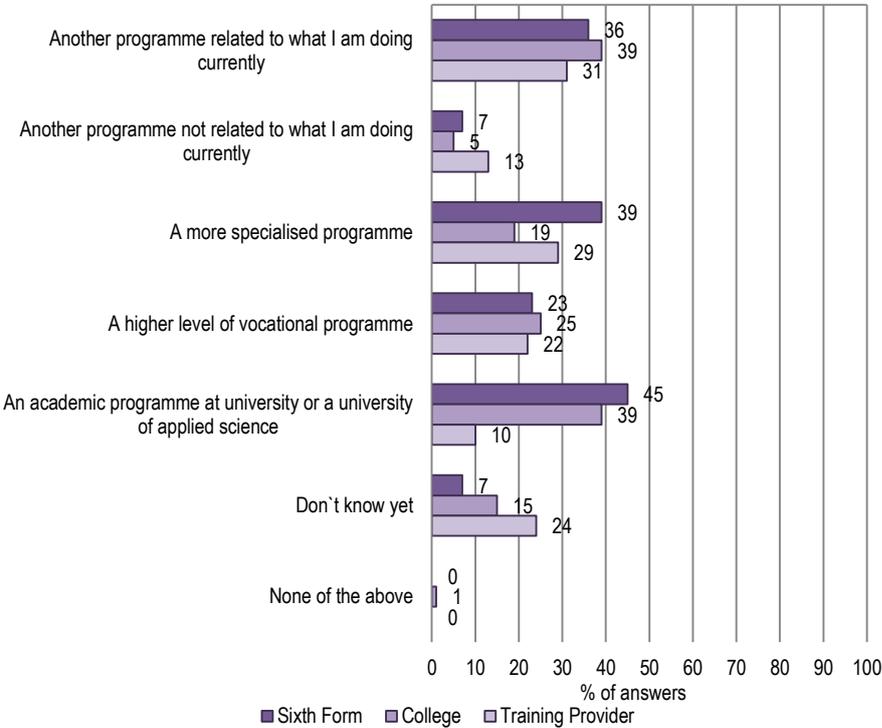
However, the survey did reveal that students intend to work in sectors other than the sector most closely related to the programme they are currently taking. For example, 19 percent of college students and 28 percent of trainees in training providers following industry-related programmes say that they do not want to work in the industry sector. 28 percent of college students and 19 percent of trainees enrolled in service sector programmes intend to work in production. This suggests that a substantial minority of students are not even committed to broad sectors when aged 17–18 and may be changing their plans during their studies.

More than half of those students who plan to continue in education want to take further programmes related to what they are currently doing and somewhat less than half want to take academic programmes at university.

57 percent of all students intend to take programmes 'related' to what they are currently doing, while 30 percent plan to specialise in their further studies. Learners in sixth forms and training providers are more likely to wish to specialise in their further studies. Overall, 45 percent of students intend to progress to university – this being particularly attractive for those in sixth forms (45 percent) and less at-

tractive for college students (39 percent) and learners in training providers (10 percent). Only 32 percent of all learners plan to take a high level vocational programme. Learners in training providers (24 percent) and colleges (15 percent) are less likely to have formed their plans for further study than those in sixth forms (7 percent). University is attractive to many vocational learners while higher level vocational programmes appear to be less attractive (or perhaps less well understood).

*Chart 4.55: Which programmes do learners intend to follow in the future? By current institution (in percent)*



*Question D7: If you plan to take a further qualification after you have finished your course, what kind of qualification would you study?*

Students were asked what goals they strive for in relation to their working life. College students were most likely to be seeking responsibility at work (86 percent), happiness in their work (92 percent), opportunities to learn new things (90 percent) and to obtain solid occupational proficiencies (85 percent). Learners in training providers were most likely to be striving for happiness in their work (88 percent), a high income (85 percent) and good relationships with their colleagues (85 percent).

There were some differences in goals related to gender: female learners were more likely to strive for a number of goals, for example, job security, undertaking interesting tasks, happiness in work, having responsibility at work, learning at work, having good relationships with colleagues – see Table 4.58.

*Table 4.58: Learners' goals in relation to work by institution and gender (in percent)*

	Sixth Form	College	Training Provider
<i>Male</i>			
Obtaining solid occupational proficiencies	79	83	72
Receiving a high income	84	86	85
Gaining job security	78	84	79
Having responsibility at work	78	84	76
Having opportunities to learn new things at work	78	89	82
Undertaking interesting tasks in the workplace	86	85	78
Having a job that makes me happy	85	90	87
Having a good relationship with colleagues	84	89	82
Advancing to a high level of status in society	71	73	68
Having enough spare-time to do other things in life	85	78	76
Making and maintaining relationships with others (e.g. family and friends)	84	86	82
<i>Female</i>			
Obtaining solid occupational proficiencies	88	88	72
Receiving a high income	81	86	87
Gaining job security	93	88	85
Having responsibility at work	88	89	82
Having opportunities to learn new things at work	93	92	83
Undertaking interesting tasks in the workplace	93	93	81
Having a job that makes me happy	88	95	90
Having a good relationship with colleagues	88	92	87
Advancing to a high level of status in society	81	74	78
Having enough spare-time to do other things in life	81	79	76
Making and maintaining relationships with others (e.g. family and friends)	81	91	84

*Question: D1 How far do you agree with following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

Some aspirations are associated with socio-economic status. For example, 94 percent of college students whose families were classified as having a high socio-economic status were committed to obtaining 'solid occupational proficiencies' as against 84 percent of those with an average socio-economic status and 79 percent of those with a low socio-economic status. A similar association with socio-economic status existed in relation to the goal of having responsibility at work and the goal of having "a job that makes me happy".

#### **4.5.6 Conclusion**

From 2001–2011 there was an increase from 367,000 to 493,000 in the number of 16- to 18-year-olds following vocational programmes in general further education colleges, tertiary and specialist colleges in England. At the same time, there was considerable change in the offer and take up of different types of vocational programmes, for example many GNVQ qualifications were phased out and replaced with other types of qualifications. Work-based learning for 16- to 18-year-olds declined over this period.

The survey found that, when choosing programmes, most students are seeking both an attractive occupation and a good foundation for further education. The influence of parents, former teachers and

friends was important or very important for only a minority of students, but it was greater for students in one-year programmes than it was for those in two-year programmes.

Choosing to study at a college is associated with a commitment to a vocation: 83 percent of these students identified the appeal of an occupation as at least important to their choice. Only 51 percent of trainees learning with a training provider rated the appeal of an occupation as important and 25 percent of trainees reported that learning with a training provider was an option that they did not at first consider. 66 percent of college students believed that their programme would guide them to their 'dream job', but only 41 percent of those in sixth forms and just 24 percent of those in training organisations. The decision making of 17- to 18-year-old students in sixth forms and training providers seems to be more provisional and experimental than that of their contemporaries in colleges.

Teachers were rated as important (or very important) information sources by a large minority of students in sixth forms (46 percent) and colleges (42 percent) but only by 20 percent of students with training providers. This provides some confirmation of the view that some teachers are not knowledgeable about progression options, such as apprenticeship, which take place outside of schools and colleges. Students currently with training providers rated family (35 percent) and friends (36 percent) as relatively important information sources.

English vocational students are less likely to consider alternative programmes than students in the other six countries: only 50 percent of them considered at least one other alternative. A relatively high proportion confirmed they would choose the same programme if they could choose again, but a significant minority stated that they would not. Broken down by institution type: 35 percent of those in sixth-form colleges, 22 percent of those in colleges and 42 percent of those in training organisations said they would not choose the same programme again.

In general, satisfaction levels are high in the English VET system and compare favourably with the other countries in the survey. Satisfaction levels of all kinds were relatively strong in colleges. Satisfaction with practical training and learning was better in colleges and training organisations than in sixth forms and better in one-year and three-year programmes than in two-year programmes.

Satisfaction levels were higher for those students who believed they are achieving well: those students who reported relatively high grades were more likely to express satisfaction with different elements of their programmes. Perceived higher grades were associated with students reporting higher levels of identified competencies, such as being able to manage occupational tasks independently. This provides confirmation of students' judgement about their own relative performance because this judgement was linked to judgements about particular competencies.

Learners in colleges were more likely to judge that their programmes were helping them to develop these competencies than learners in sixth forms or training providers.

According to some of the experts, the low status of vocational England impacts upon choices and motivation of learners. However, the survey found that 60 percent of students in colleges, 41 percent of students in sixth forms and 43 percent of students in training providers judged that their programmes had a good reputation in society. We can conclude that many students do not share the view that vocational education has a low status, although this view is more widespread in some institutions.

According to the survey, student satisfaction levels with respect to the availability of information on careers and training and with respect to the helpfulness of advisors were lower than general levels of satisfaction. This was particularly marked for sixth-form students: 60 percent were not satisfied with information and 61 percent were not satisfied with the service provided by careers advisors. This data

supports the view of the experts we interviewed that careers advice and information is a weakness of the English VET system.

Students in sixth forms were more likely (59 percent) to report that they were likely to continue their education beyond their current programme than those in colleges (49 percent) or in training organisations (34 percent). This may be partly as a result of different intentions (see below) but it may also be connected with the kinds of programmes that students are taking. Students with high levels of perceived achievement were more likely to plan to continue their education.

Students in sixth forms were more likely to be aiming for employment in business, finance or public administration whilst employment in production/industry was more popular for students in colleges and training organisations. This reflects the programme offer and take up by different institutions: none of the sixth-form students in the survey reported that they were taking programmes related to industry. The survey revealed that some students intend to work in sectors other than the sector related to the programme they are currently taking. Some 20–30 percent of students, depending on the institution, who are in industry-related programmes say that they do not want to work in industry. This suggests that a substantial minority of students aged 17–18 are not committed even to very broad employment sectors and may be changing their plans during their studies.

Over half of those who intended to continue their education (57 percent) intend to take further programmes related to what they are currently doing, while 45 percent intend to progress to university of some kind. Non-university, higher level vocational programmes were less attractive to English 17- to 18-year-old students – or perhaps simply less well understood.

## 4.6 Slovenia

### 4.6.1 General Education System Characteristics

The Slovenian education system is still more or less centralised. Local municipalities administer pre-school institutions and primary schools, while the curriculum is managed at the national level. All secondary and HE programmes fall within the financial and legal jurisdiction of the Ministry of Education, Science, Culture and Sport. However, universities enjoy considerable autonomy as institutions, particularly with respect to the appointment of staff, the design and implementation of their curriculum and the assessment of students, while curricula on the secondary level are set centrally but allow schools some freedom in implementing them.

Children can be enrolled in kindergarten from early age, although this is not compulsory. In principle, every family has the right to pre-school child care, although the demand for places sometimes exceeds the supply and selection is based on social criteria at the level of local municipalities. The obligatory nine-year elementary school is divided into three phases, each lasting three years, starting with entry upon enrolment at the age of 6 and ending at 15. In Slovenia, the elementary school (*Osnovne Šole*) is the provider of 'lower-secondary' education.

Even though it is not obligatory, 98 percent of the population aged between 15 and 19 enrolls in secondary education. There is a broad division between general secondary education which is provided in *gimnazija* and vocational/technical education which is provided through a variety of programmes: secondary technical and professional, secondary vocational, vocational technical, and short-term vocational education, e.g. there are also technical *gimnazija*.<sup>62</sup> VET programmes are typically conducted in upper vocational schools or school centres providing multiple vocational programmes under the one roof. Some school centres also include post-secondary vocational education and specialised gymnasiums.

Following the Bologna reform, higher education (HE) in Slovenia is divided into three levels which are set out in the National Qualifications Framework. The first level encompasses vocational higher education programmes and university bachelor programmes with a duration of three years. The second (HE) level is that of master's studies and the third is that of doctoral studies. There are two large universities: the University of Ljubljana and the University of Maribor.

In addition to the system of formal education, there are well-established providers of non-formal and continuous education in Slovenia. Examples include youth educational facilitators and adult educators such as the People's Universities (*Ljudske univerze*) and the Universities for the Third-life Cycle (*Univerze za tretje življenjsko obdobje*): Slovenia has a centralised education system with a strong emphasis on formal education which is highly recognised and valued. However, lifelong learning, non-formal and informal learning are gaining in importance.

---

<sup>62</sup> [http://portal.mss.edus.si/pls/portal/docs/PAGE/PORTAL\\_SOLSTVO\\_MSS/MSS\\_STRANI/MSS\\_DOKUMEN TI\\_ZA\\_SPLET/SLOVENSKI\\_SOLSKI\\_SISTEM\\_V\\_STEVILKAH.PDF](http://portal.mss.edus.si/pls/portal/docs/PAGE/PORTAL_SOLSTVO_MSS/MSS_STRANI/MSS_DOKUMEN TI_ZA_SPLET/SLOVENSKI_SOLSKI_SISTEM_V_STEVILKAH.PDF) str 11 - 12

## 4.6.2 Fundamental characteristics of VET System

### 4.6.2.1 General principles and governance

In the last 10 years the Slovenian VET system has been reformed in a significant way. The VET system is still largely school-based but the revised curriculum places a much greater emphasis on practical training in schools and in enterprises. Curricula are modularised, accredited, competence and learning outcomes-based. Schools are authorised to modify the curriculum by up to 20 percent to meet the needs of local employers. Schools and teachers have gained more freedom and responsibility with respect to the creation of school curricula and a new final assessment has been introduced (*Poklicna matura*) that combines an external and internal examination.

Upper-secondary education in Slovenia is divided between general, vocational and technical schools. It is regulated by general legislation (e.g. the Organisation and Financing Education Act) and by legislation that relates to particular institutions (e.g. *Gimnazija* Act, the Act on Vocational and Technical Schools) and legislation that relates education to the world of work (e.g. the National Vocational Qualifications Act). The National Institute for Vocational Education and Training is charged with the development, management and administration of curricula and occupational standards and catalogues. The Ministry of Education and Ministry of Labour controls funding for VET and keeps registers of providers and enrolments. The National Assessment Centre is responsible for assessment and reporting. Almost all upper VET secondary schools are founded and financed by the state. The state also owns and maintains schools. School fees are only charged for extra activities.<sup>63</sup>

### 4.6.2.2 Involvement of the social partners

It is a legal requirement in Slovenia that VET is determined through consultation with the social partners at the national and local levels. The social partners work with governmental bodies to determine standards for qualifications for each industry, appoint their representatives to expert groups and examination committees and contribute to practical training. Trade Unions, Chambers and employers help to develop new VET programmes and occupational profiles and standards. Employers are responsible for the organisation and implementation of work-based learning.

At the school level, the “open curriculum” gives an opportunity for the curriculum to be related to local needs. It is the responsibility of the school council to appoint “a quality assurance committee” comprising representatives of employers, students and parents in addition to teachers with a view to consulting them.<sup>64</sup> Some chambers also play an active role in CVET, for example, in running master craftsman assessments. Employers are also involved in schemes to provide training and work experience for the unemployed.<sup>65</sup>

### 4.6.2.3 VET programmes

Even though most VET in Slovenia is centralised, schools have a certain degree of autonomy in implementing core national curricula, the choice of teaching methods, staffing and employment matters and admission procedures. Slovenian upper-secondary VET is differentiated into two main types of VET programme: 3-year secondary VET programmes and 4-year technical upper-secondary education programmes, with both usually provided by the same VET school.

*Three-year secondary VET programmes* train students for most employment sectors to enter employment as skilled workers. Programmes include at least 24 weeks of practical training which can be entirely school-based or involve some work experience. However, some programmes build in enterprise-

<sup>63</sup> Eurydice: Organisation of the education system in Slovenia (2008/2009). Available at: [www.eurydice.org](http://www.eurydice.org).

<sup>64</sup> Organisation of the education system in Slovenia (2008/2009). Available at: [www.eurydice.org](http://www.eurydice.org).

<sup>65</sup> Organisation of the education system in Slovenia (2008/2009). Available at: [www.eurydice.org](http://www.eurydice.org).

based training which can extend the practical component to 53 weeks for those learners who have obtained an individual learning contract – which amounts to a kind of apprenticeship. These students spend less time in school. However, not all employment sectors provide sufficient opportunities for such individual contracts. The programmes are completed with a vocational final examination.

*Four-year technical upper-secondary education programmes* last 4 or 5 years and end with a vocational *matura* (*poklicna matura*). The vocational matura examination leads to the award of the qualification of a technician, which allows students to enrol in professionally-oriented higher education or higher vocational education courses. If students pass an additional exam in one of the general *Matura* examination subjects, they may also enrol in academic higher education. The 4-year programme has a greater emphasis upon general knowledge and, despite its length, there are only two weeks of practical training in the whole programme.

With the 3-year vocational secondary education students obtain ISCED level 3C. The programme has a similar structure as the 4-year programme with more work-based practical training (24 weeks). Technical secondary education is a 4-year programme with 40 percent of general subjects and 40 percent of vocational subjects. Students attend a minimum of 4 weeks of work-based training and by finishing the programme they obtain an ISCED level 3B education. 50 percent of the programme contains general subjects, while 30 percent of the programme is reserved for vocational subjects and only 2 weeks for work-based practical training. In the Slovenian education system, both types of VET programmes cover all major industry and service areas.<sup>66</sup>

Graduates of 3-year VET programmes can continue by enrolling in 2-year vocational-technical programmes – the so-called 3 + 2 structure – and pass the same examination as students from 4-year VET programmes. More than half of the 3-year programme graduates take this option and these students make up about one-third of all students who achieve the Vocational Matura (Medveš et al., 2008 cf. Pavlin, 2009). In the future, the so-called “plus 2 programmes” are expected to see the stronger involvement of companies and more work-based learning.

There is evidence of some permeability in Slovenia between the general and vocational tracks. Around 1.7 percent of gymnasium students enrol in post-secondary vocational programmes. It is estimated that some 7 percent of vocational graduates achieve the general Matura by joining the final year at a Gymnasium while another 6 percent do so by taking additional subject papers in addition to their Vocational *Matura*.

*Post-secondary vocational programmes* include higher level vocational programmes that lead to internal diplomas. Graduates from these programmes are likely to progress to a professional higher education programme and, depending on the programme, they may be exempted from the first year of study or from some examinations.

*Continuing Education and Training* includes a variety of post-compulsory, non-higher education in Slovenia for school leavers and adults. Chambers of Crafts and Commerce make provision so that after a minimum of three years' work, adults can return to education to obtain a secondary technical level of education by passing the master craftsman's, foreman's or managerial examinations, they can sit for general subject exams of the vocational matura, or they can enrol in the matura course. General and vocational programmes for adults are provided by the Slovenian Institute for Adult Education, Centres of Adult Education and the so-called Folk Universities (*ljudske univerze*).

---

<sup>66</sup> See Appendix 1.

#### 4.6.2.4 Quality Assurance

Quality assurance in Slovenia is in accordance with the Vocational and Technical Education Act (2006) which requires external and internal evaluation. External evaluation is done by the Inspectorate of the Republic of Slovenia for Education and Sport through national verification and registration processes for schools when registering new programmes. In addition, the National Examination Committee, through its expert committees, assures the quality of practical examinations and the subject committees of the National Committee for Vocational Matura assures the quality of the practical examinations. Both are supported by technical and administrative support from the National Examination Committee. Self-evaluation systems focus on the analysis and publication of assessment results. By law, teachers and experts – in cooperation with pupils – are required to analyse the success of pupils by subjects at the end of each assessment period on the school level. It follows that student achievement is a key indicator of quality; however, the administration aspects are also internally evaluated.

### 4.6.3 Socio-demographic Characteristics and Transition to VET

#### 4.6.3.1 Introduction

Like in many other European countries, in Slovenia the number of students enrolled in secondary VET programmes has been constantly dropping. It dropped by 13,000 students in 3-year and 3,000 in 4-year programmes) from 2000/01 to 2010/11. On the other side, enrolment in general education programmes on the secondary level has been growing, as can be seen in Table 4.59. While Table x shows that, even though the number of students who finished 4-year or longer programmes has been constant, there has been growth in the numbers of enrolled students in higher education.

Table 4.59: Numbers of enrolled students in programmes on secondary level

School year	Lower secondary vocational education (2-year)	Secondary vocational education (3-year)	Secondary technical education (4-year)	General education (Gimnazija)	Vocational technical education (2-year)	Vocational final examination preparation course	Final examination preparation course (matura)
2000/01	3439	25629	33576	33628	7763	95	378
2005/06	1902	17664	32598	38413	7428	309	1546
2010/11	875	11900	30688	32432	4839	429	1083

Source: *Bela knjiga*. 2011.

Table 4.60: Permeability from secondary to tertiary education: 2000 and 2007 (in numbers)

Year	Number of secondary school graduates	Professional higher education (short cycle)	Higher Education Programmes	Total
2001	17081	864	15015	15879
2007	18130	1719	15229	16948

Source: <http://www.drznaslovenija.mvzt.gov.si/ch03.html>

There are various reasons for such trends; the first is the low reputation of manual occupations that derives from the historical cultural aspects of our nation. Research has demonstrated a correlation between the length of education and income, standard of living, prestige etc., which has resulted in intergenerational upward mobility and – with every generation – led to more people seeking higher education. Another factor influencing the trends are changes in the Slovenian economy, which has moved from being highly industrial to service dominated. Due to needs for flexibility in employment and growth in the labour market, vocational education is perceived as too narrow to allow fast mobility between different job positions, which again makes the general programmes more attractive.<sup>67</sup>

67 Svetlik, Ivan. 2004. Adjusting to the falling interest in VET in Slovenia.

Some of these trends are confirmed by our research among VET students which shows that there are more students enrolled in 4-year programmes than 3-year ones. VET programmes are slightly more popular among male students and students with low grades. Most VET students come from an average socio-economic background and therefore the perception of VET students coming from a low socio-economic background may not be true anymore. However, the shift to a service economy is also obvious in our results, which indicate that there are more students in service sector programmes compared to industry sector programmes.

Throughout the rest of this section we present the results of our survey where we asked students what influenced their choices of VET programmes and explored how different socio-demographic characteristics such as gender, parents' education, type of programme, sector and others may have influenced their decisions.

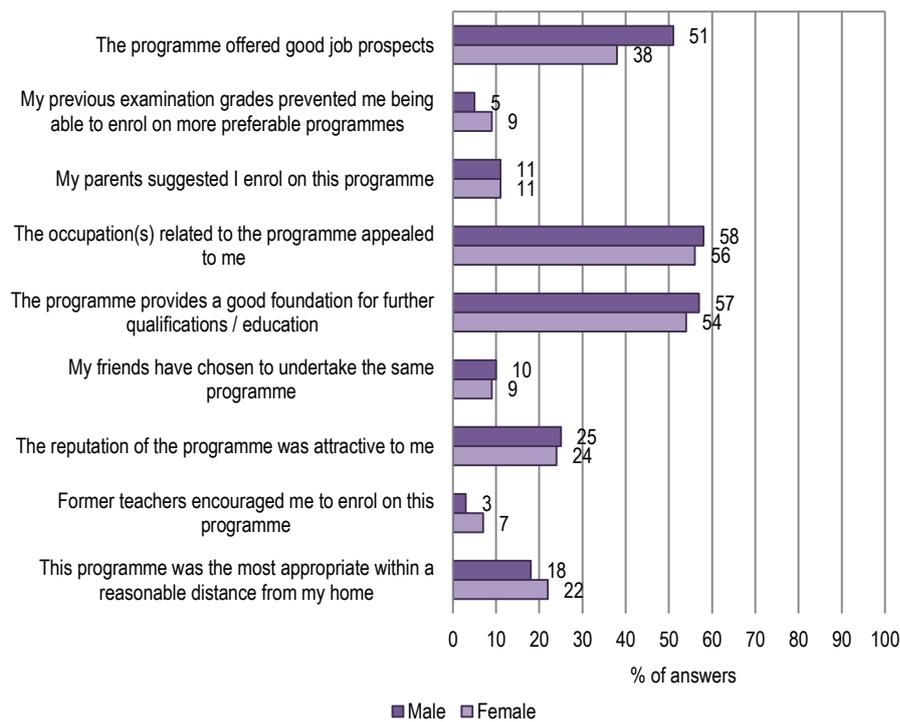
#### 4.6.3.2 Survey Results

*Students choose programmes connected with an appealing occupation, provide them with the foundation for further education and offer them good job prospects*

In general, Slovenian students are likely to choose a programme because the occupation related to it appeals to them and because they believe the programme provides them with a good foundation for further education (55.5 percent) and with good job prospects (44.5 percent). Their decision is far less often influenced by previous examination grades, parents' suggestion, friends' choice or a former teacher's encouragement.

In Chart 4.56 we can notice that females are less often (29 percent in 3-year and 39 percent in 4-year programmes) influenced by the fact that the programme offers good job prospects than males (around 50 percent in both programmes). More differences between the genders can be noted among students of 3-year programmes, where males (60 percent) are more often influenced by the appeal of the occupation related to the programme than females (42 percent), while females are more often influenced by their previous examination grades (20 percent : 8 percent) and teacher's suggestions (16 percent : 5 percent). These differences confirm the view that in Slovenia the VET offer (especially 3-year programmes) is unattractive to females, which was also stressed by some experts in the interviews.<sup>xxviii</sup>

Chart 4.56: Factors influencing students' programme choices, by gender (in percent)

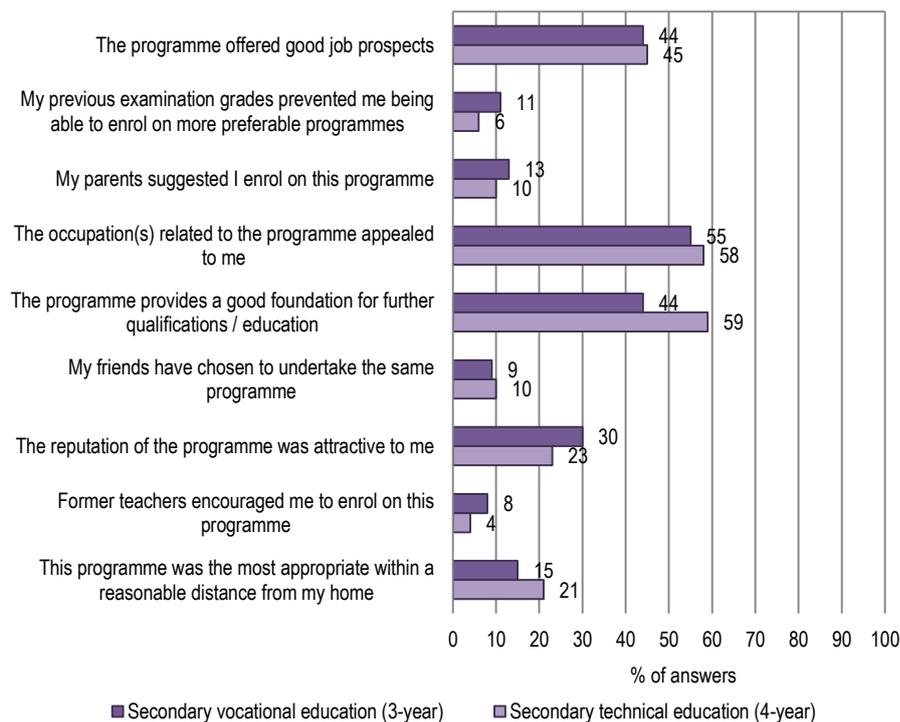


Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Parents' education only influenced programme choice based on previous examination grades for students of 4-year programmes: the lower the parents' education, the stronger the influence of the past exam grades. Similarly, parents' employment status does not impact significantly on any of the possible influences on students' programme choices.<sup>xxix</sup>

As indicated earlier, students most often chose their programme because the related occupation appealed to them, the programme provides a good foundation for further education and it offers good job prospects. All three factors had a slightly stronger influence upon students in 4-year programmes than those in 3-year ones. A teachers' encouragement, previous examination grades and parents' suggestion were the least influential factors when students were deciding on their programme. However, those three factors had a slightly stronger influence on students in 3-year programmes.

Chart 4.57: Factors influencing students' programme choices by VET structures (in percent)



Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Chart 4.57 shows that students in programmes related to employment in industry more often decided on the programme because it offered them good job prospects, a good foundation for further education and because the programmes appealed to them than those in service programmes. Students in 4-year service programmes were more likely to be influenced by the distance between their home and school and friends' choices than those in 4-year industry programmes.<sup>xxx</sup>

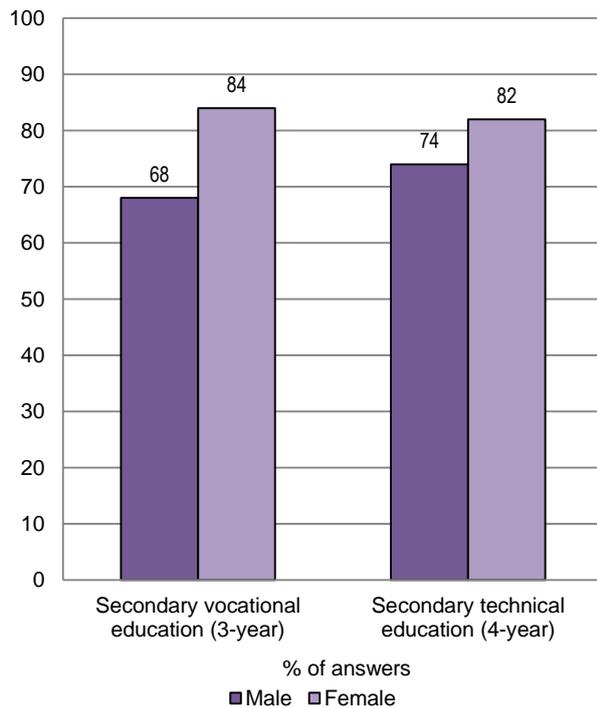
We also considered if there is any connection between students' choices and their parents' employment status. In general, there are no larger differences in factors that influenced students' decisions about the programme between those who have part-time, temporarily or unemployed parents and those who have a full-time employed parent.

However, if we also consider the type of programme we can see some slight differences. In 3-year programmes students with full-time employed parents more often chose the programme if it offered good job prospects, if the occupation related to the programme appealed to them and if the programme provided them with a good foundation for further education compared to students of parents without full-time employment<sup>xxxi</sup>.

*Most students in the process of enrolling in VET considered alternative programmes, although the influence of their socio-economic background is small*

The majority of students (in both types of programmes) was considering at least one other alternative programme (77 percent) when deciding on the current one. Female students more often (82 percent) considered other alternative programmes than males (72 percent). Male students in 4-year programmes more often considered alternative programmes than male students in 3-year programmes. However, the sector of the programmes does not affect this difference.<sup>xxxii</sup>

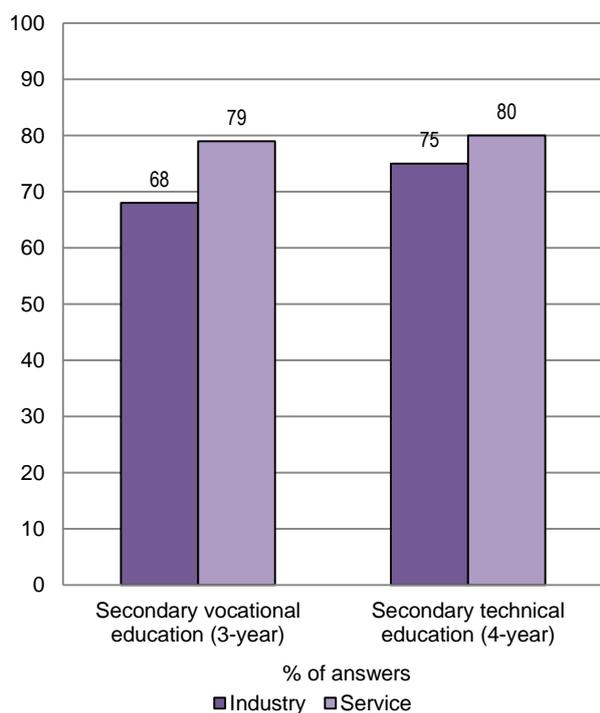
*Chart 4.58: Share of students considering alternative programmes, by VET structures & gender (in percent)*



*Question: A6 Have you considered any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't considered any alternative programme", 2="I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"*

As Chart 4.59 shows, if we take the employment sector into consideration, we can notice that students from service programmes more often (80 percent) considered alternative programmes than those from the industry sector (73 percent), although these ratios are still relatively alike. Similar results are visible if we compare industry and service sectors across the two types of programmes. We can say that high results were expected here because there is a wide variety of programmes in both sectors in Slovenia, making it harder for students to decide.

Chart 4.59: Share of students considering alternative programmes, by VET structures & programme-employment sector (in percent)



Question: A6 Have you considered any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't considered any alternative programme", 2="I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"

Students from 3-year programmes more often considered alternative programmes if their parents had a lower education. However, parents' employment status did not influence the consideration of alternatives<sup>xxxiii</sup>.

#### 4.6.4 Vocational Curricula in Slovenia

In this section we first present the structure and development of VET curricula in Slovenia and then, drawing on the results of the survey, we consider how these curricula are experienced by learners.

##### 4.6.4.1 General Characteristics of Vocational Curricula (school-based and practical training)

The main body responsible for the development VET programmes is the National Centre for Vocational Education (*Center za Poklicno Izobraževanje*) and the Council of VET experts working under the jurisdiction of the institute – this body also has authority over vocational curricula. Since the last reform, Slovenian VET curricula are learning-outcomes-based, modularised and accredited according to ECVET and a new final assessment has been introduced which combines an external and internal examination. The curriculum authority for general subjects is the National Educational Institute.

The curriculum of the 4-year, technical, upper-secondary programmes comprises general subjects which take up around 40 percent of all school hours; vocational modules (some modules are compulsory and others are elective), amounting to around 30 percent of all school hours; practical education (delivered partly in school as practical lessons and partly in a workplace), amounting to about 15 percent of all school hours; special interest activities (serving the acquisition of knowledge and skills that satisfy students' individual interests and inclinations), this part takes up around 5 percent of all school

hours; and an open programme set by the school in cooperation with industry associations and/or social partners in the region, this part takes up around 10-20 percent of all school hours.<sup>68</sup>

On the other hand, the curriculum of 3-year, vocational, upper-secondary programmes comprises general subjects, this part can take up between 20 and 25 percent of all school hours; technical modules – 20 and 25 percent of all school hours; practical education (delivered partly in schools as practical lessons and partly as training in a work situation with an employer), this part takes up between 35 and 40 percent of all school hours; special interest activities – 4 percent of all school hours; and an open programme set by the school in cooperation with industry associations and/or social partners in the region, where this part can take up between 10 and 15 percent of all school hours.<sup>69</sup>

The Slovenian mainstream VET system is characterised by a small share of *practical training*, particularly in the case of 4-year programmes. Practical training is either conducted in a workplace or within school training facilities. The person responsible for conducting practical training in school is the teacher responsible for practical training, while in work settings the responsibility is given to a mentor. The development, preparation and implementation of practical training should be the result of collaboration between teachers of practical training, teachers of other modules and work-based mentors. Currently, there is room for improvement with respect to this coordination.

The framework for Slovenian VET curricula is created on the national level, while the delivery and contextualisation are the responsibility of providers. Curricula are modularised, accredited and learning-outcomes-based.

#### 4.6.4.2 *Assessment and progression arrangements*<sup>70</sup>

During the school year, assessment in VET upper-secondary education is conducted by oral and written examinations. Minimum standards are set by a subject group of teachers. If students have an individual apprenticeship contract, then practical training is assessed separately by a practical work-based test in the second year. There are final examinations at the end of both the 3-year and 4-year programmes. In the case of the 3-year programme, the examination consists of written, oral and practical tests or tasks. For the vocational *Matura*, that follows the 4-year programme, assessment includes written and oral tests in Slovenian, the vocational/technical subject, a foreign language or mathematics and a demonstration of occupational capability. Successful completion of the final examinations leads to a dual qualification: an educational certificate and a vocational qualification. The vocational *Matura* qualifies learners to enter higher education excluding universities.

#### 4.6.4.3 *Survey results*

The survey gave us an opportunity to explore the curriculum as experienced by learners. The survey permits us to investigate how the curriculum experience differed for students with different socio-demographic characteristics, different prior levels of attainment and students taking different programmes or programmes oriented towards different employment sectors. The survey also gives us an insight into the extent to which students are satisfied with their curricula and their perception of the skills they are attaining in their studies.

#### *VET students spend only a small amount of time studying outside school*

It is not surprising that students in 4-year programmes spend more time in school (34.2 hours per week) than those in 3-year programmes (31.8 hours). In more demanding programmes, we can note no differences in the time spent in school between genders, but that is not the case in less demanding

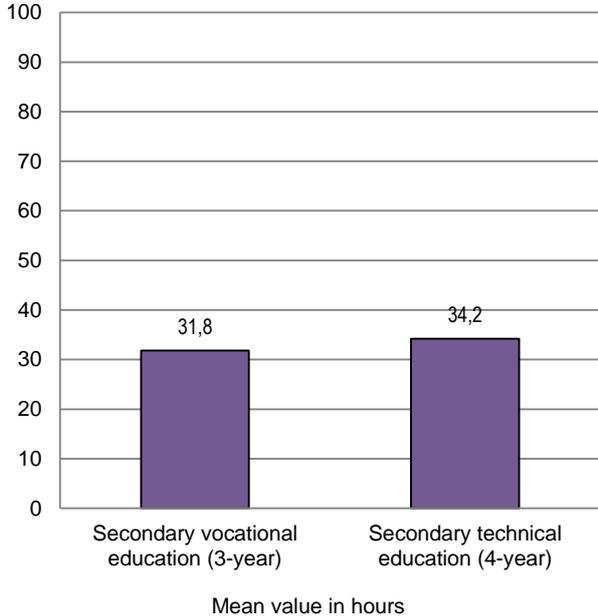
<sup>68</sup> Eurydice: Organisation of the education system in Slovenia (2008/2009). Available at: [www.eurydice.org](http://www.eurydice.org).

<sup>69</sup> Eurydice: Organisation of the education system in Slovenia (2008/2009). Available at: [www.eurydice.org](http://www.eurydice.org).

<sup>70</sup> Eurydice: Organisation of the education system in Slovenia (2008/2009). Available at: [www.eurydice.org](http://www.eurydice.org).

programmes where males spend 33.1 hours per week compared to females who only spend 28.5 hours in school. It would be interesting to know the reason for this. There is no difference in the time spent in school between the two types of programmes based on their sector/orientation.<sup>xxxiv</sup>

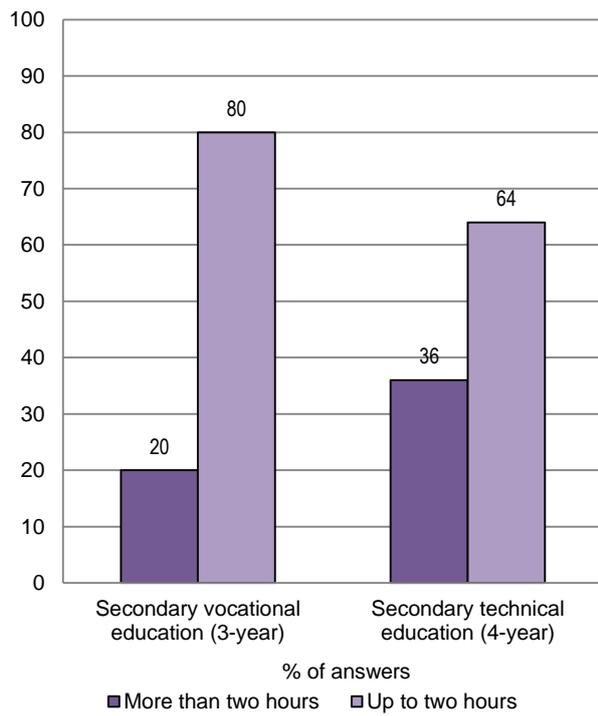
Chart 4.60: Students spending time in school, by VET structures in hours



Question: B3 How many school hours per week do you spend at school?

As expected, students in 4-year programmes (36 percent of students spend more than two hours) spend more time studying outside school than those from 3-year programmes (with 20 percent spending more than two hours). In both programmes very high percentages (3-year: 80 percent, 4-year: 64 percent) of students spend less than two hours per week studying outside school, which seems very low. But this is apparently not surprising because, according to the experts we interviewed, the motivation for learning in VET schools is one of the big issues, while another reason lies in the fact that students who enrol in VET usually already had low grades in compulsory education and often come from a below-average socio-economic environment.

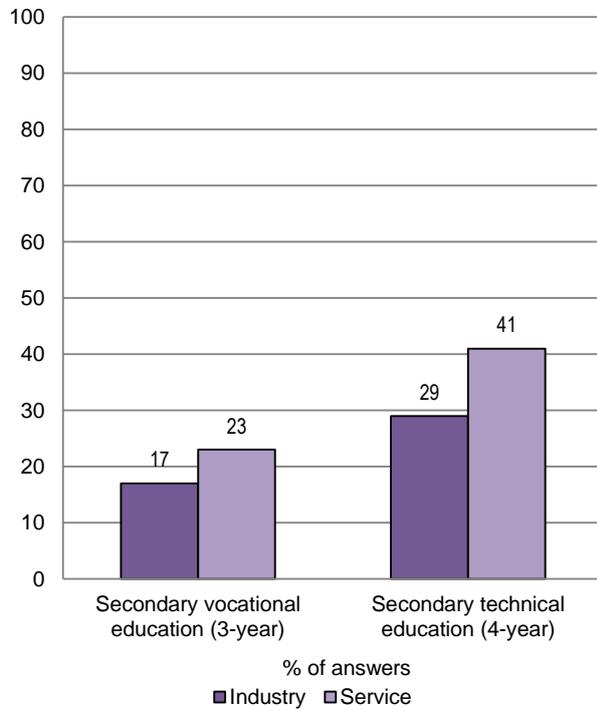
Chart 4.61: Hours students spend learning outside school, by VET structures (in percent)



Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?

In Chart 4.62 we can see that in both types of programmes students spend more time studying outside school if they are in service programmes (23 percent) than industry programmes (17 percent); however, the difference is larger in the 4-year programmes (41 percent : 29 percent).

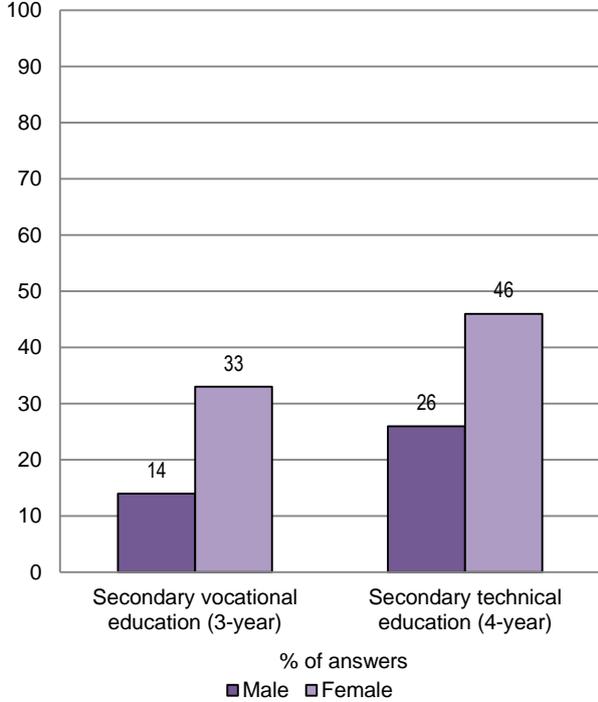
*Chart 4.62: Hours students spend learning outside school, by VET structures & programme orientation (in percent)*



*Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"*

Again, as expected, we can note from Chart 4.63 that in both programmes females spend more time studying outside school than males. In 3-year programmes, students with an average socio-economic status spend more time studying outside school than those with a below- or above-average SES.<sup>xxxv</sup>

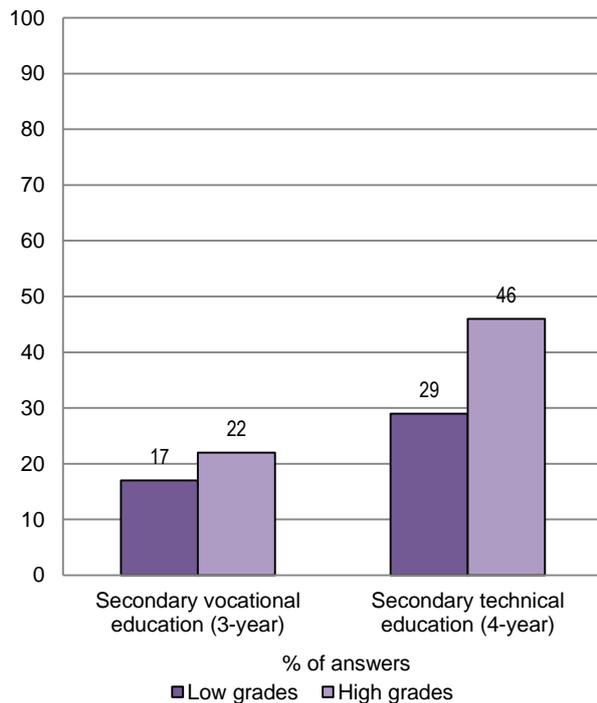
Chart 4.63: Hours students spend learning outside school, by VET structures & gender (in percent)



Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"

Another expected result is visible in Chart 4.64, where we can see that in both types of programme students with higher grades spend (26 percent more than two hours per week) more time studying outside school than students with low grades (41 percent). However, the difference is far more noticeable in 4-year programmes where only 29 percent of students with low grades study for more than two hours outside school compared to 46 percent of those with high grades. In 3-year programmes, these percentages are much lower: 17 percent and 22 percent.

Chart 4.64: Hours students spend learning outside school, by VET structures & school success (in percent)

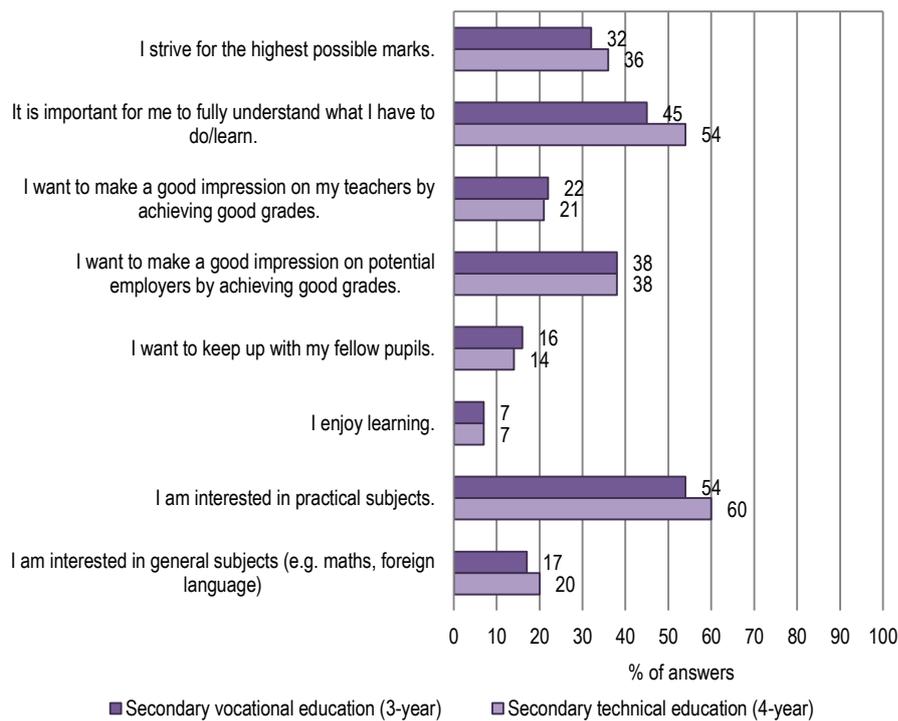


Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"

*VET students enjoy practical learning and consider understanding the substance of learning as very important – they do not like classical learning*

According to Chart 4.65, there are no large differences in study behaviour between the two VET programmes, except for the concern to fully understand what they need to learn and interest in practical subjects, which are slightly more mentioned by students from 4-year programmes. These two behaviours are the most commonly reported by all students. Only 7 percent of students agreed that they enjoy learning.

Chart 4.65: Students' learning incentives towards learning, by VET structures (in percent)



Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

When comparing students by programme orientation we notice that, whatever the programme length, more students from the industry sector are interested in practical training those from service programmes. However, students in the service sector more often strive for higher grades and want to understand what they need to learn or do than students in industry programmes, although this is only true for 4-year programmes.<sup>xxxvi</sup>

In 3-year programmes, male students more often like to keep up with fellow students (20 percent) and are more often interested in practical training (62 percent) than females (9 percent, 35 percent for the 4-year programmes. Meanwhile, in 4-year programmes females more often strive for the highest marks, want to make a good impression on employers by achieving good grades and believe that it is important to fully understand what they need to learn.<sup>xxxvii</sup>

School performance is connected with students' study behaviour in both types of programmes (Table 4.61), but the connection is stronger in 4-year programmes. In both types of programme, students with lower grades less often strive for higher marks, want to make a good impression on employers by achieving good grades and find it important to fully understand what they have to learn than those with higher grades. In 4-year programmes, students with lower grades are also less interested in practical and general subjects, while in 3-year programmes there are no differences in interest in subjects based on school performance.

**Table 4.61: Students' learning incentives, by VET structures & school success (in percent)**

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Low grades</i>		
I strive for the highest possible marks.	19	19
It is important for me to fully understand what I have to do/learn.	35	42
I want to make a good impression on my teachers by achieving good grades.	21	20
I want to make a good impression on potential employers by achieving good grades.	34	31
I want to keep up with my fellow pupils.	15	16
I enjoy learning.	(7)	7
I am interested in practical subjects.	51	55
I am interested in general subjects (e.g. maths, foreign language)	16	14
<i>High grades</i>		
I strive for the highest possible marks.	56	58
It is important for me to fully understand what I have to do/learn.	64	70
I want to make a good impression on my teachers by achieving good grades.	24	21
I want to make a good impression on potential employers by achieving good grades.	51	48
I want to keep up with my fellow pupils.	18	13
I enjoy learning.	((8))	8
I am interested in practical subjects.	57	63
I am interested in general subjects (e.g. maths, foreign language)	20	29

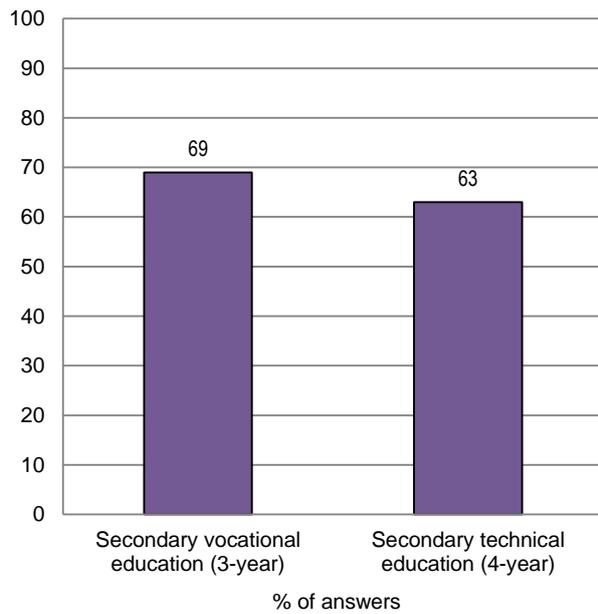
*Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*( ) n is less than 10, (( )) n is less than 5*

#### *A surprisingly high percentage of VET students do paid work*

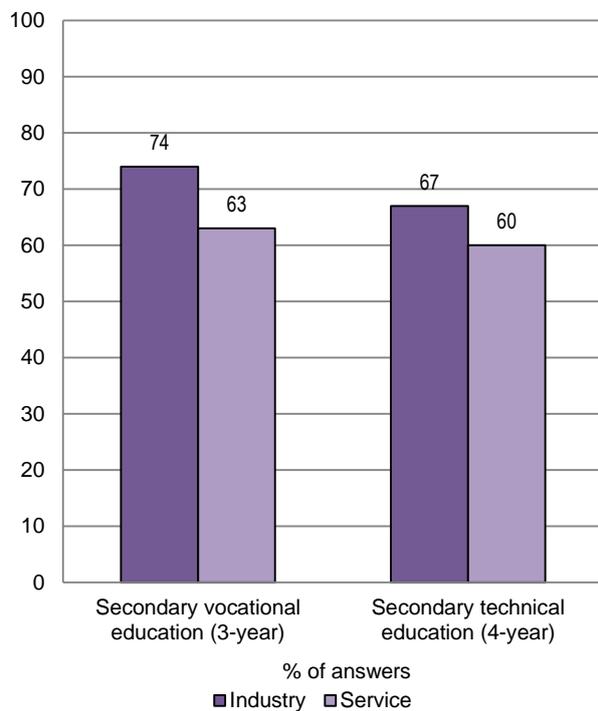
64 percent of the interviewed VET students were doing paid work and the difference based on VET structure is insignificant, as seen in Chart 4.66, where there are only 6 percent more in 3-year programmes. However, in both types of programmes students in industry programmes are more likely to be in paid employment than those from service programmes. Again, in both types of programmes, students from big cities more often have paid work experience than those from a country village or town<sup>xxxviii</sup>.

Chart 4.66: Students doing paid work, by VET structures (in percent)



Question: C6a Have you worked for payment during the last year outside your programme (eg. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regular," 2="Yes, but I only work during the holidays" and 3="No"

Chart 4.67: Students doing paid work, by VET structures & programme orientation (in percent)



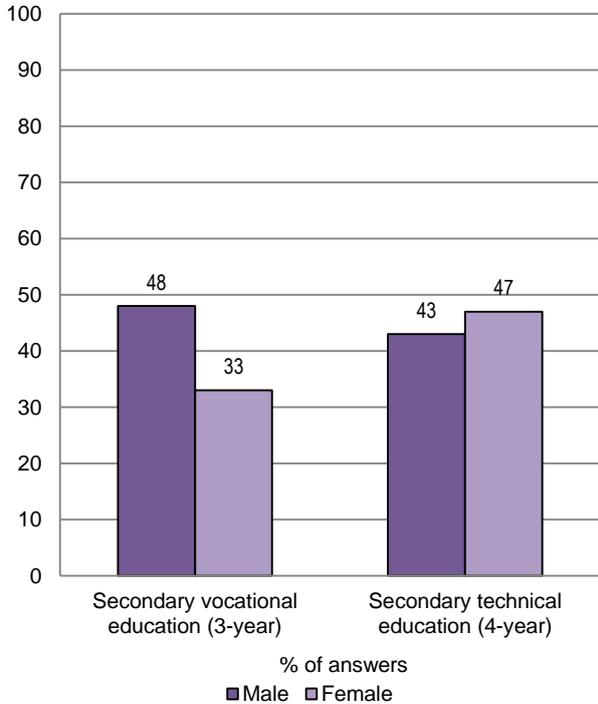
Question: C6a Have you worked for payment during the last year outside your programme (eg. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regular," 2="Yes, but I only work during the holidays" and 3="No"

By only a few percent of male students have more often work experience than female students and this applies to both types of programme. In 4-year programmes, students with lowly educated parents are more likely to be involved in paid work than those with parents with an upper-secondary or tertiary education, while in less demanding programmes the situation is reversed: students with parents with a tertiary education work slightly more often than those with lower educated parents.<sup>xxxix</sup>

*Students with high grades are much more satisfied with VET programmes than students with low grades*

Surprisingly, there is no difference in student satisfaction between the 3-year and 4-year programmes: in both types, the majority (55 percent) is unsatisfied with their programmes. However, if we look at 3-year programmes based on programme orientation there is quite some difference: 56 percent of students in industry programmes are satisfied with their programme, while only 28 percent of service programme students are satisfied with their programme. In the same type of programme, we can also notice differences in satisfaction between genders, where 48 percent of males are satisfied with the programme and only 33 percent of females.<sup>xi</sup>

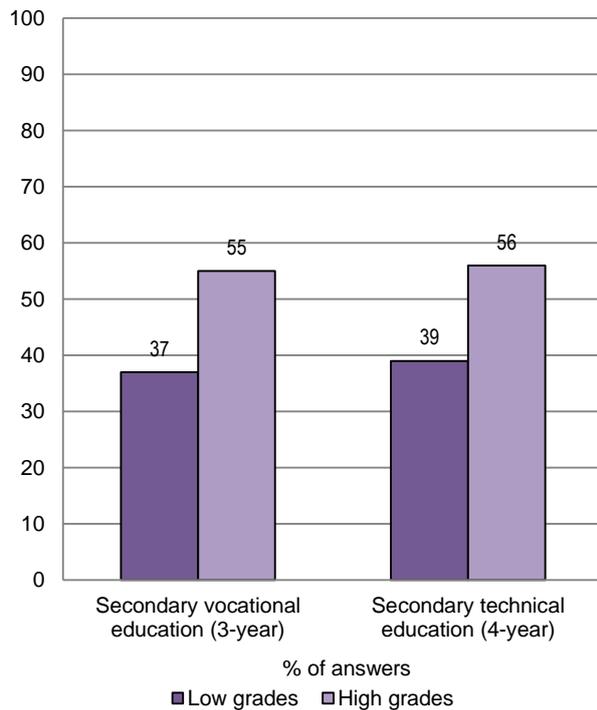
*Chart 4.68: Satisfaction with the current programme, by VET structures & gender (in percent)*



*Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

It is evident in Chart 4.69 that student performance is associated with student satisfaction in both 3-year and 4-year programmes, those with high grades are more often satisfied than those with low grades.

*Chart 4.69: Students' overall satisfaction with the programme, by VET structures & school success (in percent)*

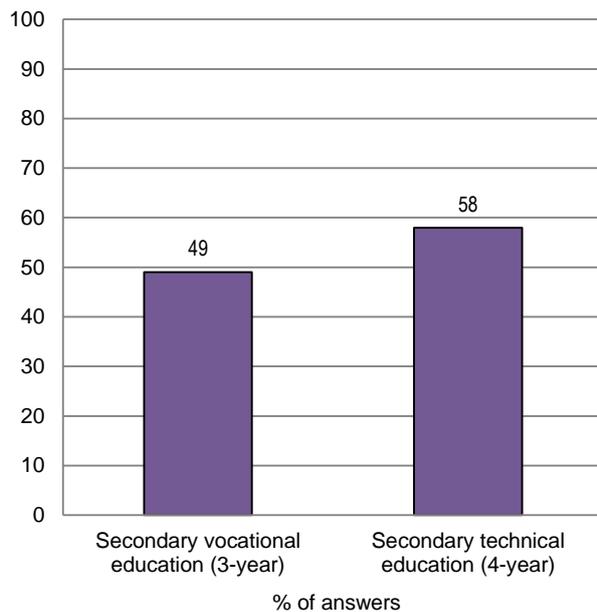


*Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*Grades impact students' perceptions of how well they are prepared for work*

Students were asked about which competencies they had developed. Chart 4.70 shows that half of the students in 3-year programmes believe they are skilled to manage occupational tasks independently, while 58 percent of students in 4-year programmes reported this belief. We can hypothesise that this may be associated with the greater emphasis on general knowledge in the 4-year programmes.

Chart 4.70: Share of VET students who acquired a selected generic competence to a large extent, by VET structures (in percent)



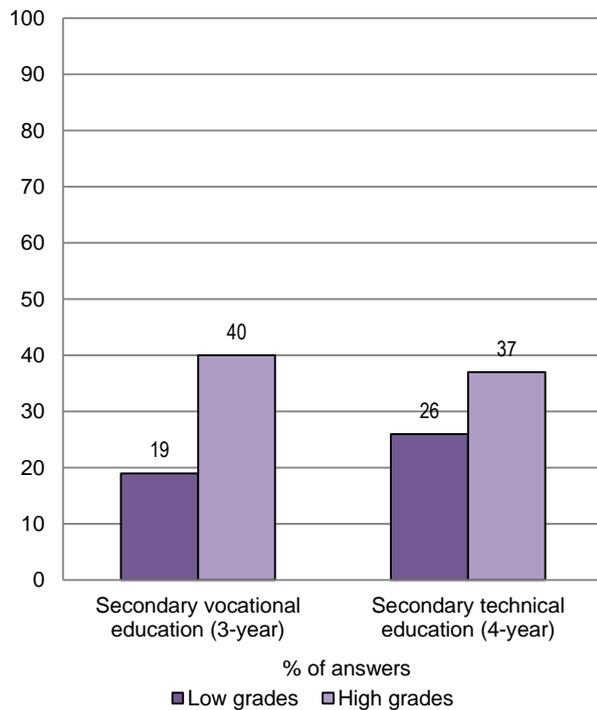
Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently  
Presented answers on 4 and 5 on a scale from 1="Poor" to 5="Excellent"

Programme orientation, gender and socio-economic status do not influence skill acquisition in either programme type. Parents' education and grades do influence the acquisition of the skill to be able to manage occupational tasks independently, but only in the case of students in 3-year programmes. In this case, the higher the grades or higher the parents' education, the higher will be the percentage of students who acquired that skill.<sup>xii</sup>

Most of the students from both types of programmes (75 percent and 70 percent) believe they are not prepared well overall. The overall acquisition of competencies is only influenced by performance; in both programmes, a bigger percentage of students with high grades acquired competencies than those with low grades.<sup>xiii</sup>

Overall, when looking at Chart 4.71 we can see that few students believe their programme prepares them well for all activities. This is especially among students with low grades where only 24 percent believe this, while 38 percent of students with high grades believe their programme prepares them well. Similar differences are also noted in both types of programmes, 3-year and 4-year.

Chart 4.71: Share of VET students who acquired competencies to a large extent, by VET structure & school success (in percent)



Question: E1b Overall, to what extent does your current programme prepare you to these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

The interviews with the students show that they believe there should be more vocational modules and practical training and less general content in VET and that, because of this imbalance, they do not feel prepared enough for the occupation. However, most of the experts interviewed defend the balance between the general and vocational parts, especially because Slovenian VET's main objectives are preparation for work, lifelong learning and further education which implies that programmes should provide students with foundations that should be built on later at work or further education.

## 4.6.5 Career Guidance and the Progression of IVET Graduates

### 4.6.5.1 Introduction

In Slovenia, the National Educational Institute (Ministry of Education) is responsible for vocational and educational guidance directed at progression through education, while the National Centres of Occupational Orientation (Ministry of Labour) are responsible for the transition from school to the labour market.<sup>71</sup> At upper-secondary level, VET schools carry the main responsibility for vocational and educational guidance. Vocational guidance activities include lectures, visits to educational institutions, employers' visits, workshops and one-on-one interviews. The main purpose of these activities is to prepare students for autonomous decisions concerning their education and professional career.

The survey provides an insight into the way learners experience progression. In particular, it reveals what their career goals are, what influences these goals and how these intentions relate to their socio-demographic characteristics.

<sup>71</sup> Although this institution also takes care of the progress of pupils from primary school into upper-secondary school.

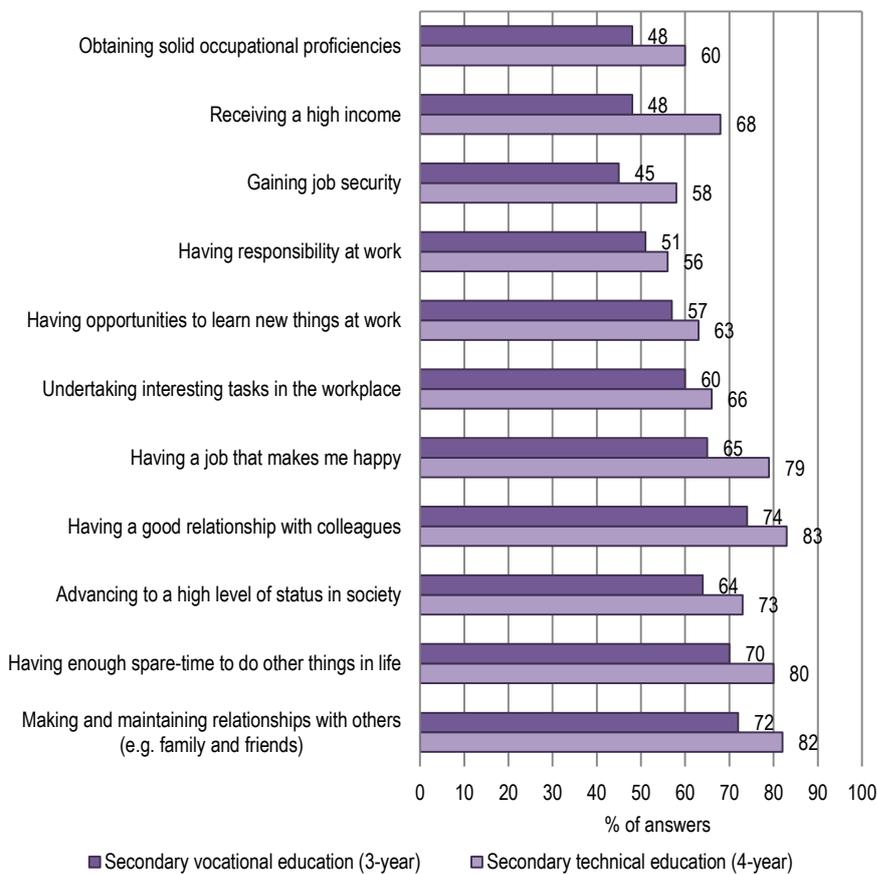
#### 4.6.5.2 Survey results

The majority of students follow more personal career aspects than professional and material ones, even though they are all related – gender and grades make important differences

Roughly 70 percent of VET students strive for job that will make them happy, good relationships with colleagues, making and maintaining relationships with others and a job that allows them enough spare time to do other things in their life.

Chart 4.72 shows that students in 4-year programmes are more likely to strive towards all the goals we asked about than students in 3-year programmes; the biggest difference (20 percent) was for the goal of receiving a high income. Students in 3-year industry-related programmes more often strive towards obtaining solid occupational proficiencies and making and maintaining relationships with others than students from service programmes. Striving towards goals was not influenced by sector in the case of students in 4-year programmes.

Chart 4.72: Drivers of VET students' professional development, by VET structure (in percent)



Question: D1 How far do you agree with following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Students in 3-year programmes were influenced by their place of residence only in relation to one goal. That is in the case of striving towards obtaining solid occupational proficiencies, where the highest percentage can be noted among those who live in the country compared to those from big cities and lastly those from towns.

For students in 4-year programmes the influence of place of residence is stronger. Students from country villages or farms are more likely to strive towards gaining job security, having a job that makes

them happy, having good relationship with colleagues, having enough spare time to do other things in life and making and maintaining relationships with others.<sup>xliii</sup>

Gender also influences goal striving in both VET structures (see Table 4.62). In 3-year programmes, male students more often strive towards obtaining solid occupational proficiencies, gaining job security, having good relationship with colleagues, having enough spare time to do other things in life and making and maintaining relationships with others. However, in 4-year programmes female students are the ones that would more often strive towards gaining job security, having responsibility at work, having opportunities to learn new things at work, having a job that makes them happy, having good relationship with colleagues, having enough spare time to do other things in life, advancing to a high level of status in society and making and maintaining relationships with others.

*Table 4.62: Drivers of VET students' professional development, by VET structure & gender (in percent)*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Male</i>		
Obtaining solid occupational proficiencies	54	58
Receiving a high income	51	66
Gaining job security	50	53
Having responsibility at work	54	47
Having opportunities to learn new things at work	60	57
Undertaking interesting tasks in the workplace	65	63
Having a job that makes me happy	68	73
Having a good relationship with colleagues	78	79
Advancing to a high level of status in society	66	67
having enough spare-time to do other things in life	75	76
Making and maintaining relationships with others (e.g. family and friends)	80	75
<i>Female</i>		
Obtaining solid occupational proficiencies	35	62
Receiving a high income	41	70
Gaining job security	34	64
Having responsibility at work	44	64
Having opportunities to learn new things at work	49	68
Undertaking interesting tasks in the workplace	51	69
Having a job that makes me happy	59	85
Having a good relationship with colleagues	65	88
Advancing to a high level of status in society	58	79
Having enough spare-time to do other things in life	57	84
Making and maintaining relationships with others (e.g. family and friends)	54	89

*Question: D1 How far do you agree with following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*( ) n is less than 10, (( )) n is less than 5*

Students in 3-year programmes and with parents with a tertiary education would more often strive towards having enough spare time to do other things in life than students whose parents only have a secondary or lower education. Otherwise, parents' education is does not affect the students' goals.<sup>xliiv</sup>

Students with a below-average socio-economic status in 4-year programmes more often strive towards gaining job security than those with an average or above-average SES. Further, students with a

below-average socio-economic status in 3-year programmes more often strive towards advancing to a high level of status in society than the other two groups of students.<sup>xlv</sup>

*Table 4.63: Drivers of VET students' professional development, by VET structures & school success (in percent)*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Low grades</i>		
Obtaining solid occupational proficiencies	44	53
Receiving a high income	43	65
Gaining job security	44	53
Having responsibility at work	45	48
Having opportunities to learn new things at work	52	57
Undertaking interesting tasks in the workplace	59	61
Having a job that makes me happy	63	75
Having a good relationship with colleagues	73	79
Advancing to a high level of status in society	63	69
Having enough spare-time to do other things in life	69	76
Making and maintaining relationships with others (e.g. family and friends)	71	78
<i>High grades</i>		
Obtaining solid occupational proficiencies	53	72
Receiving a high income	58	74
Gaining job security	51	66
Having responsibility at work	66	70
Having opportunities to learn new things at work	66	73
Undertaking interesting tasks in the workplace	63	76
Having a job that makes me happy	68	86
Having a good relationship with colleagues	77	90
Advancing to a high level of status in society	64	80
Having enough spare-time to do other things in life	69	87
Making and maintaining relationships with others (e.g. family and friends)	71	88

*Question: D1 How far do you agree with following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

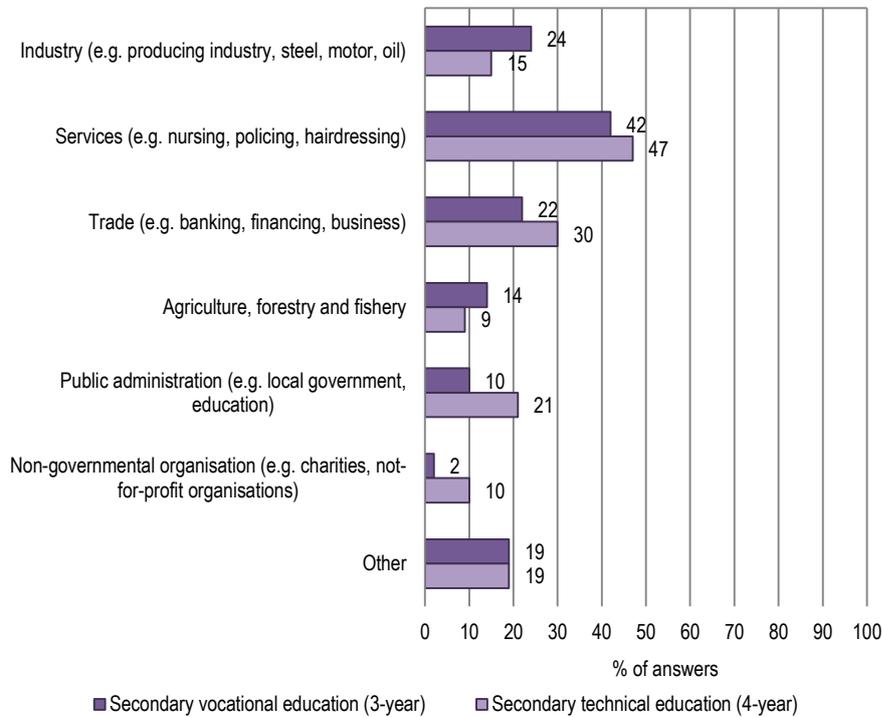
*( ) n is less than 10, (()) n is less than 5*

Table 4.63 reveals that students in 4-year programmes with high grades more often strive towards all the mentioned goals than those with low grades. With regard to students in 3-year programmes, grades make a difference only with respect to striving towards having responsibility at work, where students with higher grades more often strive towards this goal.

The most popular employment sector among students is services, followed by business/finance and industry

In both types of programme, most students would like to work in services followed by trade (business and finance), industry, public administration and other.

Chart 4.73: Sectors students would like to work in, by VET structures (in percent)



Question: D5 Which sector would you like to work to the most?

Across both types of programme students in industry-related programmes are more likely to want to work in industry and agriculture than students from service programmes, who are more likely to want to work in services and public administration. However, it is interesting to note that students from industry programmes choose to work in the industry sector just as often as the services sector.

*Table 4.64: Sectors students would like to work in, by VET structures & programme orientation (in percent)*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<b>Industry</b>		
Industry (e.g. producing industry, steel, motor, oil)	35	32
Services (e.g. nursing, policing, hairdressing)	35	36
Trade (e.g. banking, financing, business)	20	28
Agriculture, forestry and fishery	20	15
Public administration (e.g. local government, education)	9	14
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((3))	9
Other	20	25
<b>Service</b>		
Industry (e.g. producing industry, steel, motor, oil)	(9)	5
Services (e.g. nursing, policing, hairdressing)	52	53
Trade (e.g. banking, financing, business)	24	31
Agriculture, forestry and fishery	(6)	5
Public administration (e.g. local government, education)	(11)	25
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((1))	10
Other	18	15

*Question: D5 Which sector would you like to work to the most?*

*( ) n is less than 10, (( )) n is less than 5*

In 3-year programmes, students from a country village or farm would more often (19 percent) choose to work in agriculture, forestry and fishery than students from towns (7 percent) or big cities (3 percent). In 4-year programmes, students from big cities (10 percent) and towns (14 percent) would more often choose a non-governmental organisation than students from country villages (8 percent).<sup>xlvi</sup>

If we now look at how gender influences students' employment preferences, we can see in Table 4.65 that in 3-year programmes females would far more often (72 percent) decide on services than males (32 percent), while males would more often choose industry and agriculture. A similar situation is found with 4-year programmes, where females would more often choose services and also public administration and non-governmental organisations. School performance, parents' education and socio-economic status do not significantly influence students' choices of employment sector.

Table 4.65: Sectors students would like to work in, by VET structures and gender (in percent)

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Male</i>		
Industry (e.g. producing industry, steel, motor, oil)	32	29
Services (e.g. nursing, policing, hairdressing)	30	38
Trade (e.g. banking, financing, business)	23	31
Agriculture, forestry and fishery	19	16
Public administration (e.g. local government, education)	10	15
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((2))	7
Other	19	20
<i>Female</i>		
Industry (e.g. producing industry, steel, motor, oil)	((3))	3
Services (e.g. nursing, policing, hairdressing)	72	55
Trade (e.g. banking, financing, business)	19	29
Agriculture, forestry and fishery	((3))	(2)
Public administration (e.g. local government, education)	(10)	26
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((3))	12
Other	20	17

Question: D5 Which sector would you like to work to the most?

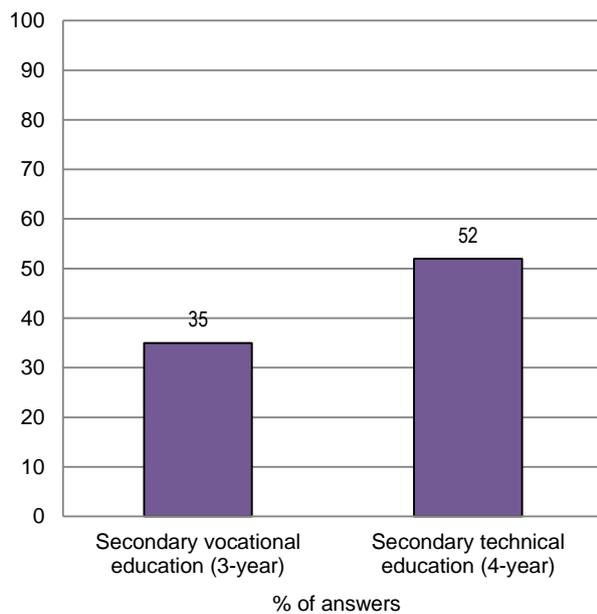
( ) n is less than 10, (( )) n is less than 5

*Students in 4-year programmes are more likely to plan to continue to further education*

Chart 4.74 shows that in less demanding programmes only 35 percent of students answered they are likely to continue to further education, while in more demanding programmes that share is higher (52 percent).

Programme orientation, residency, gender, parents' education and socio-economic status do not significantly influence students' intentions to continue schooling. Student performance, however, does influence this (particularly in 4-year programmes): students with higher grades are more likely to plan to continue education than those with lower grades.

Chart 4.74: Share of VET students who intend to continue schooling, by VET structures (in percent)



Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

#### 4.6.6 Conclusion

In Slovenia, like in many other European countries, the share of the cohort enrolled in secondary VET programmes has been falling. On the other hand, enrolment in general education programmes at secondary level and the number of students continuing education at the tertiary level has been growing. According to the current research, students in VET mostly choose programmes which appeal to them, programmes that offer good job prospects and programmes that provide a good foundation for further education. VET programmes are slightly more popular among male students and students with low grades. Most VET students come from an average socio-economic background and therefore the perception of VET students coming from a low socio-economic background may no longer be true for Slovenia. In the results the greater attractiveness of the service sector is also obvious.

VET students do not spend a lot of time studying outside school and in general do not enjoy learning. The survey suggests a low motivation for learning in some dimensions, which is not surprising because motivation for learning in VET schools is known as one of the major issues. Another reason lies in the experts' belief that students who enrol in VET usually already had previous bad experiences with learning in compulsory education, but no other larger socio-demographic connections were identified. Quite a high percentage of VET students do paid work, which may reduce the time for learning outside school. Overall, there is quite low satisfaction with VET programmes and no difference between 3- and 4-year programmes. However, male students and 3-year students in industry-related programmes are more likely to be satisfied than females or 3-year students in service-related programmes.

In addition, most students do not believe their programme prepares them well for their occupation, particularly students with low grades. For some time now, research suggests that students believe there should be more vocational modules and practical training (interest in practical training is also evident in our results) and less general content in VET and that, because of that, they do not feel prepared enough for their occupations. However, most of the experts we interviewed defend the balance between the general and vocational parts of the curriculum because they believe that this balance

supports all of the main VET objectives: preparation for work, lifelong learning and further education. They believe that programmes need to provide students with foundations that should be built on later at work or in further education.

The majority of students aim more towards social goals than professional and material goals. Most VET students (approximately 70 percent) strive for job that will make them happy, give them good relationships with colleagues, help them to make and maintain relationships with others and a job that would allow them enough spare time to do other things in their life. There are some minor differences based on socio-demographic characteristics such as gender, parents' education and socio-economic background.

When looking at employment sector and students' aspirations, the most popular sector in general is services, followed by industry and trade. Students in industry-related programmes would prefer employment in industry, services, trade and agriculture, while students from service programmes would prefer services, trade and public administration. The majority of males want to work in industry, services and trade, while the majority of females would prefer to work in services and public administration.

It is particularly interesting that in general only half the students answered they would continue education (in 4-year programmes this share is a little higher and a little lower in 3-year programmes), when it is known that a higher percentage does continue education. However, these are only students' current plans which might change soon.

Günter Hefler,  
Genoveva Brandstetter,  
Silvia Zimmel and  
Jörg Markowitsch

## 4.7 Austria

### 4.7.1 General Education System Characteristics

Austria has a highly stratified education system with only four years of comprehensive compulsory education, early tracking (at age 10), a stratified lower-secondary education system and a highly diversified higher secondary education system, strongly dominated by vocational education. Since the second half of the 19<sup>th</sup> century, education has been a major area of partisan politics between the main political parties: the social democrats and the conservatives. Between 1962 and 2005, a general constitutional clause determined that any law concerning education had the formal status of a constitutional law (*Verfassungsrang*), implying the need for a two-thirds majority. Yet, both before and after the time of the validity of that general clause, a broad variety of single regulations on education were also passed with the status of a constitutional law<sup>72</sup>.

The cornerstones of the education system could therefore only change where a compromise was reached between the main political competitors. Consequently, many formal elements of the education system – for example, the division of authority between the central state (*Bund*) and the Austrian regions (*Bundesländer*), the prerogative of churches to run their own schools yet receive full public funding for their teachers and so forth, represent historical compromises, often not of any importance for

---

<sup>72</sup> Berka 2008, 54. In 2005, for replacing the general clause, parties passed particular regulations with constitutional status on the most disputed issues as e.g. early tracking.

current affairs, but hard to change given their legal status. Educational reforms are therefore required to 'work around' the constitutionally enshrined principles. Incremental change<sup>73</sup>, leaving the formal framework widely untouched, yet substantially altering the functioning of the system, has thus become the hallmark of educational reform in Austria.

In Austria, public child care facilities are available to children aged 18 months and older, although the lack of places and provision for early child care has become a key policy issue. Children aged 3 and over can attend a nursery school (*kindergarten*). Kindergarten is attended by the overwhelming majority of the population (90 percent of five-year-olds). However, places for children between ages 3 and 5 are scarce in many regions and the opening hours of kindergartens are often not in line with the requirements parents working full-time. Nursery school is not part of the school system; however, since autumn 2010 the kindergarten year has been compulsory throughout Austria for the year before a child's commencement of school.<sup>74</sup> Early child care is mainly the responsibility of the municipalities and the *Bundesländer*, adding much to the complexities of the system and explaining the large regional differences in the provision.

School education starts at age 6 with the four-year *primary school (Volksschule)*. At the age of 10, when children transfer to the *lower-secondary* level, a differentiation into two school types takes place: some 66 percent of all children (in the school year 2008/09) enter lower-secondary school (*Hauptschule*), while the remainder enter the lower cycle (*Unterstufe*) of secondary academic school (*allgemeinbildende höhere Schule*). In either case, lower-secondary education lasts four years.<sup>75</sup> After a period of voluntary changes, *Hauptschulen* will be replaced by *Neue Mittelschulen* by 2015, implying a reform of curricula, teaching styles and increased financial resources. However, the idea of introducing comprehensive education for 10- to 14-year-olds, which has been at the core of the political debate on education for more than 40 years, still lacks a 'constitutional majority'<sup>76</sup>.

*Hauptschulen* (HS) or *Neue Mittelschulen* provide schoolchildren with basic general education, preparing them to transfer to the upper-secondary level and for working life. In the main subjects (German, Mathematics), children are educated within one of three performance groups or sets. *Allgemeinbildende höhere schulen* (AHS) provide a four-year lower cycle (*Unterstufe*) and a four-year upper cycle (*Oberstufe*). AHS aim to impart a broad and advanced secondary general education. The lower cycle of the *Allgemein bildende höhere Schule* offers pupils a comprehensive and in-depth general education. It may lead to the upper cycle of *Allgemein bildende höhere Schule*; on the other hand, pupils may transfer to technical and vocational schools.<sup>77</sup>

Compulsory education extends to age 15, the first year of the *upper-secondary* level. At this point, the education system further differentiates and the learner faces a choice of different programmes which lead to different qualifications. Learners may progress to the four-year, academic AHS upper cycle. Particular forms of AHS are available to former pupils of *Hauptschulen/Neue Mittel Schulen*. Alternatively, they may complete compulsory education with an orientation year at a one-year pre-vocational school (*Polytechnische Schule*, PTS) or pupils may enter VET colleges or VET school for a minimum of one year until compulsory schooling ends.

At age 15, learners can enter the Austrian dual system: apprenticeship training (*Lehrlingsausbildung*) is provided both at the training enterprise (*Lehrbetrieb*) (practical training makes up some 80 percent of the training period) and compulsory part-time vocational school (*Berufsschule*). Depending on the

---

<sup>73</sup> Graf et al. 2012; for an exhaustive account of educational policies 1918-1980, see Engelbrecht 1988

<sup>74</sup> Tritscher-Archan, Nowak (eds.) 2010

<sup>75</sup> Tritscher-Archan (ed.) 2009

<sup>76</sup> For an attempt to explain the equally persistent 'early tracking' in (Western and later the unified) Germany, see Meyer 2011.

<sup>77</sup> Eurydice 2010b

apprenticeship, training lasts between two and four years, usually three years. At the end of the training, every apprentice can take an apprenticeship-leaving examination (*Lehrabschlussprüfung*)<sup>78</sup>.

However, the dual system is only one VET pathway in Austria. School-based VET education is – contrary to Germany or Switzerland – of equal importance in IVET. The *Berufsbildende mittlere Schulen* (BMS) (medium-level technical and vocational schools) are full-time vocational schools that impart the basic specialist knowledge and skills that qualify students to immediately take up a profession. Programmes usually last between three and four years, but there are also one-year and two-year programmes.<sup>79</sup> Another pathway is provided by the VET college (*berufsbildende höhere Schule* or BHS). VET colleges last five years and are completed with the *Reifeprüfung* (also called *Matura*) and diploma examination. This pathway permits students to acquire professional qualifications and the general higher education entrance qualification (double qualification).<sup>80</sup>

Schools for general healthcare and nursing (*Schulen für allgemeine Gesundheits- und Krankenpflege*) hold a special position. They cannot be started before successful completion of the tenth year<sup>81</sup>.

In Austria, school-based IVET programmes are also provided for adults, aged 18 or older, in evening classes ('Second Chance Education' in IVET) or shortened programmes for graduates of academic higher secondary education. Adults working in an occupational field without formal training can complete a particular type of apprenticeship (examination) (*Außerordentliche Lehrabschlussprüfung*); however, preparation courses are not provided by the public school system but in the further education market and subject to high fees to be paid by the individual learner. (Public co-funding for course fees is partly available)<sup>82</sup>.

The *tertiary* level comprises two types of institutions: Universities of Applied Sciences (*Fachhochschulen*) and universities. However, as second-tier institutions were only introduced in 1994, the Austrian Higher Education system is still dominated by 'old' full universities and more resembles a unitarian than a diversified type of system<sup>83</sup>. Legislation on new higher education studies provides for three-year Bachelor degree courses at both universities and *Fachhochschulen*. These permit entry to two-year Master's courses. In 2012, a change towards Bologna structures is still under way. Graduates of a Master's course or a diploma programme are entitled to enrol in doctoral studies at universities.

#### 4.7.2 Fundamental principles and legislative framework

VET in Austria is characterised by very diverse institutional paths and vocational programmes. Another characteristic is the high attractiveness of VET, with some 80 percent of 15- or 16-year-olds following a VET programme. However, the latter is explained by the particular role of VET colleges, combining VET and general academic education, as they have absorbed the trend of educational expansion in upper-secondary education level and not – as in many other European countries – general academic institutions. All stakeholders and decision makers consider it important to maintain the position of VET in Austria. This commitment has led to further institutional development, the development of training content and to further differentiation of vocational pathways. Apprenticeship has attracted particular attention as it has suffered from a reduced willingness of employers to offer training places and changing preferences of students and their families. The government has provided additional financial support to enterprises and the social partners have supported marketing and information campaigns in-

<sup>78</sup> [http://www.bic.at/downloads/en/brftipps/0\\_1\\_bildungssystem\\_en.pdf](http://www.bic.at/downloads/en/brftipps/0_1_bildungssystem_en.pdf)

<sup>79</sup> Tritscher-Archan, Nowak (eds.) 2010

<sup>80</sup> Tritscher-Archan, Nowak (eds.) 2010

<sup>81</sup> Eurydice 2010b

<sup>82</sup> Markowitsch et al. 2012, forthcoming

<sup>83</sup> For the typology, see Shavit et al. 2007

tended to make apprenticeships attractive to young people. However, the overall high prestige of IVET in Austria goes along with the high degree of vertical and horizontal stratification within VET.

IVET is regulated by a number of laws and regulations<sup>84</sup>, including the School Organisation Act (*Schulorganisationsgesetz, SchOG, \*1962*), the School Instruction Act (*Schulunterrichtsgesetz, SchUG, \*1974*), the Vocational Training Act (*Berufsausbildungsgesetz, BAG, \*1969*). The latter is within the sphere of competence of the Federal Ministry of Economy, Family and Youth (*Bundesministerium für Wirtschaft, Familie und Jugend, BMWFJ*)<sup>85</sup>. The training requirements of company-based training are regulated for every apprenticeship in a training regulation (*Ausbildungsordnung*), which includes the in-company curriculum (*Berufsbild*) for the company-based part of apprenticeship training. Also included in the training regulation are provisions concerning the apprenticeship-leaving examination. While major laws have been in place for decades, they have been reformed and amended continuously.

#### *Quality Assurance*

Traditionally, there have been two forms of evaluation in the Austrian education sector: 1) self-evaluation by those engaged in educational practice; and 2) the monitoring and supervision of schools, headmasters and teachers by the official bodies of the school inspectorate. An alternative approach is scientific evaluation by institutions or persons specifically established or trained for this task. Systematic evaluation using scientific methods is especially found in the area of school experiments and politically induced innovation and reform. Currently, there is no external evaluation of schools through the systematic measurement of the assessment performance of students. However, proposals for this approach are being explored.

Internal evaluation and quality management are accompanied by the introduction of educational standards in the main subjects and testing procedures at schools that are based on these standards. This initiative was launched in 2002 in the general education sector and in 2004/5 for the VET sector.<sup>86</sup>

The introduction of additional subsidies for apprenticeships (June 2008) has been accompanied by further quality assurance measures. Companies are eligible for subsidies if they fulfil several requirements such as providing documentation as proof of appropriate training activity and if the apprentice passes a practical test within a specified period during the training.<sup>87</sup>

#### *Involvement of the social partners*

The engagement of stakeholders in VET processes in Austria takes the form of institutionalised cooperation between the responsible national and regional authorities and the social partners. The cooperation varies depending on the area of education involved. In apprenticeship training, federal and regional advisory boards set up permanent bodies which develop proposals for new apprenticeship occupations, elaborate new training regulations and make recommendations for financing training. Specialists from companies and, if necessary, also research institutions, help the Federal Ministry of Economics, Family and Youth (BMWFJ) draft proposals for new VET regulations. In the regions, vocational school inspectors, head teachers and employer representatives cooperate to modify training content and pedagogy.<sup>88</sup>

In the full-time school-based VET sector, the social partners appraise curricula, sit on governing bodies and contribute their expertise and experience through research projects. Employer and employee

---

<sup>84</sup> Tritscher-Archan, Nowak (eds.) 2010

<sup>85</sup> Eurydice 2009

<sup>86</sup> Tritscher-Archan (ed.) 2010

<sup>87</sup> Tritscher-Archan (ed.) 2010

<sup>88</sup> Tritscher-Archan (ed.) 2010

associations are represented on the bodies that organise and inform CVET and contribute to research networks. One new initiative is, for example, the standing committee on skill needs.

The social partners are represented on the *Fachhochschule* Council and are involved in the review and approval procedure for applications to set up programmes in vocational higher education and their quality assurance.<sup>89</sup>

Educational clusters have been established to enhance collaboration between the education sector and the business sphere. They are voluntary associations of companies and educational institutions at regional level that were created at the initiative of the Austrian economic chambers and the Federal Ministry for Education, the Arts and Culture. By 2006, some 50 regional educational clusters had been set up across the country. The clusters promote networking between education and business.<sup>90</sup>

### 4.7.3 Socio-demographic Characteristics and the Transition to IVET – Comparative Aspects of VET Structures

*IVET – programmes in a stratified world of education: The Matura as the watershed credential*

Austria belongs to those countries with the highest participation rates in initial vocational education and training (IVET) in Europe. The post-compulsory participation rate in education among 16/17 -year-olds is high at about 93 percent (2005/2006, see Diagram 1 below). In the 10th year of schooling, normally entered between ages 16 and 17, 75 percent are studying in IVET and only 20 percent general academic education (“gymnasium”). However, the VET system knows three fundamentally different types of VET, namely:

- VET colleges (*Berufsbildende Höhere Schulen (BHS)*), five years in duration, accounting for 23 percent of all students at age 16/17. VET colleges not only provide vocational qualifications, but prepare – as Gymnasiums – for “Matura”, a demanding (but non-competitive) examination which traditionally marks entrance to ‘more elite’ positions (such as ‘higher careers’ within public administrations, banking or insurance) and implies unrestricted access to higher education.
- VET schools (*Berufsbildende Mittlere Schulen (BMS)*), three to four years in duration, catering to 12 percent of all students of the same age. VET schools are shorter, less demanding forms of VET colleges and organisationally integrated with the VET colleges (same buildings, broadly identical teaching body). Given their considerable high workload, the VET schools hold a middle position in the vertical stratification. However, they suffer from both their strong subordination to the VET colleges and their competition with related Dual VET programmes.
- Dual apprenticeships (*Duale Berufsausbildung/Lehre*), forming a quite different universe and way of spending late adolescence. Dual apprenticeships combine employment and learning, with – broadly speaking – two parts of productive work, two parts of on-the-job training and workplace learning and one part school-based education in VET part-time schools<sup>91</sup>, catering to 40 percent of 16/17 -year-olds. The content of apprenticeships is formally regulated. *Berufsschulen* lack the competence to issue the final credential. Workplace and school-based instruction prepare for a formal final examination (*Lehrabschlussprüfung*), administered by the responsible sector branch of the Chamber of Commerce (*Wirtschaftskammer*), Austria’s compulsory business interest organisation. The examination committee, however, consists of an equal number of representatives from the employer and employee (Trade Unions) sides. Beyond traditionally trained teachers for the general subjects, educational staff includes high

---

<sup>89</sup> bm:ukk 2011

<sup>90</sup> Tritscher-Archan, Mayr (ed.) 2008

<sup>91</sup> Lassnigg 2006, 7.

numbers of practitioners of the particular occupation, providing workshop training. Public funding for part-time VET schools, the school-based part of the Dual system, is considerable, yet lower than for VET schools and colleges, and includes a payment to the employer<sup>92</sup>. Dual apprenticeships require an employer who is willing and able to hire an apprentice. Apprenticeship is a formally regulated employment status with a regulated minimum wage, which is lower than the minimum wage stated for normal employees. Employers strongly shape the provision by deciding on the number of apprenticeship spells. Disciplinary authority is mainly with the employer, not with the school.

More recently, a workshop-based form of dual apprenticeship has been established where training providers – not regular employers – provide the practical component of dual apprenticeship alongside the VET schools, preparing for the apprenticeship examination (*Überbetriebliche Lehrausbildung (UBA)*)<sup>93</sup>. The workshop-based dual apprenticeship is open to young people who do not find regular apprenticeships and it is the least prestigious type of VET education in Austria, closely related to active labour market measures for unemployed or unemployable young people. It forms an equivalent to the German “*Übergangssystem*”<sup>94</sup>. Pupils in workshop-based Dual VET are not employed, yet receive a small allowance<sup>95</sup>. The Austrian transition system, for about 6 percent of a cohort, is comparatively small as VET schools allow for another ‘escape route’ when no regular dual apprenticeship programme can be found. It also provides young people with an alternative to employers that deal with their apprentices unfairly and exploit them, raising the pressure for employers to provide fair conditions<sup>96</sup>. Public funding for each place in the workshop-based training system, where various non-profit and for-profit organisations have been established, is very high<sup>97</sup>. Despite the achieved degree of institutionalisation and the likelihood that this form of VET education will remain in place for good, the system of “*überbetriebliche Lehrausbildung*” is still hardly recognised as an additional pillar of the Austrian VET system or – at least – as an important variation of the ‘Dual System’.

It is important to note that the differences between the three VET programmes types – speaking of their clientele, content and social outcomes – are fundamental. In particular, school-based VET and the dual apprenticeship stand for completely different approaches to vocational learning and spending the years of adolescence. Moreover, as we will see, the differences *within* the three main types of VET, responsible for the *horizontal stratification* of IVET on the higher secondary level are of crucial importance in their own right.

Contrary to earlier periods up to the 1980s, entering the world of work immediately after compulsory education is no longer a viable option. For young people, labour demand is scarce beyond temporary jobs typically available besides pursuing education. Among adolescents (15–19), the proportion of youngsters not in employment nor in education or training is – due to strong policy interventions – comparatively low. Typically, young people without a qualification oscillate between formal or informal jobs, initiatives within active labour market policy and withdrawal from any work or education (Not in

---

<sup>92</sup> To give some indication, for example, the public investment for a place in the system is about €17,000 a year, whereof about €11,500 are paid to training providers for practical training activities. In case of attending the full programme, public funding is about €51,000, the highest value of all educational programmes. For comparison, in 2006 public investments per pupil (costs for schools only, not individual-level support) and year has been about (Specht 2009, 55) €7,200 for Gymnasiums, €3,400 for VET part-time schools and €9,000 for VET colleges and schools (average value per year). For each apprenticeship place, employers receive public funding of about €1,300 per year. Public investment till completion of a programme is about €28,800 for Gymnasium, €45,000 for VET colleges, €27,000 for VET schools and between €14,700 to €18,800 for three- to four-year-long apprenticeship programmes.

<sup>93</sup> BMASK 2012, 69ff.

<sup>94</sup> Baethge 2010

<sup>95</sup> €240 for the first and second year, €555 for the third year (BMASK 2012, 70)

<sup>96</sup> Austrian expert Interview 3

Employment, Education or Training). However, returning to regular education is more or less the only way out of a precarious social position.

At age 16, being a '*Lehrling*' or a '*SchülerIn*' – an apprentice or a pupil – signifies completely different life worlds and related experiences. Becoming an apprentice is basically experienced as leaving education and becoming an adult whose life is determined by the logics of gainful work. Part-time vocational education forms the minor part of an apprentice's identity, which is strongly determined by the struggle to deal with the realities of the world of work. While students in VET colleges and schools may prolong their childhood and alternate between more adult and more child-like behaviour, apprentices are strongly confronted by the need to behave constantly as adults, otherwise they will be penalised by their employers. However, apprentices earn their own money and – depending on their employer – may have a chance to start their career with their current firm after mastering the final examination<sup>98</sup>.

Whether programmes prepare or do not prepare for *Reifeprüfung* or *Matura* – a demanding school-form specific final examination, consisting of a week-long written part and one oral examination, taken by a commission consisting partly out of school-external teachers – forms the second core divide. As in many other European countries<sup>99</sup>, with the institutionalisation of the education system, the *Matura* became the single most significant educational credential, dividing the population into 'elite' and 'non-elite' fractions.<sup>100</sup> Historically, various privileges (e.g. in military services) and career patterns (e.g. *Höherer Dienst* (advanced services) in public and private administrations) have been attached to the *Matura*. The *Matura* remains the 'watershed' qualification, even after it lost its high selectivity in the 1960s in the course of a large-scale expansion of higher academic secondary education, initiated by a conservative Austrian government. Being with or without *Matura* is more important for a person's prestige, likely career or marriage behaviour than the type of school attended preparing for *Matura*. It is an Austrian particularity that the expansion of upper-secondary education in the past three decades took place mainly within the VET colleges sector and not within academic secondary education. With the massification of *Matura*, remaining without this basic credential – as for its equivalents in many other European countries – becomes a hindrance for any further social advancement and a requirement for belonging to the 'middle class' (and not to the 'working' or 'lower' classes). For VET programmes traditionally not preparing for *Matura* (e.g. schools for early child care), opening up a pathway to its equivalent has consequently become a major reform strategy (see below).

It is important to note that the relative equality in attractiveness and prestige between academic higher secondary education and VET colleges is strongly influenced by – now fading – features of the Austrian Higher Education system. Up to the introduction of the *Fachhochschulen* (Universities of Applied Science), Austria had a *unitary* university system<sup>101</sup> only with demanding, long (average factual duration 6 years plus for the first degree) 'research-based'<sup>102</sup> (not vocationally-oriented) programmes. Only study at a university leads to a fully recognised 'academic degree' and the (frequently used) right to use an academic title. The university system has been complemented by post-secondary, non-tertiary academies for particular professions (teachers of compulsory schools, nurses; called "*hochschulverwandte Lehranstalten*"). Access to the universities has been granted traditionally – with few exceptions in e.g. the arts – to anybody holding *Matura*, without any further limitation. No prior schooling (not even grades) allows for any privileged access to any programme, not even to the most demanded ones like

---

<sup>98</sup> (About half of all apprentices stay with their company, however there are important differences between programmes; the likeliness and opportunity to remain employed forms a particular dimension of horizontal stratification within the Dual VET programmes).

<sup>99</sup> See Ringer 1979

<sup>100</sup> In the sense of Meyer & Rowan 1978

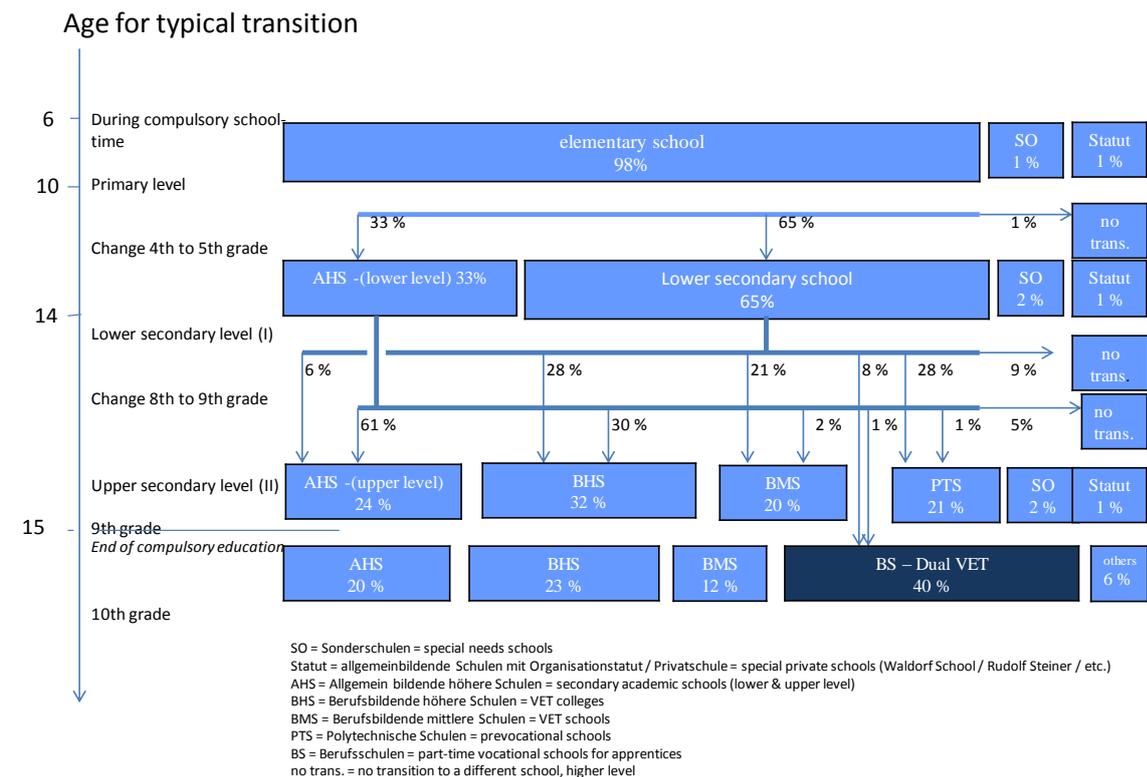
<sup>101</sup> For the typology, see Shavit et al. 2007

<sup>102</sup> However, the majority of students enter programmes clearly oriented to one of the academic professions (law, medicine, business administration; teaching on the higher secondary education level) with comparatively weak research-related components in the curricula.

medicine or jurisprudence. Universities have been required to admit everybody to any programme, however, traditionally they apply a policy of selecting within the process (e.g. by imposing very demanding examinations in an early phase of the programme)<sup>103</sup>. Pupils are not ranked by their school performance in higher secondary education at all and the standardisation of 'Matura' has been comparatively low<sup>104</sup>. There is no 'numerous clausus', awarding good grade averages in higher secondary education like in Germany; grades or examination results are not used as a 'league table' allowing universities to select students. There is no equivalent to a standardised 'aptitude test'. Only recently, for the most demanded study programmes, attracting also a high number of students from Germany, universities have introduced competitive entrance examinations, admitting students with the best test scores; recently, secondary schools have begun to advertise by pointing to the success rates of their former pupils in the examination. There is still no formal mechanism linking the nature of 'higher' secondary education to access and success rates in higher education. However, there is an ongoing political struggle to end the liberal access policies (so-called "*Freier Hochschulzugang*") and allow universities to introduce admission criteria.

Beyond the strong position of IVET, the Austrian education system is characterised by the persistence of early tracking at age 10 into higher and lower channels of education with considerable effects on equity in education. IVET is particularly strongly affected by the tracking regime.

Chart 4.75: Educational tracking and student flows (10- to 16-year-olds) in Austria; 2005/2006



Source: Own translation, based on Specht (2009), 56

<sup>103</sup> Examples included examinations on mathematical foundations, covering the whole field of higher maths required for a five-year study technical programme, within the first two years of technical studies and very demanding examinations in the 'non-clinical' subjects (such as chemistry) of medicine in the first year of study resulting in rates of failure in examinations beyond 50 percent. Students have three to four opportunities to pass an examination before being expelled from a programme.

<sup>104</sup> A standardised, centrally administrated form of Matura – so-called Zentralmatura – will be introduced in the years up to 2015, although differentiated for any type of school preparing for Matura.

After four years of primary education, pupils are tracked either to:

- a four-year, lower track of academic general education (about one-third of students); or
- the four-year *Neue Mittelschule*, which is currently replacing the former *Hauptschule*<sup>105</sup>.

In (mainly urban) regions, where they are available and parents have a choice, they strongly prefer *Gymnasium*, which has become the school for the majority of 10- to 14-year-olds in urban areas. School choice at age 10 strongly reflects the socio-economic background of the parents, as Austrian parents want to see their children reach at least the same or some higher level of education than they themselves achieved.

Although on the individual level a considerable level of choice is left open, it is important to note that the choice at age 10 strongly predetermines the future educational pathway at an aggregated level.

- Only 33 percent of pupils in *Gymnasium* enter VET, yet almost all of them enter VET colleges. Completing the lower cycle still allows for a kind of 'sponsored mobility'<sup>106</sup> and marks an entitlement or promise for reaching the highest ranks within the education system.
- From former pupils in the *Hauptschule* (now *Neue Mittelschule*), 85 percent enter VET, the majority in Dual VET programmes or (lower) VET schools, and 28 percent in the first year of a VET college. Only 6 percent transfer to the higher cycle of *Gymnasium*. Moreover, it is important to note that the former *HauptschülerInnen* are much less likely to survive the highly selective 'first' year of the VET colleges, which functions as a selection mechanism for students in their last year of compulsory education.

Another particularity of the Austrian education system is the fact that – since the last basic reform of the Austrian education system in 1962 – compulsory education lasts nine years up to age 15; however, the lower cycle of *Gymnasiums* and *Hauptschule* ends with 14. Proposals to extend the lower cycle by one year have not found sufficient support. Consequently, all young people – with the notable exception of pupils who have repeated one class – have to transfer to a programme on the higher secondary level.

As a compromise, for a 14-year-old not transferring to school-based education, a one-year prevocational programme allowing for deciding on and searching for a dual apprenticeship has been established, the so-called "*Polytechnische Schule*"<sup>107</sup>. About one-fifth of 15-year-olds spend their last year of compulsory education in this type of programme, classified at ISCED level 3c. However, the low prestige of this option explains why former pupils of the *Hauptschule* decide to try for VET colleges or VET school to complete compulsory education. This leads to the heavy over-application to school-based VET, leading to fierce selection. Consequently, a more lasting structure of participation is not reached before the first year of post-compulsory education at age 16 ("10<sup>th</sup> grade"). The *Polytechnische Schule* represents an example of historical compromises which last for decades despite all criticism.

In line with a world-wide and European trend, the period between 1970 and 2000 saw the sharp expansion of upper-secondary educational pathways, formerly perceived as 'elite only', leading to a 'university entrance permission'. In Austria, in the past decades, expansion has taken place not within academic upper-secondary education, but almost exclusively by the further expansion of the VET

---

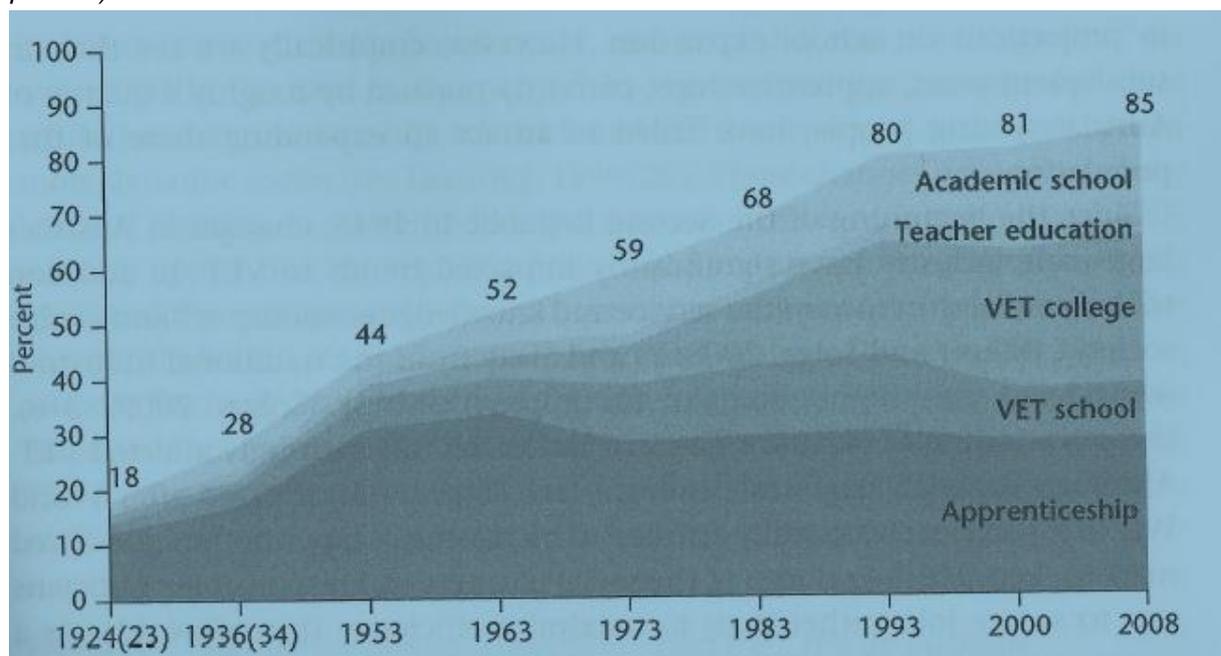
<sup>105</sup> See the information platform <http://www.neuemittelschule.at/>

<sup>106</sup> Turner 1960

<sup>107</sup> The *Polytechnische Schule* (former *Polytechnischer Lehrgang*; ISCED level 3c) was effectively introduced in 1966/67 (as part of the new organisation of the Austrian school system in 1962) when the end of compulsory schooling was changed from age 14 to 15 (1962) with the goal to engage more of a youth cohort with vocational education (instead of starting to work instantly) (Engelbrecht 1988, 498f). Understood as a compromise, the *Lehrgang* had poorly lived up to the expectations and become a matter of continuing reforms for the next 20 years, before consolidation by the mid-1980s. Educational expansion have further undermined the function of the programme, however its abolition is not on the educational agenda.

colleges, 'holding all doors open' by providing on one hand a general upper-secondary education and unrestricted entrance permission to higher education and a bundle of vocational qualifications, some of which are highly valued in the labour market. The two other types of VET are either stagnating (apprenticeship) or in retreat (VET schools). As in other countries, the expansion of the most prestigious types of education implies considerable changes in the composition of the student bodies of the less sought-after 'second choice' programmes. For the latter, student bodies show lower educational achievements and become more disadvantaged with respect to their socio-economic background. This is particularly the case for many VET schools. However, it is also the case for the less prestigious vocational programmes in Dual VET.

Chart 4.76: Development of the main layers of the Austrian System – 15- to 19-year-old students (in percent)



Source: Graf et al. 2012

There are good reasons for taking the success of VET colleges as a hallmark for the Austrian VET system. However, in the national discourse and within reports for an international audience, the dual apprenticeship system is praised as the main backbone of Austrian VET and the 'miraculous secret' of today's lowest youth unemployment rate (15–24) within the European Union. However, although the lynchpin of Austria's policy makers, the dual apprenticeship system is experiencing considerable strains and requiring constant reforms to remain functional. We address this issue in the next section.

The dual apprenticeship is still the most frequently used type of education in higher secondary education and in IVET in particular. However, it has lost the dominant position it held between the 1950s and 1980s due to:

- the strong expansion of VET colleges, leaving dual VET in 'second place' at best; and
- the overall expansion of higher secondary education on all levels, leaving only a small minority without any formal qualification. To over-exaggerate a little: there are no 'unskilled' left to distinguish from and to leave behind in the labour market.

Nevertheless, Austria is among the three European countries with the strongest 'traditional' dual VET systems in Europe.

- More than 150 different programmes, mostly 3 and 4 years in duration; frequently updated; steered mainly by the social partners (employers and employees with an equal say)
- Approximately 40,000 new entrants or 40 percent of 16- to 17-year-olds; stagnating numbers; highly concentrated in a small number of programmes, highly gender-segregated
- Intake depends on enterprises' provision of 'places'; the rationing of apprentice spells matches (somewhat) 'provision' to 'market demands'
- Dual apprenticeship as a inroad and stepping stone for upward career development within an 'occupational labour market'.

To understand the apprenticeship system, it is important to note the differences between the Austrian system and the systems in Germany or Switzerland<sup>108</sup>, including:

- the trend of making apprenticeships more demanding ('levelling up'), as described for Germany, has been weak and only relevant to a smaller number of programmes;
- there is almost no provision for holders of Matura in academic programmes; in Germany, many apprentices in demanding programmes have acquired their 'Abitur' already;<sup>109</sup>
- direct competition with VET colleges and institutionalised preferences by sectors for VET colleges' graduates (as e.g. banking and insurance for commercial VET colleges (*Handeslakkademien*)) limit apprentices' access to more advantageous careers; and formally established career pathways for graduates of the apprenticeship system are under pressure (see below). VET colleges and schools have, in particular, limited the expansion of dual apprenticeships in the service sector with the exception of sales;
- the part-time VET schools play a dominant role in providing basic knowledge while enterprises' contributions to skill formation – with great differences between firms and fields – are lower;
- overall, Dual VET represents a less demanding and selective educational pathway than in Germany or Switzerland, in particular in sectors where apprentices' productive contributions represent an institutionalised component of the organisation of work<sup>110</sup>, independent of any educational component, so that the number of trained apprentices grossly exceeds the demand for qualified personnel. The comparatively high rates of failure in final examinations must not be taken as sign of the demanding quality of programmes, yet most frequently as an effect of the low competence levels of fractions of young people taking up an apprenticeship.

The dual apprenticeship system experiences are strained by both a lack of available apprenticeship places and a lack of candidates meeting the entrance criteria set by groups of employers. The overall number of places available is declining due to several factors, including:

- the change in the economic structure from strongholds of apprenticeship training as manufacturing (including trades) to services with a less strong tradition in apprenticeships;
- the changing work organisation and types of personnel employed within enterprises, becoming more knowledge-intensive and oriented towards flexible specialisation; staff holding a VET college or university degree replace former apprentices and enterprises withdraw from apprenticeship training as a strategy for attracting and selecting personnel; and
- entrance requirements for the available spells are rising, finding no match among young people interested in an apprenticeship; growing participation rates in VET colleges and much smaller birth cohorts add to a lack of apprentices with the sought-after abilities.

---

<sup>108</sup> Also see Ebner & Nikolai 2010

<sup>109</sup> Baethge 2010

<sup>110</sup> Depending on the share of productive work compared to on-the-job instruction and off-the-job VET school, apprentices might be the cheapest work force legally available, which could be exploited within teams out of qualified personnel and helping apprentices, which earn less than any unskilled helper might. So, you may expect to find a team of one "Geselle" (Facharbeiter) and one apprentice whenever you order two workers for e.g. rebuilding your heating system or renovating your bathroom. The scarcity of 'able' apprentices in certain trades therefore does not mainly threaten the supply of qualified labour in the future, but makes certain traditional, economically sustainable modes of production impossible.

Consequently, since the 1990s the constant gap in the available places (*Lehrstellenlücke*) – many more young people looking for an apprenticeship than open spells appropriate for their entrance level of competencies – requires measures and leading to the institutionalisation of the workshop-based apprenticeship scheme<sup>111</sup>.

To sum up, the Austrian IVET system is characterised by various deeply rooted, institutional particularities of the overall education system. Early tracking at age 10 selects young people with a more affluent background for ‘higher’ educational pathways so they hardly ever find their way into the ‘low-prestige’ Dual VET. VET colleges form a valid and highly preferable way to prepare for the Matura and access to higher education, and to simultaneously acquire qualifications allowing entry to more favourable careers. If anything, the VET colleges are the Austrian variant of the “safety net”<sup>112</sup> provided by VET education, not – as described for Germany – the dual apprenticeship. Students of VET colleges are *not* diverted from higher education (see the section below). Despite the rise of the *Fachhochschulen*, the university system still resembles the non-stratified, unitarian type with open access (yet low retention rates). All VET forms not preparing for the Matura are clearly disadvantaged. Dual VET is a fundamentally different form of spending late adolescence than schooling. VET schools and Dual VET are under heavy pressure for a variety of reasons that will be discussed in more detail in later sections.

#### 4.7.4 Excursion – Horizontal Stratification in IVET: The Case of Austria

Beyond the outstanding differences between VET programmes available to 15- to 19-year-olds on a vertical dimension, it could be taken as common knowledge, shared by large parts of the Austrian population and deeply institutionalised in the behaviour of various groups of organisations, that there are important differences between programmes belonging to one type of VET. Students, graduates and their programmes are perceived differently, whether – on the VET college level – they have completed a technical programme in electrical engineering (HTL), a college of business administration (HAK) or more broadly-oriented commercial programme at a service-oriented VET college (*Lehranstalt für wirtschaftliche Berufe*). It is essential to know if they have completed a programme on the VET school level in chemical work or commerce. One would expect – on average – fundamentally different student bodies and career prospects in Dual VET programmes for tool making or mechatronics than for hairdressing and sales.

For the differences in the various core features of educational programmes belonging to one level of education (*vertical stratification*), the concept of *horizontal stratification* has been introduced, notably in the literature on gender segregation in (higher) education<sup>113</sup>. Programmes of one school type differ considerably in their accessibility, selectivity, steps in institutionally foreseen further education, prestige, typical entrance jobs and wage levels and typical career opportunities available in the first decade of graduates’ careers. VET programmes of one type consequently promise quite different things to their student bodies in exchange for their commitment to their education. As they prepare for different types of likely futures, programmes’ diffuse socialisation effects – beyond any technical details of their curricula and teaching processes – may widely differ as well. To apply a concept of John W. Meyer, programmes in different positions within horizontal stratification differ in their “social charter”<sup>114</sup>.

---

<sup>111</sup> Schneeberger 2009

<sup>112</sup> Shavit & Müller 2000

<sup>113</sup> Charles & Bradley 2002, Gerber & Cheung 2008

<sup>114</sup> Meyer 1970

While both the existence and importance of horizontal stratification within the main types of Austrian VET – colleges, schools, Dual VET – are broadly acknowledged<sup>115</sup>, horizontal stratification remains mainly informal and hard to measure. Moreover, its ‘soft’ character, leaving much place for individual interpretation, is part of the game<sup>116</sup>, allowing for negotiating one’s identity against all odds, as a learner or a school alike. So far and in comparison to Germany<sup>117</sup>, little systematic research on horizontal stratification has been done on Austrian IVET, with the notable exception of its most visible component, namely, gender segregation<sup>118</sup>. However, by convention, clusters of programmes have been established, grouping VET programmes by type, which provide a kind of prototype for horizontal stratification<sup>119</sup>.

For the current project, we have clustered the programmes represented in the sample into a total of 10 clusters, three for VET colleges, one for VET schools<sup>120</sup>, six for Dual VET. Overview 1 summarises the main arguments supporting the clustering, and outlines a framework for future research<sup>121</sup>. Beyond a short qualitative summary, the table also provides a qualitative assessment on a number of dimensions important for horizontal stratification. Overview 2 provides detailed information and a broad selection of descriptive statistics for the 10 clusters of programmes.

For a full analysis of horizontal stratification in IVET, it would be required to collect an even larger sample than that achieved within the 7EU-VET project, addressing each possible programme (with the exception of some very small programmes with less than 100 students) available, as the differences between programmes established on one level of education are substantial, so that one programme only poorly represents other programmes not covered. In particular, the analysis would a more inclusive sample for VET schools (in particular in technical programmes and in agriculture), for VET in the field of medicine and (early) child care, both of which are not covered at all in our survey. Finally, VET programmes designed for adults should be included in the picture.

---

<sup>115</sup> See, for example, Interviews 2 and 3 in Hefler 2012.

<sup>116</sup> Expert 3 reports an example of the resistance of members of educational organisations to make the differences between programmes or graduates of local schools explicit. Schools and students of poor performing programmes might suffer further damage if the (allegedly) weak quality of their education were to be made explicit.

<sup>117</sup> Heinz 1999, Baethge 2010

<sup>118</sup> Schlögl et al. 2008

<sup>119</sup> See, for example, the break downs presented in Specht 2009.

<sup>120</sup> In the sample, we have another type of VET school, albeit with only one class with 15 pupils. Therefore, we excluded this school (in the field of agriculture) from the detailed analysis.

<sup>121</sup> Hefler et al. 2012, forthcoming

Table 4.66: Overview - Assessment of the 10 groups of IVET programmes

Legend			Dimensions (qualitative assessment)						
			Span of Quali- fication	Entrance Wag- es	Gender Segre- gation	Likelihood to change fields	Available sub- stitutes	Continuation after training	Importance of productive asp.
Summary			I	II	III	IV	V	VI	VII
+++ strongly positive									
++ partly positive									
+ somewhat positive									
- somewhat negative									
-- partly negative									
--- strongly negative									
VET College	Technical	Highly demanding and selective programmes, preparing for technical AND management positions in industry; all male prehistory; institutionalised career pathways in industry	+++	+++	---	+	+++		
	Service & tourism	Demanding and moderate selective programmes, with (partly) an all-female history; less pronounced career pathways; access to sectors with low(er) wage levels	++	+	---	-	+		
	Business administration	Demanding and selective programmes, institutionalised career pathways, in particular in banking, insurance, logistics; prepares for middle management positions	+++	++	-	+	++		NA
VET schools	Commercial	Moderate demanding and non-selective programmes, which have lost most of their former institutionalised career pathways, open competition with VET colleges and Dual VET (Sales)	--	-	-	--			
Dual	Technical	More demanding and selective programmes; when provided by medium and larger enterprises, historically all-male, career opportunities are frequent; comparatively high wage levels (yet differences are considerable)	++	+	---	-	+	+	-
	Tourism	Less demanding and selective programmes, mixed career opportunities and strong competition by VET colleges for better prospects; low wage levels; productive contributions very important	-	--	-	---	---	---	---
	Personal Services	Less demanding and selective; however, particular talents are required, strongly dominated by females, low wage levels, productive aspects used to dominate	---	---	---	---	+	---	---
	Gardening	Less demanding and selective, lowest wage levels, few career opportunities	---	---	-	---	---	---	---
	Trad. Trades	Mixed, including more or less demanding programmes, more or less well paid, nearly all-male, with partly extended (brick layer), partly restricted career opportunities	+	++	---	--	-	-	--
	Sales	Less demanding and selective, strong competition for career opportunities by VET colleges, availability of substitutes is high	-	--	~(female)	--	---	+	--

Dimensions:

(I) Span of Qualification: Institutionalised career opportunities available (partly implying formal adult education)

(II) Entrance Wages: Wage level for early career positions

(III) Gender Segregation. Proportion of male/female students

(IV) Likelihood to change fields: Proportion of graduates changing occupational fields within three years of graduation

(V) Available substitutes: Opportunity for employers to hire candidates for a job typically addressed by a VET programme without the particular VET education, for example, an unqualified waiter/waitress instead of a formally trained one

(VI) Continuation after training (Übernahmewahrscheinlichkeit): Likelihood to remain employed with the same company (Lehrbetrieb) after completing the training

(VII) Importance of the productive aspect: Relative importance of contributing to productive work versus receiving on-the-job training and participating in workplace learning.

+ means for (I) more opportunities, (II) higher wages, (III) no segregation, (IV) low likelihood to change fields (V) rare substitutes (VI) high likelihood to stay (VII) low importance of productive work compared to training and workplace learning.

Source: Own description

Chart 4.77 summarises the main message relevant to the present chapter. The prestige of IVET programmes – measured as a composite of vertical and horizontal stratification, running from the left bottom corner (low prestige) to the right upper corner (high prestige) – differ considerably within types of programmes; however, the informal differences are difficult to measure. Nonetheless, we would expect both experts and lay people to broadly agree with the implicit hypothesis on the stratification within Austrian VET.

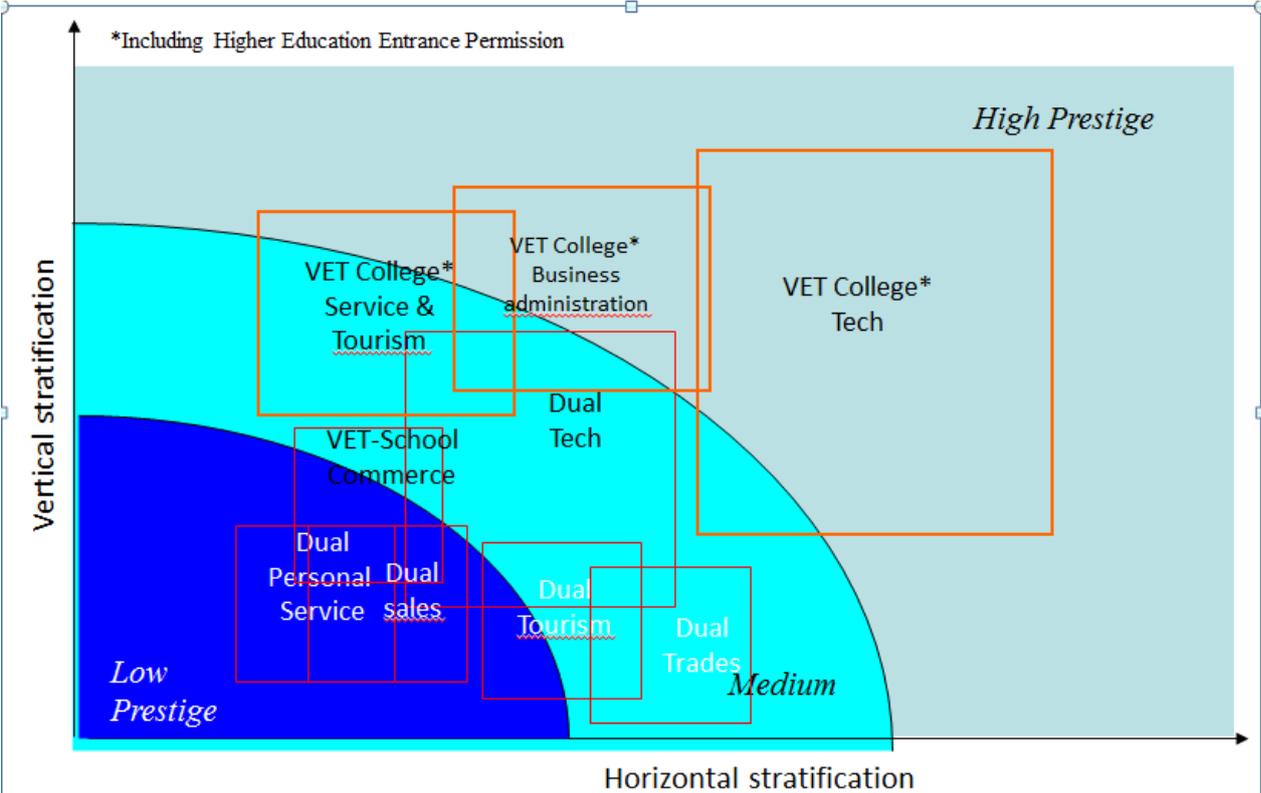
VET colleges lead the league table, in particular, technical VET colleges and VET colleges in business administration. VET colleges in services and tourism fall clearly behind the two other groups.

The most prestigious technical Dual VET programmes – when offered by medium to large employers – nearly reach the VET college level, or enjoy even more prestige than the least prestigious VET college programmes. Many technical programmes enjoy higher prestige than the least promising VET schools.

VET schools differ widely in prestige; however, the programme mainly covered by the survey (commercial VET school) is currently in jeopardy and on the same level as the less prestigious Dual VET programmes.

Within Dual VET, there is a steep hierarchy, running from – to start with the most prestigious – technical programmes, to Dual VET in traditional trades, sales, tourism and, finally, at the bottom level, personal services and gardening. However, given the importance of the company providing the apprenticeship for the prestige of a particular apprenticeship spell, the hierarchy among Dual VET can hardly be objectified. Becoming an apprentice with a leading company in a sector which has established career pathways for its (former) apprentices could turn a low prestige apprenticeship programme into a highly valued opportunity. Yet, for low prestige programmes the number of such attractive apprenticeship places is small, while for more prestigious programmes they may account for a considerable part of all positions available.

Chart 4.77: Vertical and horizontal dimensions of the VET system



Source: Own description

To conclude, we expect that students' attitudes and perceptions do not only systematically vary for the main types of VET programmes, representing three vertical levels, yet their answers also clearly differ for groups of VET programmes belonging to the same type of VET programme. In other words, groups of VET programmes promise different things; they own a different 'Social Charter'<sup>122</sup>. Students are invited to expect quite different things for their future careers based on the particular position of their

<sup>122</sup> Meyer 1970

programmes within the educational stratification system. Consequently, we expect the horizontal dimensions of the stratification system to be important for any outcome measured by our 7EU-VET survey. And indeed, analysis shows there are significant and important differences between programme clusters belonging to one type of VET for the majority of items covered by the survey.

Table 4.67: Overview - Indicators of the vertical and horizontal stratification of the sample included in the Austrian data set

	VET Colleges				VET Schools*				Dual VET			Total
	Technical	Service and tourism	Business administration	Commercial	Technical	Tourisms	Personal services	Gardening	Traditional trades	Sales		
Schools included	13	8	11	1	12	5	2	3	2	5	62	
Classes included	20	14	21	2	24	9	4	5	3	9	111	
Programmes types included; N in the sample	HTL- Bautechnik (69); Hochbau (10); Elektronik (20); Elektronik - Telekommunikation (14); Elektronik und Technische Informatik (20); Elektrotechnik (13); Gebäudetechnik (18); Informatik/ EDV & Organisation (16); Informationstechnologie (11); Innenausbau (19); Kunst und Design (52); Lebensmitteltechnologie (26); Maschinenbau (59); Mechatronik (23); Wirtschaftsingenieurwesen (24)	HLT - Hotel- und Dienstleistungsmanagement (19); Hotel- und Gastronomie management (21); Tourismusmanagement und Reisewirtschaft (24); HLW - ohne Spezialisierung (21); Gesundheits- und Freizeitmanagement (23); Humanökologie (49); International Relations (31); Kultur- und Kongressmanagement (23); Kulturtouristik (38); Sprache und Internationalität (19); sprachenorientiertes Wirtschaftsmanagement (17)	HAK-ohne Spezialisierung (189); Controlling (13); Informationsmanagement und Informationstechnologie (67); Gesundheits- und Eventmanagement (11); Marketing (35); Tourismusmanagement (18); Webdesign u. Netzwerktechnik od. Controlling (27)	Handelsschule - ohne Spezialisierung (56)	Elektromaschinen technikerIn(9); Installations- und GebäudetechnikerIn (97); IsoliermonteurIn (18); KraftfahrzeugtechnikerIn (102); Landmaschinen technikerIn (44); MaschinenbautechnikerIn(32)MechatronikerIn (53); MetallbearbeiterIn(14); ProduktionstechnikerIn(25); Technische ZeichnerIn(33); TischlereitechnikerIn(15); VermessungstechnikerIn(10))	Gastronomiefachmann/frau (20); Hotel- und GastgewerbeassistentIn (18); Koch/Köchin (50); Restaunfachmann/frau (48)	Hairdresser (Friseur- und PerückenmacherInnen) (70)	BlumenbinderIn (35); Landwirtschaftliche FacharbeiterIn (41)	MaurerIn (15); TischlerIn ((46); ZimmererIn (18)	Bürokauffrau/-kaufmann (115); EinkäuferIn (3); Einzelhandelskauffrau/-kaufmann (17); Industriekaufrau/-kaufmann (26); VerwaltungsassistentIn (11)		
Valid cases in the sample	394	285	360	56	452	136	70	76	79	172	2080	
Valid cases in the sample – 17/18 year-olds	293	231	285	18	270	87	32	43	44	90	70%	
Male : Female	76:24	15:85	34:66	51:49	92:8	40:60	6:94	48:52	94:6	25:75	53:47	
Duration: Years and hours of school-based instruction per year	5 years; 1443 hours per year	5 years; 1287 hours per year	5 years; 1154 hours per year	3 years; 1131 hours per year	3 years - 420 hours per year; 3,5 years- 411 hours per year; 4 years- 405 hours per year	3 years; 4 years; 360 hours per year	3 years; 400 hours per year	3 years; 400 hours per year	3 years; 420 hours per year	3 years; 420 hours per year		
Range of values, programme level	1143 hours per year	1287 hours per year	1154 hours per year	1131 hours per year	405-420 hours per year	360 hours per year						
Range of wages of apprentices (3 <sup>rd</sup> year)					€ 729 - € 1053	€ 617	€ 524	€ 510 - € 823	€828 - €1214	€663 - € 807		
Higher/lower bound – wage after 10 years in small enterprises – gross income/month	(€2236 -2366) to (€2489 -2614)	(€1747 - 1866) to (€2215 - 2381)	(€1741 -1866) to € 2655 - 2807)	€2011 to € 2158	(€ 1857 - 1973) to (€2099 - 2214)	€1553 to €1661	€1700 to €1811	(€1857 - 1973)to € (2073 - 2184)	(€2073 - 2184) to (€ 2099 - 2214)	(€1700 - 1811) to (€1932 - 2072)		
Group Average – Highest education of one of the parents –	Matura or higher	59%	54%	53%	35%	37%	50%	35%	29%	33%	28%	47%
	Dual VET or VET school	39%	45%	43%	63%	57%	49%	60%	69%	61%	71%	50%
	Compulsory school or less	1%	1%	4%	2%	5%	1%	6%	1%	5%	2%	3%

Source: 7EU-VET Austrian data set, various statistical sources, see Hefler et al. 2012, forthcoming.

\*results for VET schools include one further school/class in agriculture; results are not discussed separately, but included in VET school averages

#### 4.7.5 Pathways into IVET, vocational curricular and students' assessments of their programmes

In the following, we discuss selected results of the 7EU-VET survey in a twofold way. We report, firstly, the survey results for Austria against the backdrop of the other six countries. Next, we show how a more detailed account of horizontal stratification in IVET contributes to our understanding of the Austrian situation.

##### *Realities and illusions of VET guidance – Making peace with institutional inconsistencies*

In Austria, a perceived lack of VET guidance is held to be responsible for the high proportion of young people changing IVET programmes, dropping out of IVET or expressing their dissatisfaction with the choice made. In recent years, considerable efforts have been made to improve VET guidance (see overview 3) and new information hubs, such as a web platform on IVET in Austria<sup>123</sup> installed to improve the accessibility of information. However, age 14 is certainly too early in an individual's development to make sound decisions as subsequent development will alter the preferences and allow for additional personality traits and talents to come to the fore. Moreover, the socialisation effects of the family of origin are of particular importance at the end of puberty.

In Austria, late adolescence is typically not seen as an age for carefree experimentation. Students are to make more binding, lasting choices. While the idea that (vocational) education between ages 15 and 19 should hold 'all doors open' is highly attractive to large parts of the population, it is still more of a social privilege than an accepted norm valid for all young people<sup>124</sup>. Guidance initiatives also try to overcome strong gender segregation in IVET and the tendency to choose only from among a small number of VET opportunities<sup>125</sup>.

---

<sup>123</sup> For the whole sector, <http://www.berufsbildendeschulen.at/>; for particular fields, see e.g. <http://www.hum.at/index.php/mode-und-kunst>

<sup>124</sup> For youth regimes and ideas on the purpose of education in late adolescence, see Walter 2006

## Overview: National System of Career Guidance

In Austria there is a considerable diversity of institutions, providers and initiatives in the field of information, counselling and guidance on learning and occupations:

Educational counselling and career guidance in the school sector is in principle within the sphere of responsibility of the Federal Ministry for Education, the Arts and Culture (*Bundesministerium für Unterricht, Kunst und Kultur, BMUKK*). From the fifth school year onwards, school counsellors and career guidance officers are available to guide schoolchildren and parents who have questions about schools and careers. Guidance is provided by teachers with relevant qualifications who are termed, depending on the school type, school counsellor (*Schülerberater/in*) or educational counsellor (*Bildungsberater/in*) and offer their counselling services in addition to their teaching activity.

In the final years of lower-secondary level, in the seventh and eighth school years, career guidance is a compulsory subject totalling 32 hours a year. These lessons particularly aim to support the development of decision-making competence, social skills, determination and perseverance. Short periods of work placement at companies and contacts with people with different occupations are intended to help schoolchildren examine their career aspirations and make independent decisions.

At pre-vocational schools (*Polytechnische Schulen*), career guidance plays a particularly important role as this school type is at the interface between compulsory and further schooling. Career guidance aims to inform schoolchildren and parents about regional opportunities in apprenticeship training. Short periods of work experience and careers fairs help young people supplement school-based careers learning.

Teachers with specialist qualifications also work as career guidance officers at VET colleges and schools (*berufsbildende mittlere und höhere Schulen*). Here students have already chosen a vocational specialism but thanks to the good level of general education provided at vocational schools a wide range of professional development options remain open to them. Therefore, educational counselling and career guidance at these schools includes in-depth reflections on past career decisions.<sup>126</sup>

There are also several non-school establishments which offer vocational guidance and advice to people who are about to enter professional life. The Austrian *Arbeitsmarktservice* (Labour Market Service) and the social partners (Federal Economic Chamber, Chamber of Labour) have established career information centres which offer extensive services to young people who are searching for information on career options, training and continuing training possibilities.<sup>127</sup>

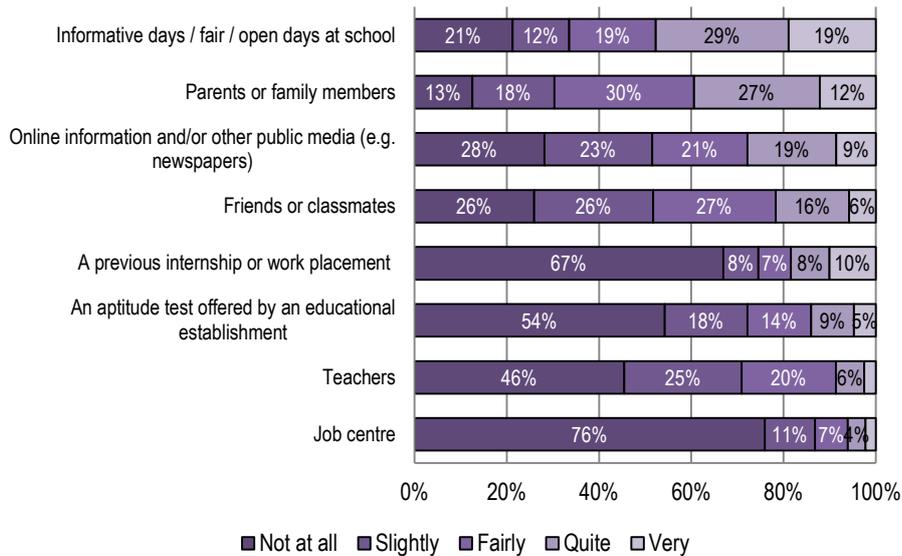
### *Information days and families are the most important sources of information*

Fairs and information days are strongly institutionalised in Austria and students of the eighth grade typically visit them as a school excursion: so it is no surprise to find them often quoted as a source of information (Chart 4.78). However, for 14-year-olds, the parents and other family members are also of outstanding importance; parents' approval of a teenager's school choice is mandatory so they are involved in the decision in one way or another. Sources such as an internship or the Public Employment Service (Job Centre) rate low in importance, but play a more important role for particular types of IVET (see Chart 4.78).

<sup>126</sup> Tritscher-Archan, Nowak (eds.) 2010

<sup>127</sup> Eurydice 2009

Chart 4.78: Factors influencing students' programme choices by VET structures (in percent)

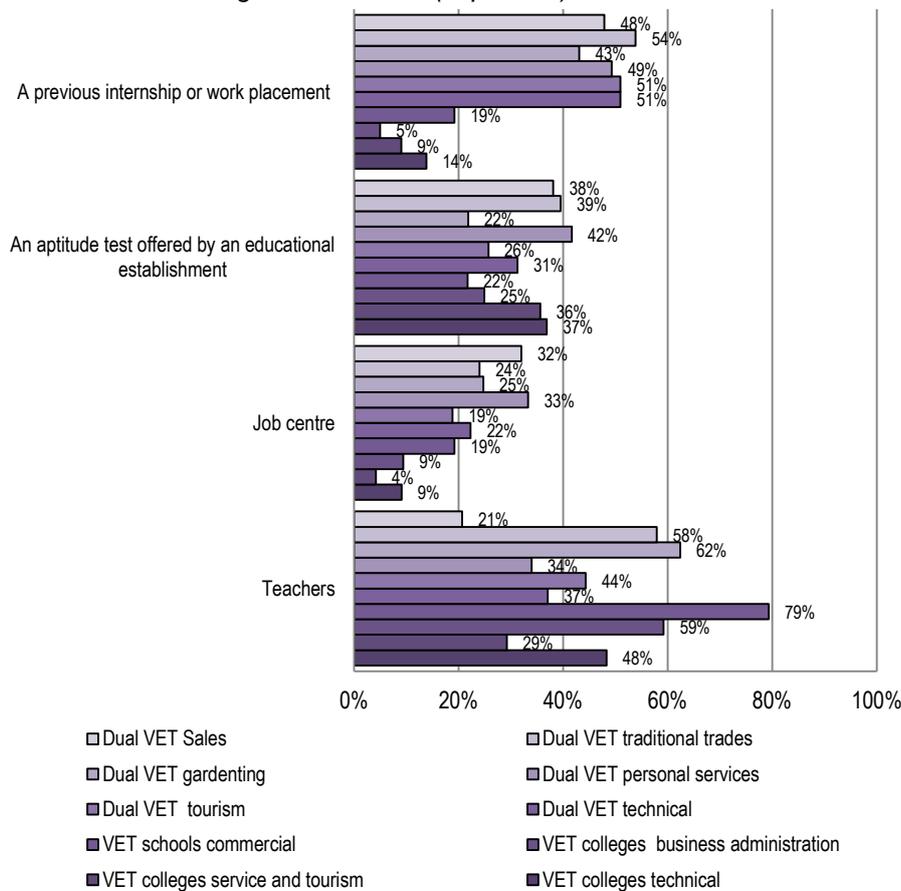


Question: A4 How important were the following aspects for you when you were choosing your current programme? Sorted according to the sum of (4) "quite" and (5) "very"

Source: 7-EU-VET transformed Austrian subdata set, own calculation

Chart 4.79 shows the four sources of information with the largest variations between the different programme types. For the dual apprenticeship a previous internship is much more important than for school-based IVET. Similarly, the Public Employment Service (Job Centre) plays a considerable role in informing on apprenticeship and supporting the match between available apprenticeship positions and young people looking for a place. Aptitude tests are more important for some VET colleges (where, for example, graduates of Hauptschulen/Neue Mittelschulen with poorer grades are required to take a test). They hold more importance for some Dual VET (sales, traditional trades, personal services) than others. Teachers are important both for highly demanding programmes of technical IVET programmes and for low prestige, less promising programmes (e.g. commercial VET schools, Dual VET gardening, Dual VET personal services).

Chart 4.79: Sources of information for students' programme choices for selected programme types – four sources with the largest differences (in percent)



Question A5: How important were the following information sources when you were choosing your current programme? Presented answers on a scale from 1="Not at all" to 5="Very" – sum of (3) "Fairly" (4) "Quite" and (5) "Very". Source: 7-EU-VET data set, own calculation

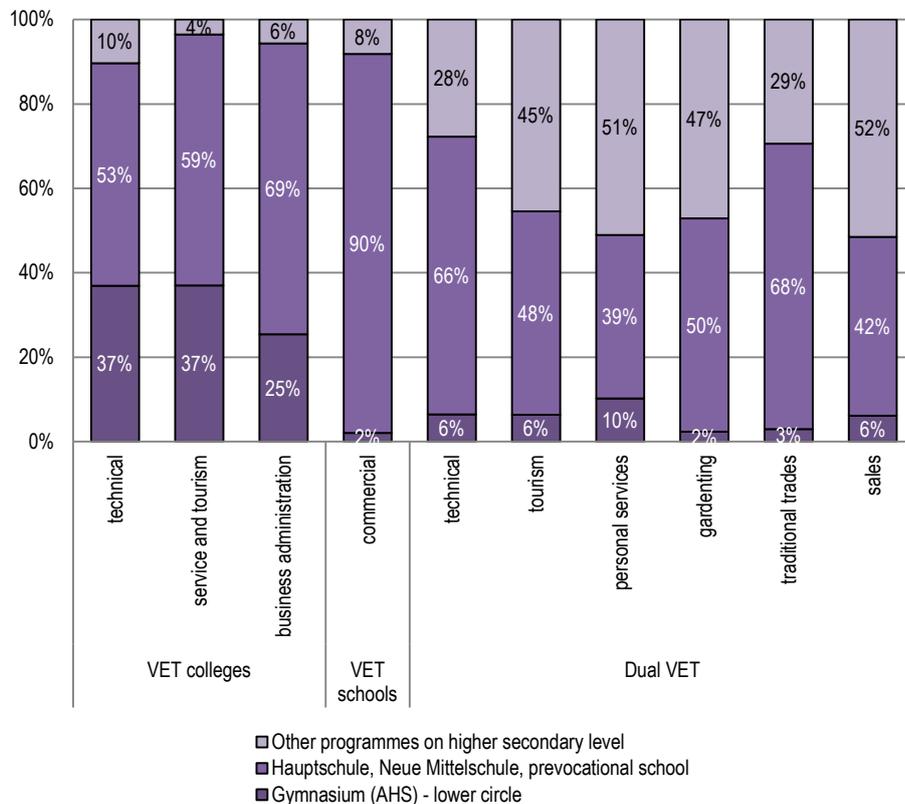
*Early tracking + 'Double Change' (Doppelter Übergang) create highly diverse groups with regard to their prior schooling in IVET programmes*

Former students of the lower cycle of Gymnasiums typically do not take anything else but VET colleges into consideration. VET colleges are the only types of VET education with considerable proportions – between 30 and 40 percent – of these former 'GymnasiatInnen'. VET school pupils or apprentices in Dual VET with an educational background in Gymnasiums typically have performed very poorly in their prior school and are often refugees from a rigid school system so they have little in common with their VET college counterparts. All types of VET have a large proportion of students who have spent their compulsory education in Hauptschule/Neue Mittelschule and their last year of education in Polytechnischer Schule.

An Austrian particularity is the large group of former HauptschülerInnen/pupils at Neue Mittelschule changing twice, which means opting at age 14 for the first year of a VET college or for a VET school for finishing compulsory education instead of the Polytechnischer Schule and then leaving school-based VET for Dual VET. While students may voluntarily choose to leave VET colleges/schools after one year – as a strategy to avoid Polytechnische Schule on the pathway to Dual VET – others flee the pressure and performance standards of school-based VET and take up a dual apprenticeship. Further, changes between Dual VET programmes, especially in the first year of a programme, are quite frequent. Together, the above complexities lead to the fact that a considerable number of Dual VET students have some experience with other VET programmes before entering their current ones. In tourism, personal services and sales,

nearly half of all students enter the programme after having experimented with alternatives. Only Dual VET in technical fields or in traditional trades has a strong majority of students who chose their VET without experimenting with an alternative.

Chart 4.80: Type of programme attended before entering the current VET programme by type of/field of VET education (all age groups)<sup>128</sup> (in percent)



Question: A1 What programme were you enrolled in directly prior to this one?  
Source: 7 EU-VET data set – Transformed Austrian Sub-data set

#### Students only consider a few alternatives

By international standards, Austrian youth can select from a relatively high number of opportunities of IVET in the three main pillars of the IVET system (VET colleges, VET schools, Dual VET) which provide highly differentiated and – at the same time – informally stratified opportunities. However, more than a quarter of young IVET students did not consider any alternative and an additional one-half only considered one alternative. While less than one-fifth of Austrian IVET students report making a choice between three programmes, a tiny minority say they considered four or even more programmes. The average results hardly differ for students in ‘higher status’ programmes than for students in ‘lower status’ programmes (VET schools, Dual VET). In regard to choice, Austrian students’ behaviour, on the whole, seems similar to students in Germany and Slovenia; more open to various opportunities than students in Latvia, Lithuania, Greece and the UK.

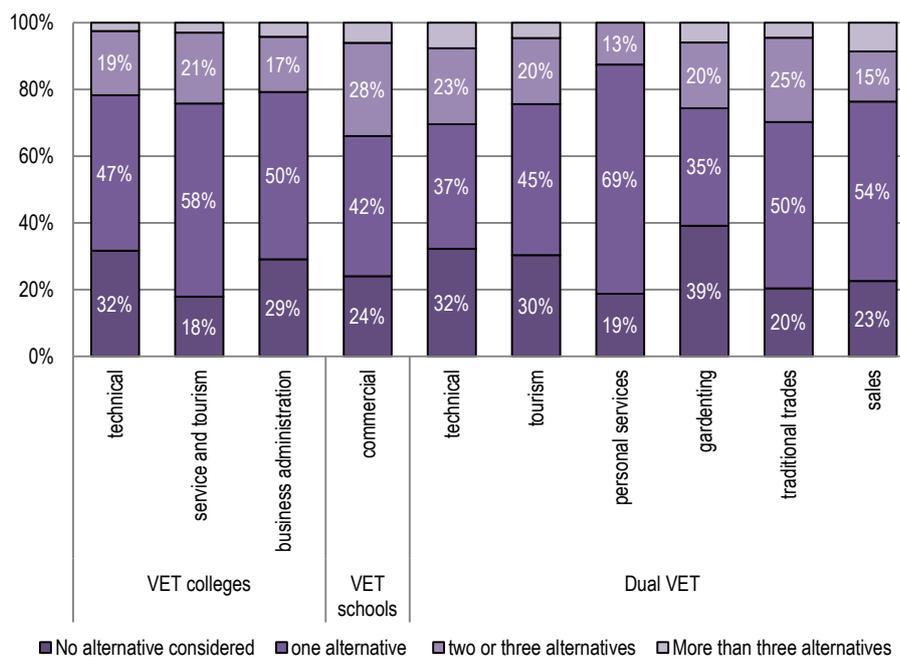
Referring to a more differentiated analysis (Chart 4.81), we see that more (predominately male) students in technical programmes in college and dual VET programmes consider no alternatives at all. Within the VET college sector, the commercial- and tourism-oriented schools – often successors of former ‘female only’ schools up to the 1980s – have significantly more students considering alternatives. Among Dual VET programmes, the dominantly female sales programmes have higher numbers of students considering

<sup>128</sup> Non-standard pathways into programmes only become visible when including students beyond the most typical age for a particular year of a programme.

at least one alternative programme. However, given the complexities of the Austrian system, the survey provides us with little information on the alternatives considered, which are likely to vary for different types of programme.

Students' in technical VET colleges might have chosen between occupationally different programmes of the same type provided by the same school (e.g. electrical engineering versus machine engineering). Students in VET schools may have chosen between VET college and VET school programmes provided in the same building; they might have chosen between staying in a school programme or leaving the programme after the first year to enter an apprenticeship. Dual VET students may have chosen not only between school-based or Dual VET education, but also among the great variety of apprenticeship programmes. In other words, similar differences in the reported number of alternatives considered must not be taken as proof of similarities among the various worlds of IVET. It also becomes clear that students tend to avoid the 'Qual der Wahl' – the agony of choice – by cutting corners in the decision progress. This leads to both poor decisions and strong path dependencies, explaining the gendered nature of IVET and high dependence of students' decisions on their family background and their parents' aspirations. However, it is a tough question how to remedy this difficulty, whether by supporting decision making or by improving the future opportunities for all programmes, accepting that – for a majority of students – ages 15/16 it is not the right 'developmental window' for making binding choices.

Chart 4.81: Choices reflected by level of programmes (in percent)



Question: A6 Did you consider any alternative programme when you were selecting your current one?  
 Source: 7EU-VET data set – Transformed Austrian Sub-data set

In the literature on IVET in Austria, reasons are well discussed concerning why the 'large' menu in IVET may not lead to a conscious choice of a 15- or 16-year-old between a large number of programmes, but to students becoming 'absorbed' by one programme, with no or only one alternative considered. It is perceived as a core problem that male and female students are following not only gender-stereotyped pathways into VET, but also choosing from among only a very small range of the programmes available. A multitude of initiatives therefore focus on expanding the range of programmes taken into consideration by young people<sup>129</sup>. However, the high concentration of female VET students in a few dual apprenticeship programmes tells something not only about choice, but points to the opportunity structure of accessible

<sup>129</sup> E.g. see Arbeitsmarktservice 2012, entitled "Mädchen können mehr" (Girls can become more) for young females

VET spells<sup>130</sup>. In practice, students may: (1) postpone any decision by choosing programmes leaving leeway for changing pathways later on; (2) experience constraints in their choice and take advantage of any solution available; (3) follow more or less articulated prescriptions of their family of origin with regard to a programme or school (e.g. 'Matura' as a must-have; the VET field corresponding to the family-owned business); or (4) choose negatively to avoid, for example, higher maths, an additional foreign language or a social milieu.

*Reported reasons for choosing programmes reflect the outstanding strong position of IVET in Austria by international comparison*

Students were invited to reflect upon their choice of programmes by reviewing eight statements, reporting if each motive had been more or less important for their choice of programme. It is important to note that statements are not of the same level of generality<sup>131</sup> so they cannot be compared unconditionally.

Austrian IVET students justify their programme choice more often in terms of career prospects than in any other of the six countries compared. This reflects both the high prestige of VET in the Austrian occupational labour market and the relatively low levels of youth unemployment (ritually repeated by Austrian media coverage month by month<sup>132</sup>). The occupational specificity of programmes allows a relatively high percentage of young people to report they were attracted by the occupational fields the programmes prepare for. Austrian students' justify their choice more often by the overall prestige of their programme than in the other six countries; again, this reflects the social acceptance of VET in Austria. A remarkably high percentage of Austrian VET students report the belief that their programme provided the foundations for further education as a reason to choose a programme, which deserves particular attention. Regional availability is an important reason for Austrian VET students, reflecting important regional disparities between urban and rural areas in Austria, which was also found in Germany, Latvia and the UK.

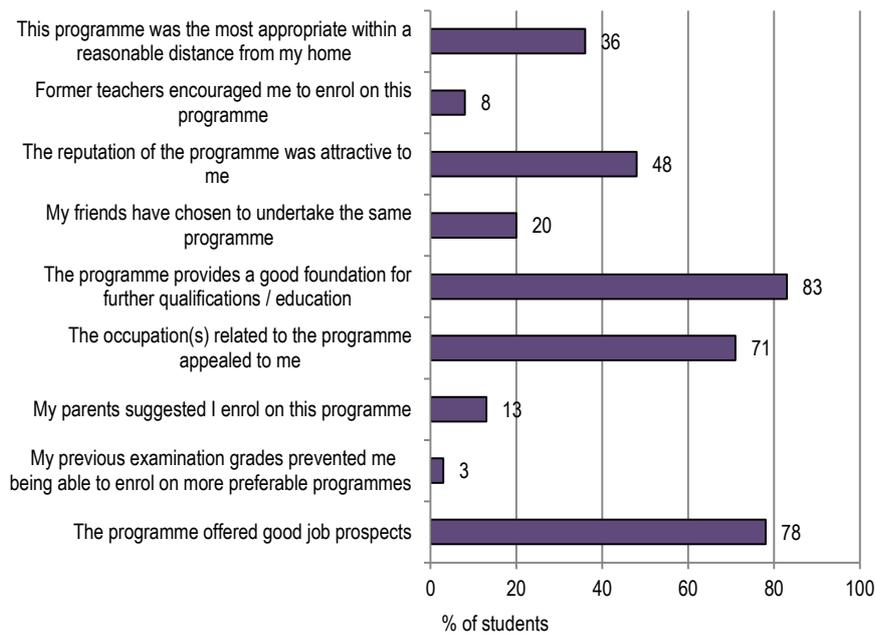
---

<sup>130</sup> More than two-thirds of female students in Dual VET enter one of 10 Dual VET programmes. The same is true, although for different vocations, for about half of the male students (Schlögl 2011).

<sup>131</sup> For example, while all students could be attracted by the occupational fields a programme prepares for, students in urban areas with a multitude of choices are less likely to report to have chosen the programme for being the most appropriate within a reasonable distance. Students with very good grades on the lower-secondary level could hardly agree that the 'grades prevented them' from enrolling in more favourable programmes and so forth.

<sup>132</sup> Having one of the lowest unemployment rates in the European Union has become part of an Austrian national myth and a reference not to be missed in the monthly media coverage on unemployment, see Krivance & Hefler 2005. It is important to note that these low unemployment figures are partly explained by the fact that participants in the dual system are counted as employed, providing plenty of counterweight to the considerably high numbers of unemployed youngsters. In absolute figures, expressing the number of jobseekers as a percentage of the age group, the Austrian figures are still good, but not as 'miraculous' as the official unemployment rates reported by the Public Employment Service or Eurostat.

Chart 4.82: Reported reasons for choosing a programme – 17/18-year-olds only (in percent)



Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Source: 7EU-VET international data set

However, beyond the characteristics of VET in the Austrian employment system, the Austrian results reflect the highly divergent sub-groups of VET programmes.

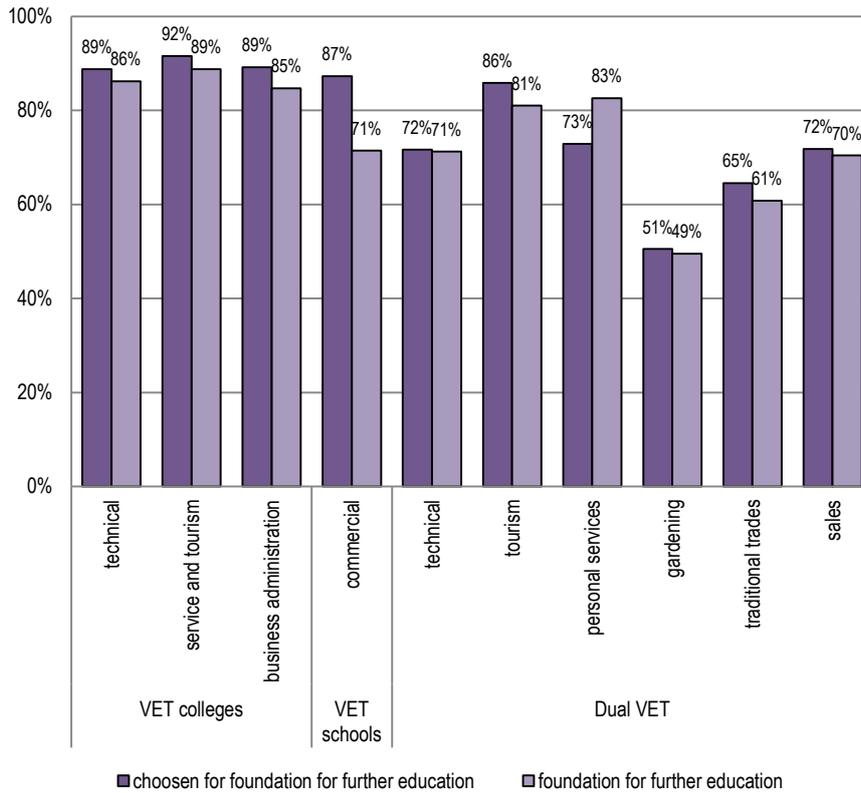
*Job prospects, foundations for further education and previous grades – vertical and horizontal stratification do matter*

Students express that with their chosen programmes they more or less get what they expected to receive. When comparing reported expectations prior to the programme and perceived qualities of programmes, assessments are unsurprisingly correlated.

Chart 4.83 reports results on the programmes' preparation for further education, both the expected (A4\_5) and perceived one (B4\_5). VET colleges are chosen for their expected capacity to prepare for any further education, including higher education. Surprisingly, also students of VET schools report the preparation for further education as highly important for choosing the programme. However, they do not rate the preparation delivered by the VET programme on a similarly high level.

Dual VET students also report that the capacity to prepare for further education was an important reason to choose their apprenticeship in the first place. So, students accept a call for lifelong learning as part of the social reality and an expectation also valid for apprentices. Moreover, programmes live up to their expectations. Only apprentices in the fields of gardening and traditional trades less often express both that they chose their programme for its preparatory qualities or that the programmes actually prepare them for further education.

Chart 4.83: Reported reasons for choosing current programme (A4\_5) and perception of the current programme (B4\_5) – further education – Austrian sub-groups of VET programmes, all age groups (in percent)

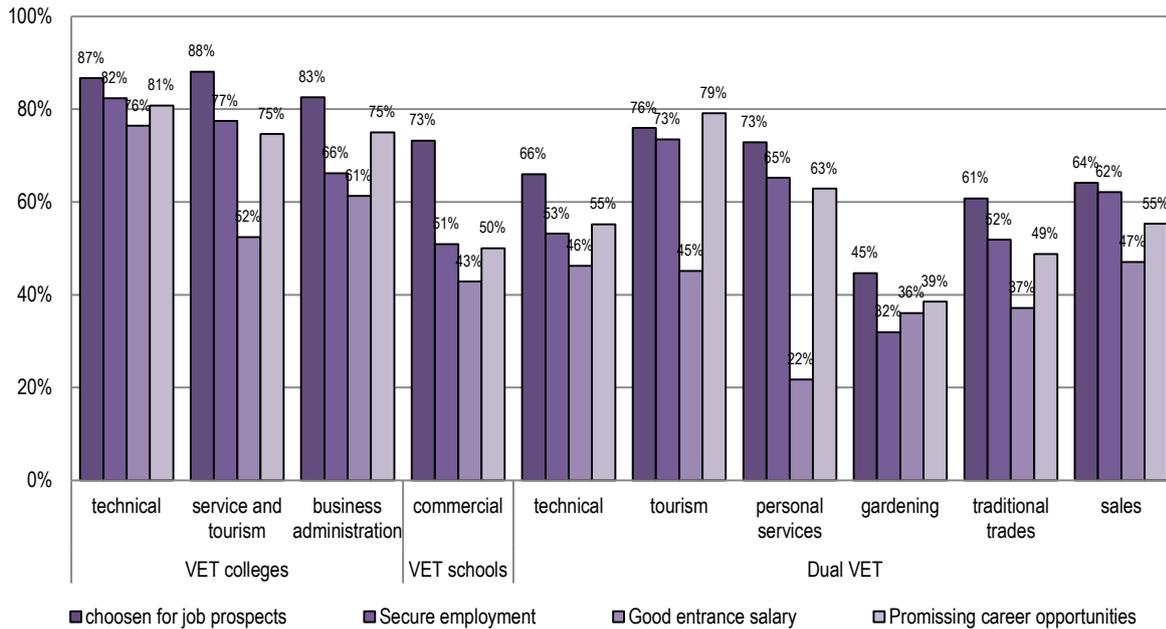


Question A4\_5 Importance for choosing the programme: The programme provides a good foundation for further education  
 B4\_5 Statement on the programme: Prepares me well for further education and training  
 Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

In Chart 4.84, we compare how many students declared they chose their programme for the expected ‘good job prospects’ (A4\_1) with three career-related assessments on their current programmes (B4\_1, B4\_2, B4\_4). First, we see that – as expected – there are some clusters of programmes where students expected considerably less often good career opportunities and assess their current programmes in a less positive way. This is true in particular for Dual VET in gardening and traditional trades.

Second, we see that students’ answers differ most in their assessment of ‘secure employment’ (B4\_1) and ‘good starting salary’ (B4\_2). Students of VET colleges in services and tourism know they would be able to find a job, yet the wage level in the sectors addressed by their programmes is relatively low, even for graduates with a *Matura*. A similar pattern can be observed for Dual VET tourism and Dual VET personal services. It is therefore important to note that students perceive ‘secure employment’ and ‘high wages’ as different dimensions of VET programmes. They might choose a programme preparing for low-wage sectors in exchange for the perceived high security of finding any job at all.

Chart 4.84: Reported reasons for choosing the current programme – Austrian sub-groups of VET programmes – all age groups (in percent)



Questions: A4\_1 Reasons for choosing the current programme: Good job prospects  
 B4\_1 Assessment of current programme: Ensures employment  
 B4\_2 Assessment of current programme: Good starting salary/wage  
 B4\_4 Assessment of current programme: Broad perspective for a professional career  
 Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

#### 4.7.6 Vocational Curricula in Austria

This section provides a brief description of VET curricula in Austria and then goes on to explore the way students experience these curricula in their different programmes and institutions.

Table 4.68: Overview - Basic characteristics of VET curricula

Type of programme	Curricula	Assessment criteria
VET colleges	Higher level technical and vocational schools provide advanced general as well as technical and vocational education, which will enable students to pursue more sophisticated occupations on one hand, and to take up university studies on the other (dual qualification). The curriculum is divided into three equal parts: general education, vocational theory and vocational practice <sup>133</sup> . The training in specialised theory in the upper years is complemented by practice-oriented projects and working methods in laboratories, drafting practice, practice firms etc. Due to the combination of these three areas, the duration of training at higher level technical and vocational schools is one year longer than that at academic secondary school. Weekly hours, in particular at schools for engineering, commerce and agriculture, amount to 37 per school year in compulsory subjects (without time spent on homework). Students in most courses at higher level technical and vocational schools have to take part in compulsory practical training in business and industry during the summer holidays.	To complete a course of study successfully, students must have passed all compulsory subjects laid down in the curriculum in all years and in all subjects in the <i>Reife- und Diplomprüfung</i> (matriculation and diploma examination). The <i>Reife- und Diplomprüfung</i> (matriculation and diploma examination) is a public and state-recognised examination before a board of examiners chaired by a school inspector (general-education and technical, written and oral examinations) providing access to university studies and professional qualifications (dual qualification). In addition to the written and oral examination of the specialist vocational/technical subject, the Diploma exam is likely to include the assessment of German, mathematics and a modern foreign language. In the final year at a <i>Berufsbildende höhere Schule</i> (higher level technical and vocational school), a project paper or diploma project is to be prepared within and outside school hours, in the course of which teams of students adequately cover a vocational field specific to their branch. Many of these projects are carried out

<sup>133</sup> Eurydice 2010a

	<p>The schools and colleges for engineering, arts and crafts, for example, offer more than 20 area specialisations, which focus on the various fields of technology. These institutions cover all the major disciplines within industry, crafts and trade by offering related modern educational programmes. Within the individual school types, different branches are provided<sup>134</sup>.</p> <p>In the individual school types and in some branches, a choice of training foci is offered. Training branches or foci are areas leading to vocational specialisation. Since the introduction of school autonomy, the schools may define the special curricular foci within the various branches autonomously. Schools are permitted to modify up to 33 percent of the subjects. However, branches are defined by curricular ordinances issued by the Federal Ministry for Education, the Arts and Culture<sup>135</sup>.</p> <p>Training careers at higher level technical and vocational schools may be compared to a tree. The specialist area is comparable to a tree trunk from which branches ramify after the third year, i.e. the training foci. In the first two years, all training courses within one area thus have a uniform curriculum. Starting with the third year, the curricula vary according to the fields of specialisation (electrical engineering branch, training foci: e.g. power engineering and industrial electronics, control engineering, information technology).</p>	<p>cooperating with, or commissioned by, business and industry.</p>
<p>VET Schools</p>	<p><i>Medium level technical and vocational schools</i> provide not only a thorough general education but also preparatory and advanced practical vocational training for specific occupations. Courses focus on practical training in school workshops, laboratories, kitchens and practice firms. Students of most three to four-year medium level technical and vocational schools must take part in compulsory practical training in business and industry during the summer holidays.</p>	<p>Students are evaluated through continuous monitoring of their progress and in written, graphic, practical or oral forms of assessments. The examinations and tests are prepared and evaluated by the class teacher within a national framework (<i>Leistungsbeurteilungsverordnung</i>). If students are graded 'insufficient' they can be held back for a year. It is possible for students to transfer from VET schools to related VET colleges after one year if grade requirements are met. Equally, students may change switch from a medium level school into an apprenticeship (credits can be carried forward) or from a higher level school to a medium level school (in the case of underachievement).</p> <p>To complete a course of study successfully, students must have passed all compulsory subjects laid down in the curriculum in all years and in all subjects in the final examination. The final examination is a public and state-recognised examination held before a board of examiners chaired by a school inspector (written and graphic/practical examinations: general education, specific project work or final paper, oral examination).</p> <p>Students wishing to progress to higher education can do so but must pass additional examinations. The <i>Berufsreifeprüfung</i> is a general examination which permits matriculation – it comprises four parts: mathematics, German, modern foreign language, and an in-depth examination in the specialisation selected at the medium level technical and vocational school. Alternatively, students can take <i>Reife- und Diplomprüfung</i> (matricula-</p>

<sup>134</sup> bmu:kk 2011

<sup>135</sup> Eurydice 2010a

		<p>tion and diploma examination) of a particular higher level technical and vocational school. Another possibility is the <i>Studienberechtigungsprüfung</i> (university entrance examination) which gives access to limited fields of study.</p>
<p>Dual VET – Part time vocational schools</p>	<p><i>Part-time compulsory vocational schools</i> complement practical training in an enterprise by giving apprentices the theoretical knowledge necessary for their respective occupations. The curriculum in all part-time compulsory vocational schools includes general subjects such as civic education, German and communication, occupation-related foreign language, as well as business management subjects. Theoretical and practical subjects specific to individual apprenticeships constitute the remaining subjects. Practical skills are provided by schools because many small- and medium-sized enterprises cannot offer specialist training in every required area. More than two-thirds of the training at part-time compulsory vocational school is devoted to general education subjects, business management and technical theory subjects. A maximum of one-third of the time is spent in state-of-the art workshops to complement practical, company-based training. Special remedial classes are available to students who want to join a higher ability group as well as for students who are in danger of being transferred to a lower ability group. Additional classes for students with a mother tongue other than German may also be available. Due to ongoing structural changes in the economy and society, apprenticeship occupations are subject to constant modifications. The dynamic development of new apprenticeship trades is noticeable above all in the services sector.</p> <p>The different subjects taught at part-time compulsory vocational school require a wide range of methods. Teachers are free to adopt their own methods of teaching. However, their teaching is required to be age-orientated, subject-oriented and practically-oriented. Students are to be guided to self-reliance and to attaining the best possible achievement in line with their talents and abilities.<sup>136</sup></p>	<p><i>Dual system</i> Students attending part-time compulsory vocational school are evaluated through continuous monitoring of their progress and in written, graphic, practical and oral tests. The examinations and assignments are prepared and evaluated by the class teacher. Specific provisions apply to apprentices during practical training in business and industry: they are evaluated by the trainer. Large companies with separate apprentice workshops often use examination and evaluation systems which are similar to those used by schools. Apprenticeship training ends with an end-of-apprenticeship examination before a board of examiners, which is made up of the chairpersons of the trade associations and members of the legally recognised representative bodies of employers and employees. After the successful completion of the vocational school course, students are awarded a final certificate which exempts them from sitting the theoretical part of the end-of-apprenticeship examination pursuant to Section 23 of the <i>Berufsausbildungsgesetzes</i> (Vocational Training Act)<sup>137</sup>.</p>

Source: own description

### *Demanding Times – IVET typically makes high demands on young people, yet the challenges vary among groups of programmes*

Compared to the other six countries, Austrian IVET is characterised by its overall high demand for time and effort. Although there are difficulties in measurement<sup>138</sup>, Austria's IVET students are required to work the longest hours. Austrian society has put considerable burdens on the shoulders of its adolescents. The period between ages 15 and 19 has been and still is among the most demanding as young people have to balance their developmental issues with the considerable demands of school-based higher secondary education or apprenticeships' full-time work commitment plus some extra hours for delivering school work in dual VET. Both types of programmes involve strains and so the promise that times will get better after completing higher secondary education is a constant motive in conversations of youngsters and their par-

<sup>136</sup> Eurydice 2010b

<sup>137</sup> Eurydice 2010a

<sup>138</sup> The figures for hours spent in part-time VET schools are not correct as too many students misinterpreted the question and reported either the duration of a week of block release or reported the number of working hours in their contract. Part-time school attendance should be between 10 and 15 hours a week across the programmes, not the average of 34.4 hours as stated by the students.

ents. A majority of Austrian higher secondary school students feel considerably stressed during the school year<sup>139</sup>.

Technical VET colleges are certainly the most time demanding, with more than 40 lessons a week and very high expectations for additional homework and learning for regular examinations (typically three times a year) in a number of demanding, vocational majors. VET colleges of business administration have less hours per week, yet require much time for homework and learning. VET colleges in tourism and service jobs also have a high number of lessons per week and considerable additional demands. All VET colleges are perceived as being more demanding, speaking of the time in school and efforts for homework requested, than academic tracks in Gymnasium which still have the flavour of being elitist in the sense that families can afford to put fewer demands on their offspring and postpone their preparation for the world of work to the days of higher education. VET schools share more or less the characteristics of VET colleges, yet are shorter in overall duration (3 to 4 instead of 5 years) and make concessions in demands for certain subjects. Outstandingly high demands during the high days of the school year ('hell') are balanced partly by extended school holidays of about 15 weeks a year.

Dual VET students experience a world quite different to their school-going contemporaries. Part-time school work is restricted to one or two days a week or to several weeks of block-release a year. On average, about 25 percent of the working time goes to on-the-job training or further education courses provided by the individual employer. The extent of instruction and one-to-one tutoring<sup>140</sup> provided by the employer differ widely, both between groups of programmes and types of employers. Yet the main efforts required go to contributing to productive work on behalf of the work organisation (although there is little up-to-date evidence, productive time is thought to be considerably higher in Austrian Dual VET than e.g. in the German dual system<sup>141</sup>). Whoever has survived a full apprenticeship has learned to live up to the demands of a full-time position and deal with its consequences. Former apprentices' high employability – beyond any particular knowledge – is due at least partly to the learning required for surviving the demands of today's work organisations, both in manufacturing and services. Beyond a normal work day, typically 8 hours long, apprentices are expected to do some school work and prepare for examinations. When apprentices opt for the new *Lehre mit Matura*<sup>142</sup> (an apprenticeship with a maturation scheme), additional course units and learning hours are required, further pushing the time demands.

Respondents' self-reports on the time spent on any activity are notoriously vague<sup>143</sup> and should not be taken at face value. Students in particular may express quite different things by ticking one time category or another (including, for particular, "I am bright enough to spend a small amount of time on learning" or "I am no swot" (kein Streber sein) on the one end to "School demands much too much", "I am really suffering" on the other end of the scale). Overall, the evidence suggests that pupils understate how much time is required, at least for the school-based programmes. (Required home assignments alone account for more than two hours a week in all school-based programmes). However, the results for Austrian VET programmes, stated in Chart 4.85, highlight the overall high level of learning time required and the considerable difference between programmes on the same level of vertical stratification. More than a fifth of VET college students report more than 8 hours per week for home assignments or learning activities of all kinds. However, only a minority of students in personal services report more than two hours of work for school, while half the students in technical programmes devote at least two hours per week to learning.

---

<sup>139</sup> According to PISA 2006 data, 43 percent of 15/16-year-old students in VET colleges, 39 percent of students in VET schools and 27 percent of students in Dual VET feel chronically stressed by the demands made on them by their schools. In Gymnasiums, even 53 percent are chronically stressed for the same reasons (Specht 2009, 164f).

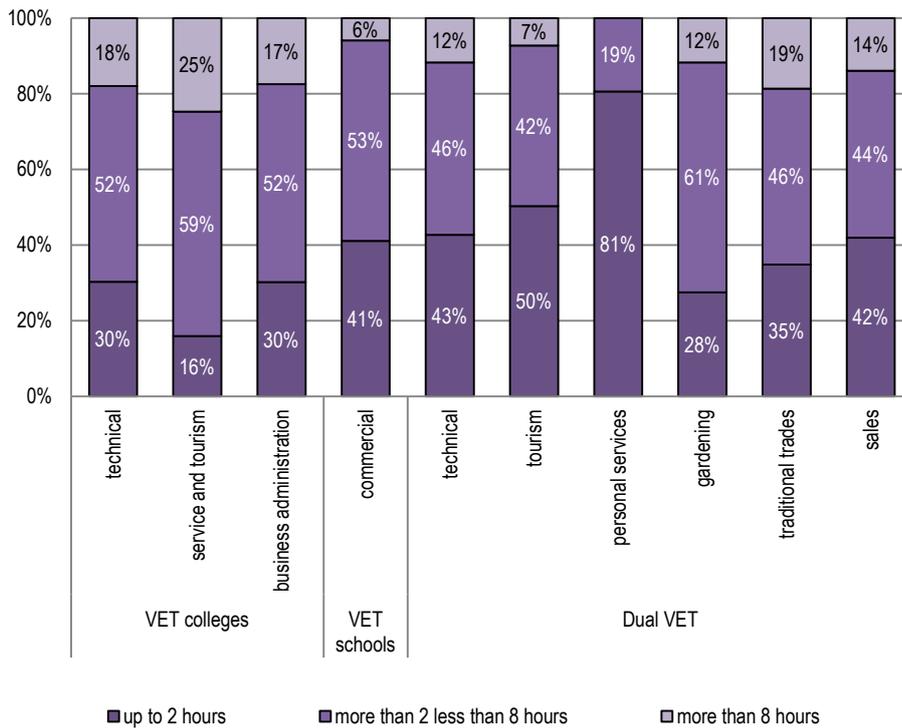
<sup>140</sup> 'Deliberative practice' in the sense of Ericsson et al. 1993.

<sup>141</sup> See Lassnigg 2006, 7.

<sup>142</sup> BMASJ (2012)

<sup>143</sup> Time-use studies require therefore a time-near account for any activity in detailed time sheets. Time estimates based on a full exploration of time sheets and estimates for a particular activity differ enormously.

Chart 4.85: Hours spent per school week on study outside school – Austrian sub-groups of VET programmes (in percent)



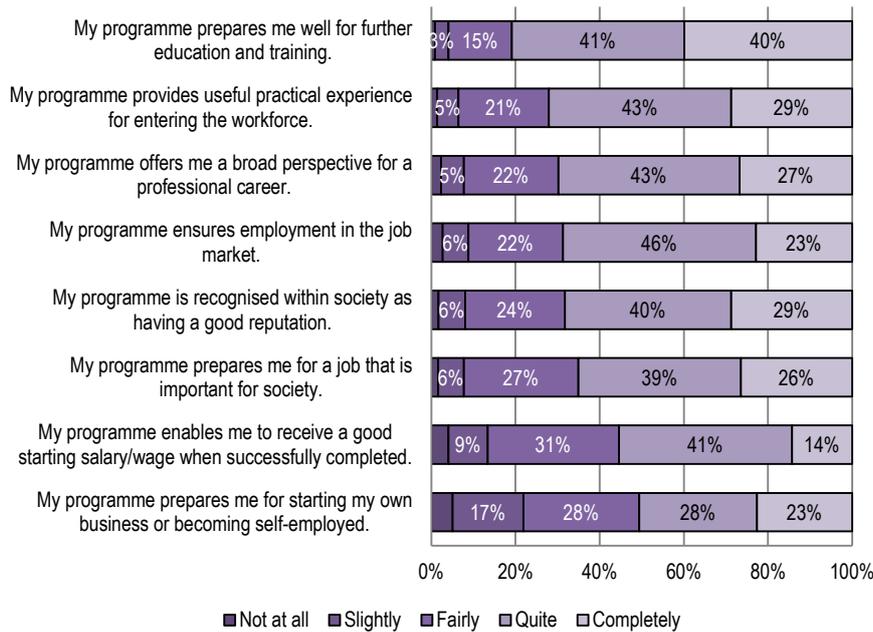
Question: C4 All in all, how much time in an average school week do you study outside school (e.g. homework or preparation for school)

Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

*Satisfaction with the current programme varies considerably among the fields*

Austrian IVET students assess their career-related aspects of their programmes quite positively, yet as we saw above, evaluations differ widely among clusters of IVET programmes. IVET students are most critical concerning the item “My programme prepares me to start my own business or become self-employed”, as only a weak majority agree with this statement. When comparing answers across programme clusters, the results are only partly in line with the expectations. The three programme clusters with the lowest values for the item include Dual VET sales (23 percent), commercial VET schools (28 percent) and Dual VET gardening (33 percent). A middle group include various Dual VET (technical (44 percent), traditional trades (45 percent)), but also technical VET colleges (46 percent) and VET colleges in service and tourism (47 percent). VET students in Dual VET tourism (65 percent), personal services (69 percent) and VET college students in business administration (72 percent) clearly IVET students better prepared to start their own business than Austrian IVET students on average.

Chart 4.86: Career-related assessment of the current programme – 17/18-year-olds (in percent)

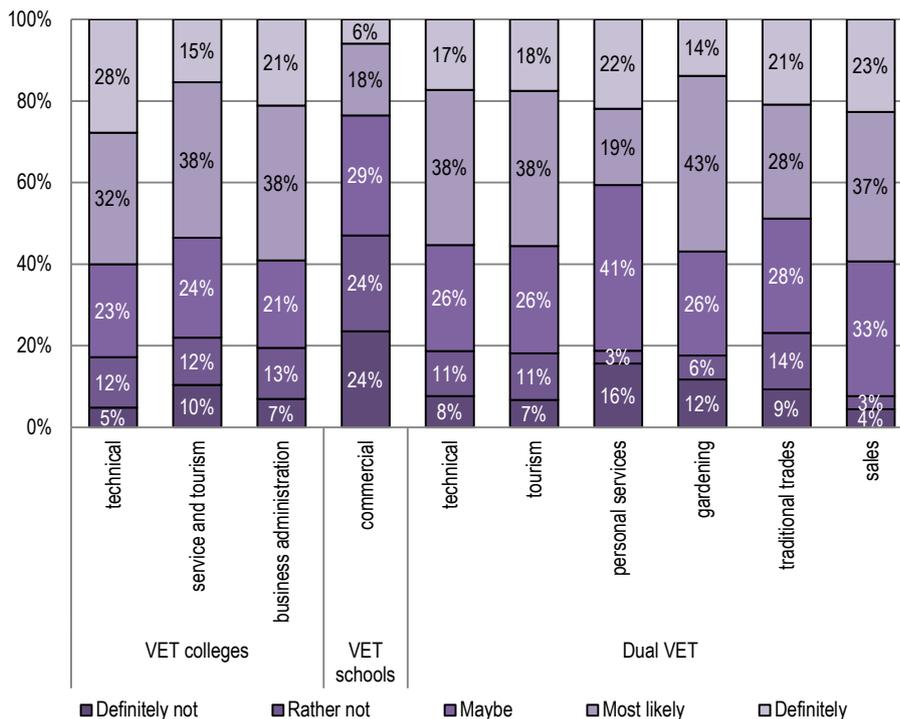


Question: B4 Now that you know your programme well, to what extent do you agree with the following statements? Presented answers 1 to 5 on a scale from 1="Not at all" to 5="Completely"

Source: 7-EU -VET international data set

Question B7 asks for an assessment of whether a student would consider taking their programme again if they were to make the choice again. Results for IVET clusters are displayed in Chart 4.87. Certainly, the question is likely to combine the assessment of both the match between the individual and the programme (*not/right for me*) and an overall assessment of the programme (*good/poor for everyone*). Between 17 percent and 22 percent of IVET students say that they would make a different choice. Only students of the commercial VET school say far more often that they would not choose their programme again. Students in sales would less often not choose their programme again. Strong affirmation for the choice made is between only 6 percent (commercial VET schools) and 28 percent (technical VET colleges). Programmes with overall less positive values for various items, such as Dual VET personal services, can nevertheless be regarded more often as the 'first choice' by their participants than allegedly more attractive programmes (e.g. VET colleges in services and tourism).

Chart 4.87: 'Would you choose the same programme again' – 17/18-year-olds (in percent)



Question: B7 'Looking back, if you were to choose again would you choose the same programme?'

Source: 7-EU-VET Austrian data set, own calculation

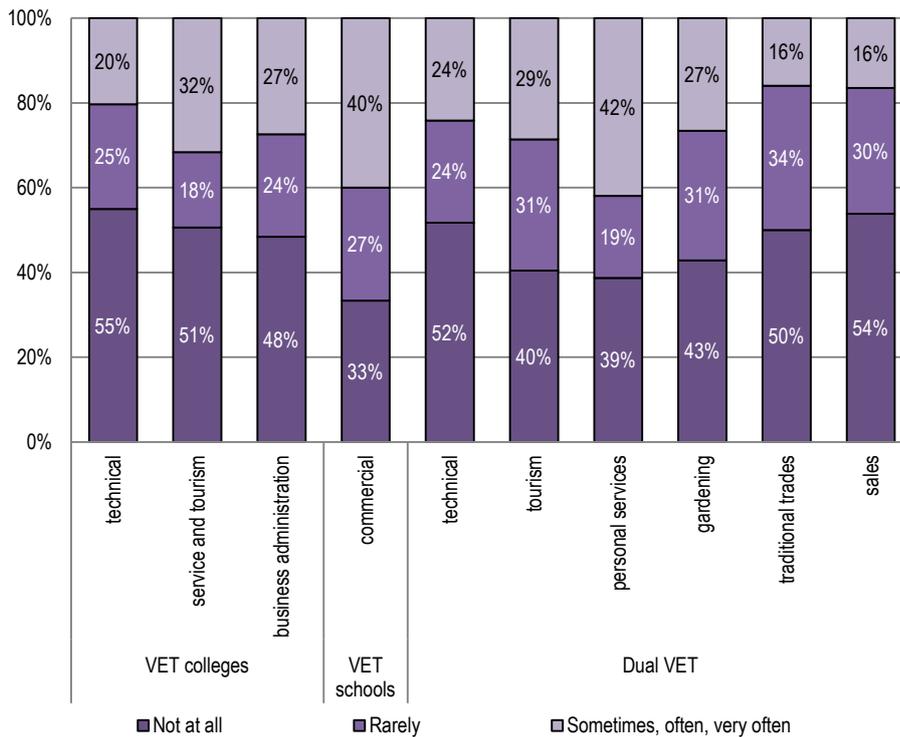
*VET students have a high inclination to drop out of their programmes – yet the reasons differ considerably among the types of programmes*

On average, Austrian IVET students report less frequently the intention to drop out of their programmes than their counterparts in Slovenia and Latvia. However, drop-out intentions are more frequent than in Germany, Lithuania or Greece. Austria used to be a country where high drop-out rates of educational programmes were celebrated as a sign of the demanding, competitive nature of educational programmes – in particular, adolescents were treated as adults to make the choice either to live up to a school's expectation or take the consequences (beyond repeating classes, this means transferring to less demanding programmes or dropping out altogether). However, preventing drop outs and early school leaving have become a core issue of educational policy, including IVET, in the last decade, especially in the wake of related European policies. Initiatives include measures (as e.g. coaches of apprentices or mediators in the case of an employer-apprentice conflict) to help apprentices complete their programmes successfully<sup>144</sup>.

The results of the survey show a high proportion of young people reflecting on whether or not they should leave their current programme but may underestimate the overall tendency of dropping out of VET in Austria. For various reasons, the first years of IVET programmes see by far the highest drop-out rates so the respondents of the survey must be seen as 'survivors' of a demanding (self-)selection process. The proportion of students with some or strong intentions to leave their apprenticeship positions is clearly higher in tourism, personal services and gardening.

<sup>144</sup> See Austrian expert Interview 7 in Hefler 2012 and BMASK 2012

Chart 4.88: Intention to leave the current programme – Austrian sub-groups of VET programmes (in percent)



Question: B8 How often have you thought about leaving your current programme?

Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

Groups of programmes in Austria differ considerably both in the proportion of students who at least sometimes consider dropping out of the programme and their reasons for thinking about dropping out:

- In VET colleges, roughly half of all students never consider dropping out of the programme. In technical programmes, the smallest proportion of students (20 percent) considers dropping out at least sometimes. Substantially more students intend to drop out in service- and tourism-oriented VET colleges.
- Students of the commercial VET schools intend most often to drop out of their programme among all the VET types studied. This resonates well with the particularly difficult position of VET schools reflected by various expert interviews<sup>145</sup>. Commercial VET schools are strongly subordinated to the VET colleges of business administration as well as VET colleges in service and tourism. They allow access for students who are either not in a position to find a dual apprenticeship or could not consider such an option for various reasons (as e.g. for female students of an orthodox-traditional Muslim background whose families find it hard to accept any employment of a young, unmarried girl outside the kinship-governed, local ethnic economy).
- Students in different Dual VET programmes differ considerably in their intentions to drop out of their programme. In technical programmes, in traditional trades and in sales, the number of students thinking about quitting their apprenticeship is relatively low, yet still nearly half of these students consider, at least rarely, dropping out. Of all programmes, personal services shows the highest proportion of students intending sometimes, often or even very often to leave their apprenticeship, marking once more its position at the bottom end of the stratification system.

<sup>145</sup> Hefler 2012

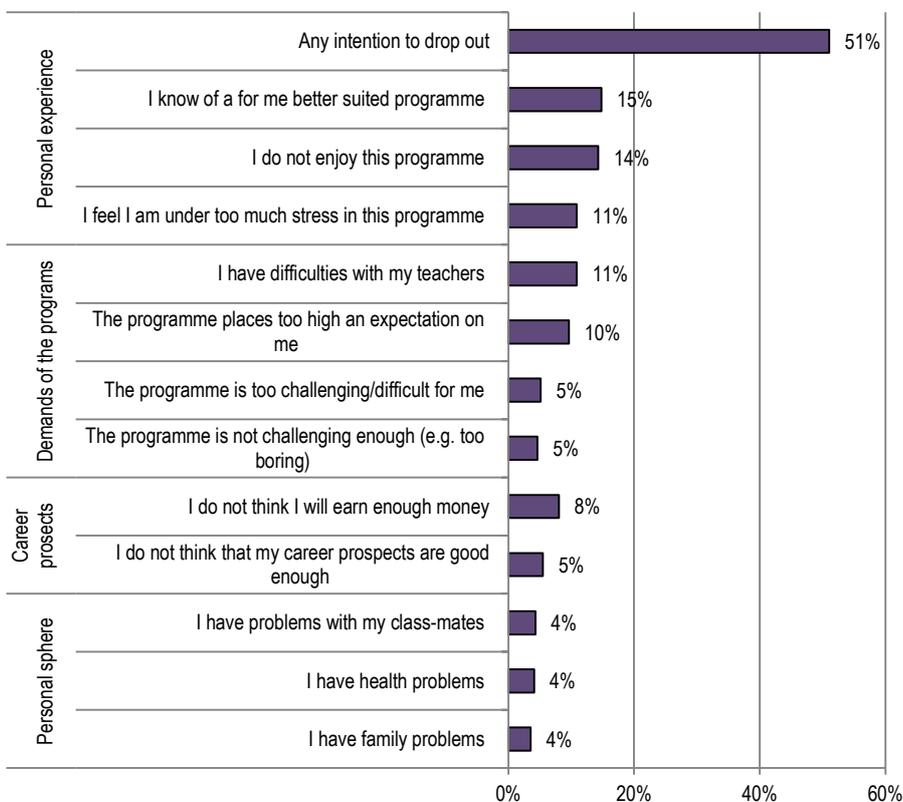
*Reasons for the intention to drop out vary considerably across programmes*

The 51 percent of students reporting they at least rarely consider leaving their current IVET programme were invited to state the reasons for those intentions. Eleven statements were provided for reporting on the reasons in question and students were asked to tick any reasons which apply. Chart 4.89 sets out the reasons for dropping out provided, related to the total population within the programmes. It could be stated that:

- Students prefer to explain their intention to drop out by their personal preference and their more subjective experience of the programme. 15 percent of students say they know a programme which seems better suited to them. 14 percent do not enjoy their programmes. 11 percent state they feel too much stress in this programme.
- Students refer frequently to the qualities of the programme when explaining their drop-out intention. 10 percent of students state that the programmes “place too high an expectation on them” – students clearly prefer this formulation to the statement that a programme is too challenging for them (5 percent of affirmation). Students express difficulties with teachers as a particular source of discontent; however, the teachers might be blamed for representing the demanding qualities of schools<sup>146</sup>. Across all programmes, only a minority of students find their programme not demanding enough (5 percent).
- Overall career prospects are also among the more frequently ticked reasons for thinking about dropping out, in particular with regard to the expected low levels of future wages (8 percent).

Problems attributed to the individual sphere are among the least chosen reasons for explaining drop-out intentions. About 1 in 25 VET students report problems with their class mates, family problems or health problems as a reason for thinking about leaving a programme.

*Chart 4.89: Reported reasons for drop-out intentions – All age groups (in percent)*

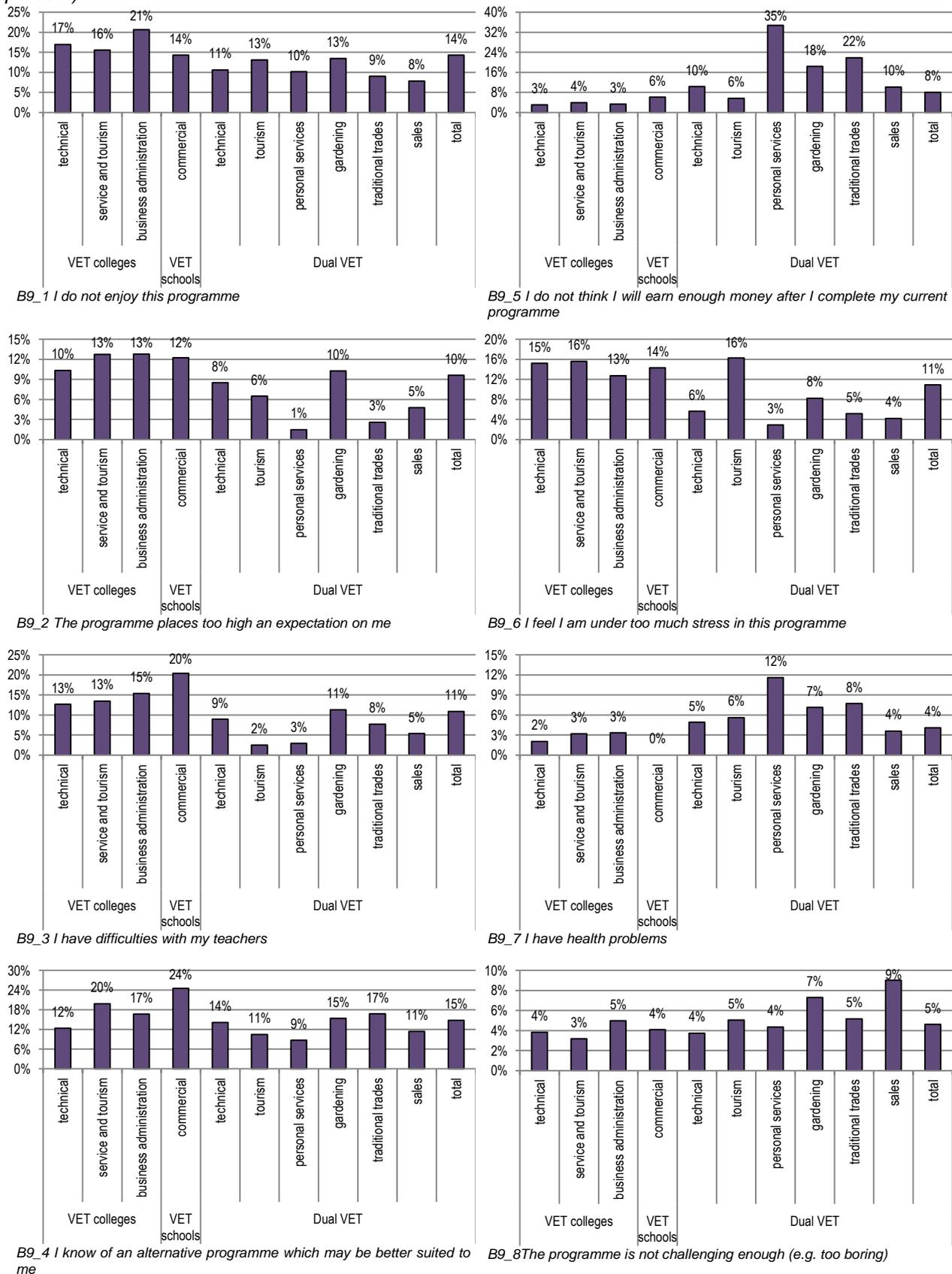


Question: B9 What were the reasons that made you think about leaving your current programme?

Source: 7-EU-VET – Austrian data set

<sup>146</sup> Correlations between the items

**Chart 4.90: Reasons for drop-out intentions – Austrian sub-groups of VET programmes, All age groups (in percent)**



Question: B9 What were the reasons that made you think about leaving your current programme? - Positive answers as a percentage of all students

Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

However, students from various programme groups report considerably different reasons for dropping out of their programme. Chart 4.90 shows the results of the eight items with the largest variation.

*Paid work of IVET students beyond Dual VET – important yet difficult to assess*

Item C6 asks whether IVET students pursue paid work while following their programme. It was emphasised that only work activities should be reported that are not part of the current IVET programme. The questions provide an example of the challenges of cross-country comparative research where questions should collect meaningful information across countries despite the fundamental differences between their IVET systems. Among 17/18-year-olds, 22 percent of students report they are working constantly throughout the year. 37 percent report that they pursue paid work during the school holidays. 40 percent say they do not work for money at all. At first sight, the reported results seem reasonable in the cross-country variation, reporting that the majority of Austrian students have at least some work experience like in Slovenia, Greece or Latvia, and that the proportion of students working during the 'school year' is clearly higher than in Slovenia, Latvia or Lithuania and lower than in Germany, Greece or the United Kingdom. Only a more detailed analysis points to difficulties affecting the Austrian results and most likely also the findings of some other countries.

Chart 4.91 clearly shows that the students' answers vary strongly across types and fields of IVET. Moreover, the ways students could potentially understand the answer could vary as well.

*VET colleges/VET schools:* While a minority of students state they are working during the school year, a majority of students report doing paid work during the holidays. This cannot be understood without reference to curricula requirements on one hand and cultural traditions on the other. The majority of VET colleges foresee compulsory work experience (one to several months) during holidays in one or more of the four holiday periods included by the five-year programme. Students are responsible for finding *Ferialarbeitsplätze* (practicum places). However, the legal status of the work placement is disputed; particular contracts for compulsory placements coexist with regular short-time work contracts. All work is paid, however, regulations (e.g. collective agreements) applied may vary. VET students are typically expected to contribute substantially to productive work and fill in for regular workers on holiday. While curricular of particular programmes in a particular year of education require students to work during their holidays, they may differ in their perceptions of their paid placements and may report it as either paid work or as part of the programme and therefore as not being addressed by the item. So while a 'true' value may be 100 percent for many classes, the individual perception allows for much variation. Beyond compulsory work placement, it has to be stressed that in Austria a culture of working during part of the (in particular, summer) holidays exists for 15- to 19-year-olds. Parents and schools are in favour of any work experience students may collect. Students enjoy gaining money, earning wages which are considerably high due to the tax exemption and refund for social rights<sup>147</sup>. Firms cover their replacement needs for workers on holidays with (low-paid) young students. So, even for VET colleges without mandatory work placements, such as the VET colleges for business administration, the proportion of students working during the holidays is high.

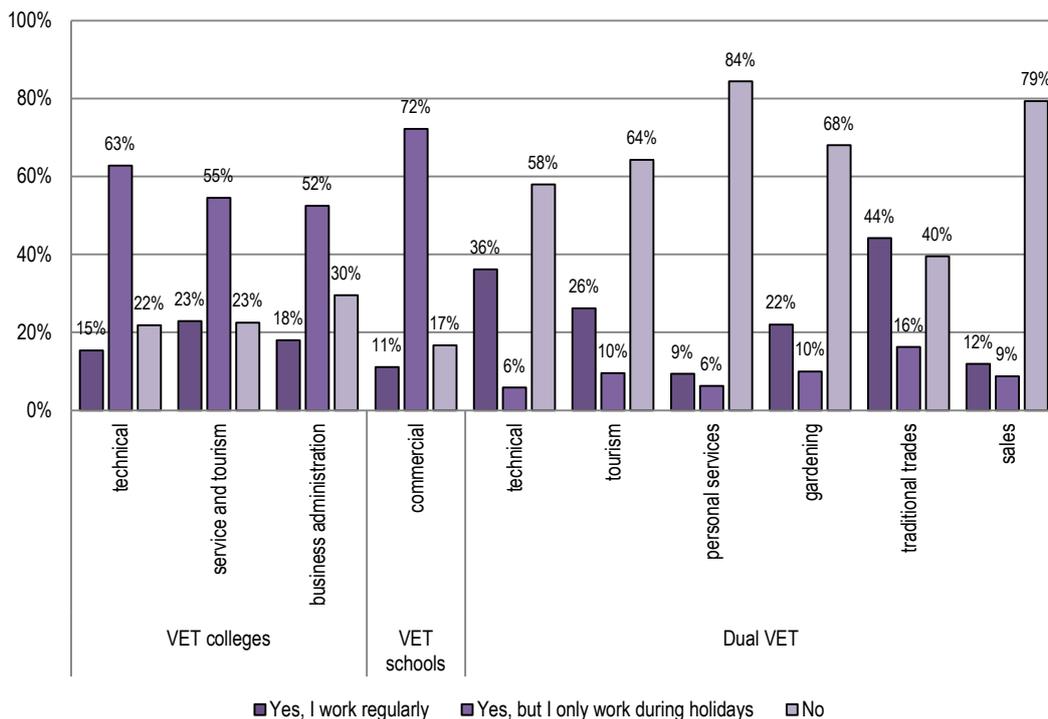
Dual VET: Dual VET students are, formally, full-time employees (although under a special contract) of their *Lehrbetriebe* (the companies offering apprenticeship periods). However, as it was highlighted that students should not report paid work forming part of their programme, the majority of students report no work activity. As apprentices have a double identity as students and workers, contributing to productive work typically half or more of their overall working time, they may understand their apprenticeship nevertheless as paid work. This might be even truer in cases where apprentices do substantial overtime. They may report on minor activities that they get some compensation for ("*Nebentätigkeiten*"). They may work

<sup>147</sup> Students have income tax returned and receive compensation for holiday not taken and mandatory additional monthly payments stated by the collective agreements (the sixth part of a monthly income).

legally in a business owned by their family. Apprentices may also work in the informal economy and openly report on their activity. Finally, a minority of students in the VET part-time schools classes surveyed are not employed by a firm, yet get their practical training from training providers (workshop-based approach). Together, the picture is mixed. Finally, apprentices do not have 15 weeks of school holidays, but five weeks of statutory holidays (*Gesetzlicher Erholungsurlaub*) where they are not expected to work at all. So, the item “working during school holidays” makes no sense at all.

To sum up, the reported findings only partly deliver the key message that Austrian IVET students typically gain practical experience either in (often compulsory) work placements during the (long holidays) or through their work as apprentices.

Chart 4.91: Paid work of 17/18-year-old IVET students for groups of programme (in percent)



Question: C6a Have you worked for payment during the last year outside your current programme (e.g. work that is not part of the completion of the programme)?

Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

#### 4.7.7 Careers and Progression of IVET Graduates

For Austrian 15- to 19-year-old youth, the traditional yet never universal sequence ‘leave education – take up VET – enter the labour market in the occupation prepared for’ is not valid any more. For a majority of IVET students, their programmes chosen after compulsory schooling are transitory and not determining their future occupational destination. The majority of IVET students will not work in their ‘learned trades’ four years after finishing their programmes, hence the reasons for changing occupational fields differ widely with the particular IVET programmes and their place in the vertical and horizontal stratification.

The majority of VET college graduates enter higher education three years after completing their programme. VET college graduates can enter starting positions in a broad range of occupations so even when traditional pathways are temporarily in crisis (as, for example, entering banking after VET colleges of business administration), other pathways are available. For a VET college graduate it is true in the fullest possible sense that all occupational pathways are open for them, that they can actually become anything.

For VET schools' graduates, the situation is the most ambivalent and different from one VET field to another and one region to another. The VET school type reached by the 7EU-VET survey is among the most troubled ones<sup>148</sup>. They are the subject of the current reforms<sup>149</sup>. VET schools do not allow regular transition to higher education and pupils know that they are missing the *Matura*. However, they potentially can 'upgrade' their programme to a VET college 'Matura' or complete a '*Berufsmatura*' after some years of occupational experience. Based on their academically demanding programmes – compared to Dual VET – VET school graduates should have a better base to build on their future educational career. At the same time, they miss the experience of actually being part of an occupation and the workforce and of possessing valid practical knowledge, which is not only 'second best' compared to the 'gold standard' of VET colleges.

Dual VET graduates face completely different futures, depending on their occupational field and the employer providing their apprenticeship. In some sectors and with some employers, they still can enter a career, leading from full membership in self-managed work teams to advanced positions, typically based on institutionalised types of formal adult education, foreseen at certain points in their future careers.<sup>150</sup> (Only a minority of apprentices<sup>151</sup> stay with the employer offering the apprenticeship spell. Roughly one-half of all apprentices change occupational fields within three years<sup>152</sup>. However, based on a successfully completed apprenticeship of any type, it is quite likely to find at least any kind of job. For various programmes, continuous employment is very likely, yet only by accepting considerably low wage levels together with limited career opportunities. So mixed prospects fuel VET students' intentions to invest in further education based on a low, yet, still a wage income. In any case, apprentices painfully miss *Matura*, both as permitting entrance to higher education and as the most broadly accepted sign of 'advanced ability'. The strongly increased preparation rates for '*Berufsmatura*' and the quick diffusion and raising participation rates in the new apprenticeship plus general education programmes (*Lehre mit Matura*) demonstrate that apprentices know about their disadvantaged position and intend to get rid of it. However, there is rising evidence that both interest in and successful completion of '*Berufsmatura*' are equally distributed among former apprentices of various programmes. Entering and completing higher education is clearly 'in sight' for Dual VET students, however, the contemporary access and success rates of former Dual VET students are still very low<sup>153</sup>.

As with reported motivation for further education in general<sup>154</sup>, IVET students' intentions – measured at one point in time – to participate in LLL are hardly a valid predictor of their future behaviour. Future changes in their particular life structures<sup>155</sup>, changes in the opportunities un/available in their workplaces as well as changes in the opportunity structures provided by the Austrian LLL system will affect their future behaviour. However, it is still important to note if young people perceive further education as a desirable option or not.

Across programmes, Austrian IVET student motivation for further education holds a middle position among the 7EU-VET countries. 43 percent of 17/18-year-old IVET students say they will very likely or certainly enter any type of further education. Only 23 percent say they (certainly) do not intend to continue education. As in Greece, Slovenia, Lithuania and the UK, Austrian female students are more oriented

---

<sup>148</sup> Heffner 2008

<sup>149</sup> E.g. Faschingbauer et al. 2011

<sup>150</sup> Hefler & Markowitsch 2012

<sup>151</sup> About one-third stay with the same employer for longer than two years, however with considerable differences between sectors. For example, in tourism only 19 percent of apprentices stay with their '*Lehrbetrieb*', see Gregoritsch 2011, 42ff.

<sup>152</sup> *Ibid.*; Moser & Bilgili 2010

<sup>153</sup> Only about 4 percent of first-year students at universities and 15 percent at universities of applied sciences have no '*Matura*', but an alternative access permission. Success rates for former VET school or Dual VET students in higher education are unknown in detail, yet are clearly below the overall low average success rate of about 50 percent after ten years of study. See Hefler & Fleischer 2012.

<sup>154</sup> Rubenson & Desjardins 2009

<sup>155</sup> Levinson 1980, Hefler 2012, forthcoming, Chapter 4

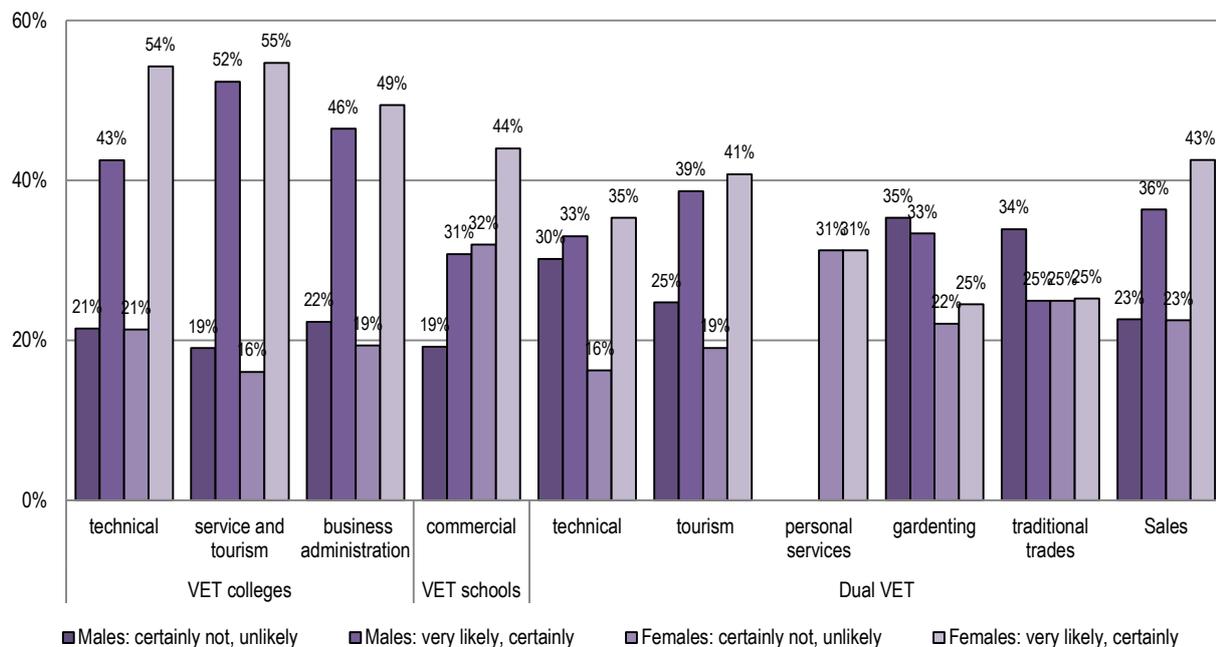
towards further education than their male counterparts. This holds true even when controlling for the type of programme (see Chart 4.92).

Students' reported intentions to take up further education vary significantly across the groups of programmes. However, it is even more important to note that the variation is nevertheless lower than the observed differences in participation rates in formal and non-formal courses by contemporary 20- to 24-year-olds. As studied in detail elsewhere<sup>156</sup>, similar levels of motivation translate into highly different probabilities to continue formal education or to participate in non-formal courses for various groups of IVET students.

VET college students (all age groups) show the highest motivation to continue their formal education and/or to take courses. At the same time, only a minority of students state they do not intend to participate in further education. Students of programme groups more closely linked to well-paid segments of the labour market show a lower motivation for LLL (technical programmes, business administration) than programmes with less favourable prospects. However, the latter is not true for the minority of female students in technical programmes (Chart 4.92), who may – for various reasons such as programme specialisation – assess their opportunities to enter the labour market based on their qualification in a different manner than their male counterparts. Commercial VET schools' students show a slightly below-average level of motivation for LLL.

Intentions for or against LLL vary most among Dual VET students. Apprentices in sales and tourism relatively often express their motivation for LLL. Students in different programme groups such as personal services and technical programmes form a middle group, with a level of expressed motivation clearly below the overall average. Motivation for LLL is lowest among apprentices in gardening and traditional trades: here, only half as many students express their motivation for LLL as the Austrian IVET average.

Chart 4.92: Intention for further education – gender – Austrian sub-groups of VET programmes (in percent)



Question: D6 Do you plan to continue schooling or further education after your current programme has ended (e.g. for example doing a specialised programme?)

Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

<sup>156</sup> Hefler et al. forthcoming

Earning the 'Matura' and/or entering higher education is among the most often reported plans for further education. Certainly, along with students' opportunities in various programmes their motivation also differ widely (Chart 4.93). For VET college students, entering higher education is quite a natural thing to do. Only among female students at technical VET colleges does a surprisingly low proportion intend to enter higher education. Given the participation rates of recent cohorts, it is likely that transfer rates to higher education will clearly exceed the levels of reported motivation.

For VET school and Dual VET students, the situation involves more and more demanding decisions. If they intend to study, they have to earn higher education entrance permission. However, they have to also decide on the type of access permission to acquire. They could opt for the traditional 'Second Chance' education, which is quite demanding and time-consuming, but it does provide the 'Matura' credential, either in general academic or in vocational higher secondary education. Moreover, traditional 'evening school' provides considerably more support for individual learning so that higher levels of competencies can be achieved than in the less demanding programmes of the 'fast tracks'. They could also opt for one of two 'fast tracks' and prepare for the booming '*Berufsmatura*' or stagnating '*Studienberechtigungsprüfung*'<sup>157</sup>. However, in the case of not entering or not completing higher education, the 'fast track' credentials are clearly of less value in the labour market.

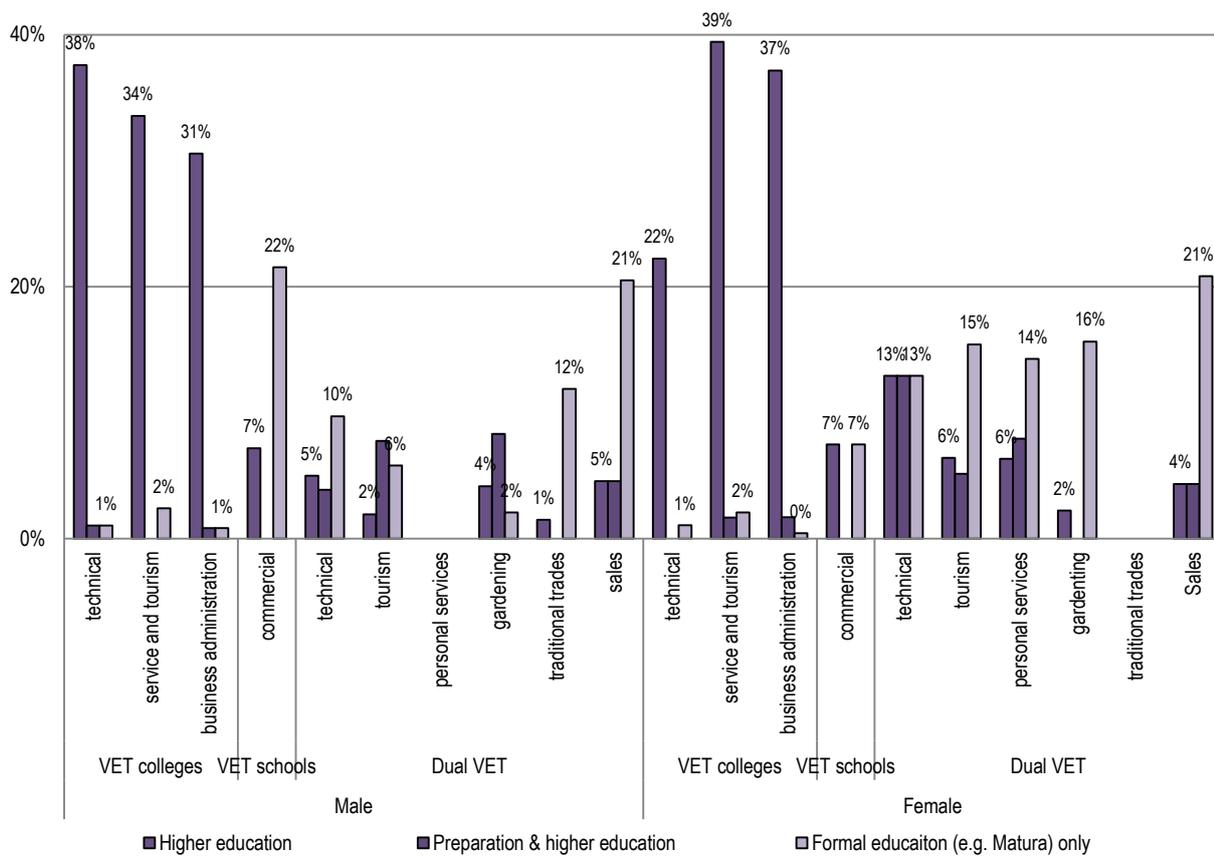
Students in commercial VET schools – in particular male ones – and in sales show the highest inclination to achieve a Matura or alternative higher education entrance permission. This reflects in the least partly changing employment pattern as large employers in wholesale and retail increasingly reserve any management positions to holders of the Matura<sup>158</sup>. They may to a certain yet unknown extent also intend to enter higher education. Only a minority of VET students without a Matura directly express their intention to enter higher education; rarely more than 10 percent dare to declare higher education as their goal, a destination formally possible yet still institutionally in no way foreseen for 'former apprentices'. Here, the divide between VET colleges and apprenticeship is fully visible.

---

<sup>157</sup> *Berufsmatura* is open to adults (18+) with a finished vocational education (VET school or Dual VET) and allows entrance to any higher education programme. *Studienberechtigungsprüfung* allows entrance to and prepares for a particular programme of higher education. For the development of the two fast tracks, see Markowitsch et al. 2012, forthcoming.

<sup>158</sup> Also see expert interview 3 in Austrian report on wp 8

Chart 4.93: Intention to access higher education – VET students (all ages groups), male & female (in percent)



Question: D7 What would you choose to continue learning?

Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

While potentially any social position can be reached by any type of VET programme, students' vision for their position at 'age 30' clearly expresses the institutionalised expectations linked to various groups of VET programmes. More than two-thirds of VET college students expect to hold a professional position at the 'age 30 transitions'. For the 'engineers', deriving from technical VET colleges, achieving a position of authoritative power or professional expertise is seen as a natural outcome of their present programme. Becoming professional is part of their schools' social charter<sup>159</sup>. On the contrary, only a minority of apprentices in Dual VET hold high expectations for their occupational future. About 40 percent of apprentices in technical programmes and in sales expect to achieve management positions or positions of professional expertise, typically based on institutionalised formal education (such as the master craftsman examination) or based on 'Second Chance Education' or higher education. Somewhat less than four out of five apprentices in all other groups do not see themselves in any advanced occupational position some ten years in the future as their current programme clearly restrains their ambitions: Being an apprentice does not match well with high-flying plans for the own future. Contrary to their comprehensive school systems' peers, they have – at least for the present moment – withdrawn from the 'contest'<sup>160</sup> so that little 'management of ambition'<sup>161</sup> is further required as they no longer aim for positions they are 'not made for'. Living up to today's expectations implies an acceptance of the divide between a blue-collar and a white-collar world and pride in one's own status: as one pupil in a focus group discussion put it: 'Not everyone needs to walk around in a white coat.'<sup>162</sup>

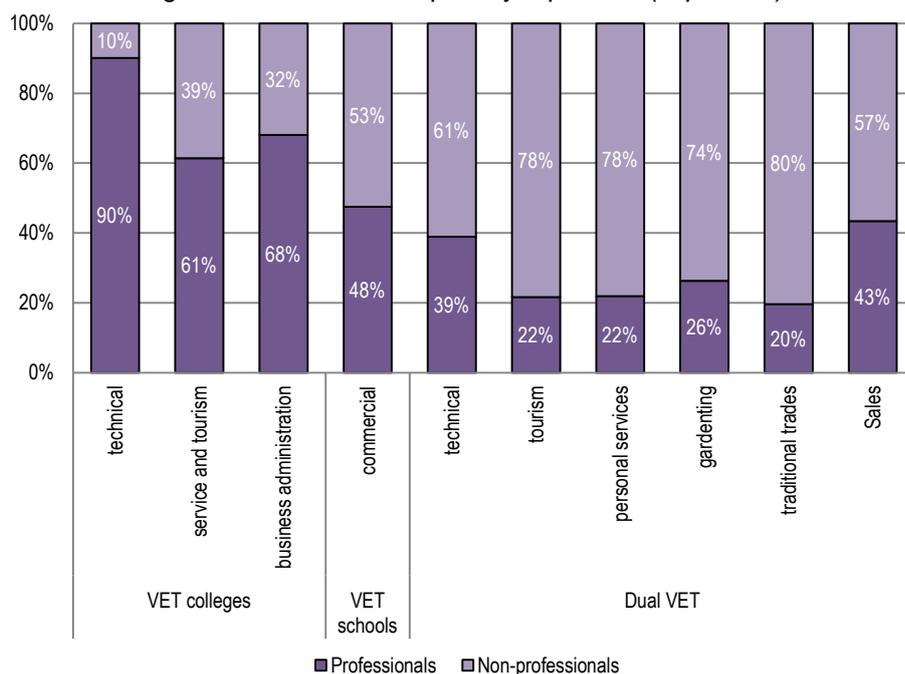
<sup>159</sup> Meyer 1970

<sup>160</sup> Turner 1960

<sup>161</sup> Brint & Karabal 1989

<sup>162</sup> Hefler & Zimmel 2012

Chart 4.94: Age 30 –version – anticipated job position (in percent)



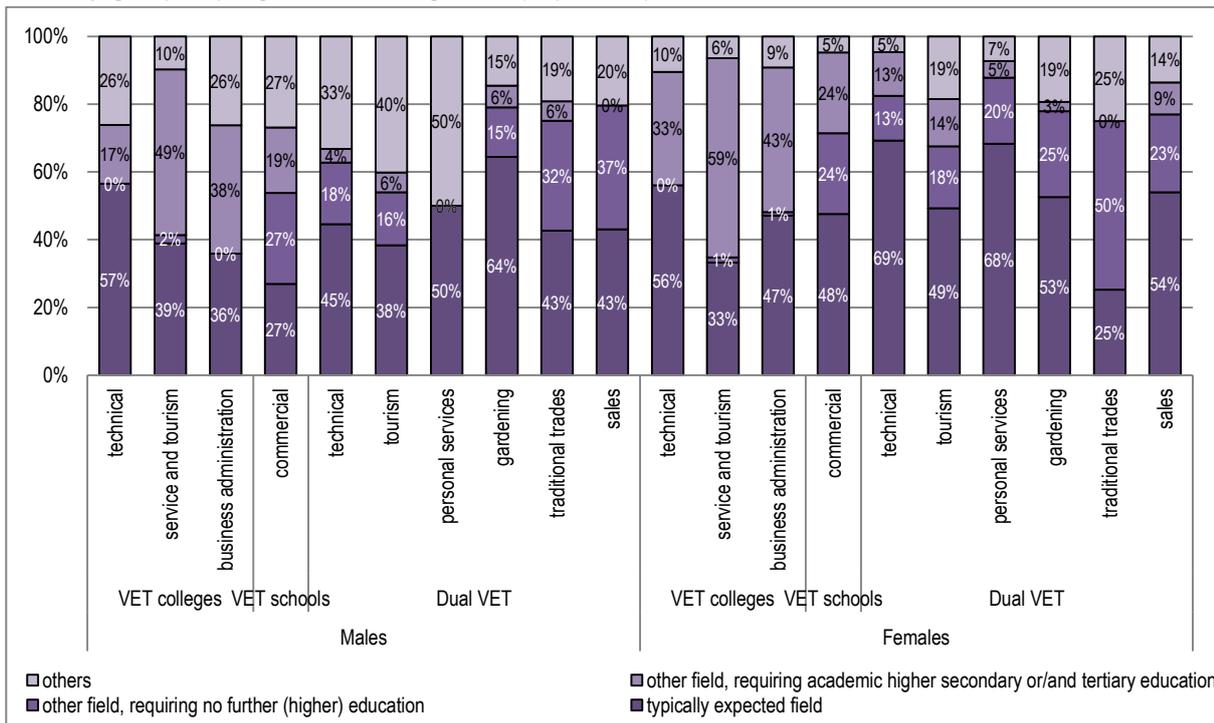
Question: D4 What kind of job do you expect to have when you are about 30 years old? age30-version adapted  
 Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

When comparing the occupation envisioned for ‘age 30’ with the typical occupations accessible from the current IVET programme, hardly one-half of all VET students – male and female students alike – expect to stay within the occupational fields related to their current programme. The proportion of students who intend to leave their field varies considerably and so do the implications of their choices. While a detailed analysis is prepared in Hefler et al. 2012, forthcoming, here, only one aspect is highlighted.

In Chart 4.95, the results of the comparison are summarised. We have built four categories, labelling the proposed ‘age 30’ position according to the following criteria:

- positions typically accessible based on the current programme;
- positions in another occupational field, yet where no return to (formal) education) is required;
- positions in the same or in another field, however, requiring (for VET school or Dual VET students) a ‘Matura’ at a VET college or (for all students) higher education; and
- others (including e.g. withdrawing from the labour market for doing the household courses

Chart 4.95: Relationship between present programmes' typical destinations and expressed 'age 30' visions by group of programmes and gender (in percent)



Question: D4 What kind of job do you expect to have when you are about 30 years old? age30-version adapted  
 Source: 7 EU-VET data set – Transformed Austrian Sub-data set, own calculation

Among apprentices of Dual VET, a considerable group of students plan to leave their occupational field for occupations where any vocational qualification allows entrance, yet the typically large employer organisations will provide for a (re-)training for a new job profile. Examples include becoming a driver in public railways or transport, entering the police, the armed forces or private security services, or entering a health or care occupation with a large public provider. Sometimes, ideas for changing occupational fields are deeply grounded in the self-understanding of occupational groups such as, for example, entering facility management based on an apprenticeship as a plumber<sup>163</sup>. The idea to change occupational field *without* re-entering formal education, expressed by up to 40 percent of current apprentices in various groups (e.g. males in traditional trades), is fuelled by the perception that there are 'less exhausting ways to earn as little money' than in the occupations actually prepared for. In apprenticeship programmes at the bottom end of the stratification system, with low average wages and less attractive employers, young people may dream not for a better paid or a more demanding job, but simply for a less 'burdensome' place.

#### 4.7.8 Conclusion

The overall high prestige of IVET in Austria, as expressed by data of Eurobarometer 2011, is no artefact of any survey method, but represents a deeply rooted aspect of Austrian society. 88 percent of Austrians asked report a positive image of VET, the third highest value achieved in the EU-27 and the highest among the 7EU-VET countries<sup>164</sup>. The clear majority of adults – about 62 percent of adults making any recommendation – would recommend IVET to young people and not the 'Gymnasium'<sup>165</sup>. The high esteem of IVET in Austria is well supported by the outstanding high proportion of young people entering IVET in

<sup>163</sup> Hefler & Zimmer 2012

<sup>164</sup> Eurobarometer 2011, 22

<sup>165</sup> 21 percent recommend 'Gymnasium', 37 percent IVET and 39 percent say that it depends on the person (Eurobarometer 2011, 105).

their late teenage years; however, while accepting it as one side of the coin, it is equally important to note that IVET is composed of divided worlds, attractive and quite unattractive pathways. The differences in quality and career opportunities offered between types and within types of IVET – VET colleges, VET schools, Dual VET and the transition system – are significant. Only by taking into account both the vertical and the quite informal horizontal dimensions of social stratification can a full understanding of IVET and its dynamics beneath the level of formal school reform be achieved.

While within the VET system, ‘downwards’ mobility, leaving VET colleges for VET schools or Dual VET is considerably frequent, ‘upwards’ mobility for young people is still rare despite formal opportunities to change programmes. Formal adult education, to be entered some years later, after some work experience and often on a part-time basis, is the most frequently used pathway to continue education for students of low status programmes.

*All doors open:* The still expanding VET college sector, with its broad range of technical programmes, including chemistry or wood engineering, to tourism, design, business administration or early childhood education, contributes much to the high esteem of VET in Austria. Graduates’ employment prospects are bright so they can, if they like, enter the labour market immediately after finishing the ‘Matura’. For VET college graduates, career pathways are good, in particular, technical programmes. Wage levels differ; they are particularly high for VET college engineers. However, the majority of VET college students will enter higher education within three years of graduation. VET colleges have become an equally legitimate stepping stone to higher education as general academic education. They function as a ‘safety net’ for those in danger of not completing higher education successfully. However, while VET colleges ‘leave all doors open’, 15- to 19-year-old students pay a high price as their education is one year longer and their curricula are much more packed than their counterparts in ‘Gymnasiums’. They prepare more different ‘main subjects’ in their particular occupational studies, which are typically more demanding than traditional subjects such as German, Maths or foreign languages. They work long hours and spend part of their holiday time doing compulsory work experience. The high demands on students do not remain without consequences. Drop-out rates and proportions of students having to repeat one year in VET colleges are much higher than for Gymnasiums. For students who leave their occupational field after graduation, e.g. by entering higher education in a completely different field, the individual balance sheet may turn red as they will hardly use their acquired vocational knowledge later on. The results of the survey clearly reflect the particular position of VET colleges compared to the other segments of VET, but also show the differences between the VET colleges’ subtypes. As countries’ average figures are strongly influenced by their VET system’s composition of different layers, the VET colleges add much to the system’s more positive appearance.

Dual VET students’ perceptions of their programme, their competencies and their occupational careers are very mixed, representing the strong segmentation of the Dual VET sector.

*Entering niches:* Many Dual VET programmes do support entry to particular occupations and secure access to ‘Berufe’ and their more or less bright career prospects. However, the apprenticeship sector as a whole, the lynchpin of Austrian VET and youth employment policy, has been under strain for more than two decades and the piecemeal reforms have not succeeded in a substantial turnaround. Apprentices’ experiences vary a lot, yet they grow up fundamentally different from their school-going ‘immature’ counterparts, as – day by day – they go to work (not to school) and are obliged to live up to their employers’ multiple expectations, not only to become skilled and educated but to contribute in a productive way, ‘earning’ their wage substitute (*‘Lehrlingsentschädigung’*). Apprentices may learn their trades, collect more valuable and hard-to-copy practical skills of immediate value to any employer in the field than their school-based counterparts. Yet, compared to Germany, quality assurance for the company-based part of appren-

ticeship remains weak<sup>166</sup> and stories of young people being simply exploited by their employers are more than common<sup>167</sup>. The school-based part, although well-resourced, cannot make up for its restricted role. 'Berufsschulen' (part-time VET schools) have clearly suffered from the success of VET colleges. However, apprentices also look on the bright side of the system. They have escaped the pressures of school-based education, VET or academic. They earn their own money – a relief for anybody from a less affluent background, despite public support for families for the living costs for school children aged 15 and older. Their apprenticeship could provide substantial career prospects if they are in the right programme and/or with the right employer. Even in the most pressured programmes, suffering the most from adverse selection and employer exploitation, one might differentiate oneself based on superior skills developed and a strong occupational identity. At least, former apprentices are likely to secure a job which will provide sufficient income for a 'return' to education.

*Avoiding exclusion:* Many apprentices experience their dual programmes as agreeable only compared to having no apprenticeship at all and relying on one of the programmes sponsored by the public employment service. However, for apprentices who feel exploited by their 'Lehrherr', dropping out of a regular contract and entering its workshop-based alternative might become alluring. When employers cannot or are not prepared to provide feasible workshop-based training, then the VET part time school is not sufficient to allow for achieving the competencies required to pass the final examination. Apprentices in programmes, where traditionally many more apprentices are trained than qualified employees are required, suffer most from poor quality work-based training. There is little doubt that apprentices know if they are working for firms which are hardly competitive and cannot provide a valid insight into the state-of-the-art of their sector. Any apprenticeship, even in an unattractive programme and for a hardly attractive employer, provide at least some income and 'a qualification'; however, many apprenticeship spells promise little more than being somewhat better off than the few remaining 'unskilled' contemporaries. Even completing the programme successfully will not provide a secure base to build on, so students may lack the motivation to perform and fail to complete their programme, remaining officially unskilled.

After all, the more positive and more negative assessments of Dual VET students neutralise each other to some extent so that their impact on the 7EU-VET survey figures is not that strong. Nevertheless, it is important to note that, even in a country with a highly prestigious IVET system, a considerable portion of VET students face problems comparable with those in countries where IVET is a strongly disadvantaged branch of education.

VET schools, the junior partners of VET colleges, face difficulties attracting students and are targeted by manifold reforms – sector by sector, region by region. In our survey, for various reasons only two VET schools (and three classes) are represented. Nevertheless, the results from the three classes covered illustrate what we also heard in the expert interviews on the present state of Austrian VET. Some VET schools (in our sample, one in the field of agriculture) have successfully managed to find their niche and make a turnaround. Other VET schools, in particular in urban areas, suffer from adverse selection, an above-average drop-out rate and deteriorating employment opportunities for graduates. The commercial VET school classes in our sample partly illustrate these difficulties. However, VET schools also share much with VET colleges: the buildings, the infrastructure and the teaching bodies so there are plenty resources available for a 'turnaround'. To conclude, as the troubled VET school sector is underrepresented in the 7EU-VET sample<sup>168</sup>, the Austrian average figures become a little too rosy.

---

<sup>166</sup> Lassnigg 2006

<sup>167</sup> Reports on mistreated apprentices frequently appear in the Austrian media. The Arbeiterkammer often publishes studies on apprentices' discomfort. See, as an example, <http://wien.arbeiterkammer.at/online/lehrlingsumfrage-junge-wollen-fairness-63690.html>

<sup>168</sup> While 12 percent of 17/18-year-old VET students are in VET schools, VET school students make up only 4 percent of all students in the sample, respectively, 2 percent of the 17/18-year-olds reached.

## 4.8 Greece

### 4.8.1 General Education System Characteristics

In Greece, the Ministry of Education, Lifelong Learning and Religious Affairs (*Ypourgeio Paideias, Dia Viou Mathisis kai Thriskevmaton*, YPEPTH) has general responsibility for all levels of formal education and implements national educational policy.

Education in Greece is compulsory for all children between the ages 6 and 15 and normally includes primary (*demotiko*) and lower secondary education (*gymnasio*). Post-compulsory education currently consists of two types: *Eniaia Lykeia* (academic orientation) and Technical and Vocational Education (*EPAS VOCATIONAL SCHOOLS, VOCATIONAL LYCEUMS (EPAL)*). The main focal point of educational policy is that education is a social resource and the right of every citizen.

According to the Greek Constitution, education is a central mission of the state aimed at the moral, intellectual, professional and physical development of Greeks, the development of national and religious awareness and the formation of free and responsible citizens. According to the legislative framework prevailing in the Hellenic Republic, Pre-school, Primary and Lower Secondary Education are compulsory and free at all levels.

The Greek education system is highly centralised. General educational policy is formulated and issued by the Ministry of National Education which is responsible for the administration of all school units. Administration is carried out through the Central and Regional Services and through councils of a consultative and scientific nature that have been created and function in the Ministry's Central and Regional Services (Eurydice 2006).

Based on the laws passed by the Parliament for all levels of education, the state seeks to democratise education by decentralising it. Decentralisation is sought by ensuring the participation of those directly involved in the educational process and by improving the quality of the education provided. Few educational policy initiatives are undertaken for the development of programmes without outside funding serving as the stimulus. The designing, formation and implementation of educational programmes mostly emanate from 'above' and are controlled by exogenous parameters. In practice, new initiatives usually arise from the European Union.

The future of Greece's well-being will depend on improving educational performance to boost productivity and improve social outcomes. In the current economic context, with the need to ensure the best value for spending, Greece must and can address the inefficiencies in its education system.

Greece must take action in order to address the unsustainable cost structure of the system and the inefficiencies that are inherent in its outdated, ineffective centralised education structure. This must include: transforming governance and management structures, eliminating, consolidating or merging small and inefficient units, making significantly better use of human resources, improving quality-assurance and information systems for accountability, and establishing far more effective structures to lead and sustain the implementation of reforms. Real change can only be achieved through persistent, consistent implementation year after year, with careful attention to capacity building for improvement.

A recurrent theme of this report is that Greece must move from a highly centralised and fragmented system of input controls toward a more flexible system in which the Ministry of Education, Lifelong Learning and Religious Affairs focuses on responsibility and accountability for performance.

Changes in the education system must be made within the framework of overall national directions. Fundamental changes in budgeting and finance, as well as in the structure of national, regional and local governments, are likely to accelerate as a consequence of the economic crisis. This, in turn, will affect the government's human resource capacity at the school, institution, regional and national levels. Therefore, two major reforms will have significant implications for education:

- reform of central controls on budget expenditures and the use of human resources; and
- reform of regional governments.

The general administrative reform (Kallikratis), effective from 1 January 2011, is also important for the ongoing education reforms, especially the administrative restructuring and rationalisation of the school network. The former system of 13 regions, 54 prefectures, and 1,034 municipalities and communities was replaced by seven decentralised administrations, 13 regions and 325 municipalities. The regions and municipalities are fully self-governed, and their first elections were held between 7 and 14 November 2010. As regional organs of the central government, the previous regions were in turn replaced by seven decentralised administrations which group one to three regions under a government-appointed general secretary (Ministry of Interior, Decentralisation and E-Government, 2011).

The vast majority of Greek students attend state/public pre-primary, primary and secondary schools. All tertiary institutions (university and non-university level) are, by constitutional mandate, public establishments.

Pre-school education is intended for children aged 3 to 6 years; the final year of the three years, as of 2007-08, is compulsory. Its aim is stated to be "to help little children to develop physically, emotionally, socially and mentally within the broader aims of primary and secondary education" (Law 1566/85). Primary education is compulsory and lasts 6 years (usually for children aged 6 to 12 years). It is aimed at "the pupils' all-round mental and physical development, at their socialisation into national, religious and moral values, and the development/acquisition of basic oral written and computational skills" (Law 1566/85).

The secondary level of schooling is divided into two self-contained cycles: (a) an undifferentiated three-year *Gymnasion*, which is also compulsory; and (b) a differentiated three-year *Lykeio*, and two-year Vocational Lyceum (VOCATIONAL LYCEUMS (EPAL) – *Epaggelmatika Lykeia* – Law 3475/2006). Admission to both cycles is without examinations. The *Gymnasion* is envisaged as both a continuation of the basic general education of primary school and as the lower cycle of the secondary stage. Its purpose is described to be "to promote the pupils' all-round development in relation to the abilities which they have at this age, and the corresponding demands of life" (Law 1566/85).

Non-compulsory upper secondary education includes three types of schools: General Lyceum (*Geniko Lykeio*), Vocational Lyceum (*Epaggelmatiko Lykeio* – VOCATIONAL LYCEUMS (EPAL)) and Vocational Schools (*Epangelmatiki Scholi*, EPAS). Entrance to these schools is conditional upon the completion of compulsory education, but there are no age or examination requirements.

The difference between Vocational Lyceums (VOCATIONAL LYCEUMS (EPAL)) VOCATIONAL LYCEUMS (EPAL) and EPAS is that students who attend EPAS follow trades that do not need strong theoretical studies, they focus mainly on practice and are intended to enter the labour market as skilled technicians.

Learners are eligible to attend an EPAS if/when they have completed the first grade of a Lyceum or an VOCATIONAL LYCEUMS (EPAL).

Post-secondary non-tertiary vocational education and training is mainly provided by OEEK (the Organisation for Vocational Education & Training). Within the framework of the National VET System, OEEK acts as an independent body under the supervision of the Ministry of Education and provides formal IVET, has the overall responsibility for the Public Vocational Training Institutes (IEK) and the supervision and control of the private ones. Students can have access to such Institutes after three years of Lower Secondary Education (holders of a Gymnasium Certificate) or after attending a Lyceum, Vocational Lyceums (VOCATIONAL LYCEUMS (EPAL)), or Vocational School (EPAS) (holders of an Upper Secondary Education Certificate). Students who complete an IEK course receive a certificate, and those who pass the examination receive a diploma. Yet it should be pointed out that Vocational Training Institutes (IEKs) are not classified within the national education system and do not permit access to tertiary education.

There are also Vocational Training Centres (KEK) administered by the Ministry of Employment and Social Protection through the National Accreditation Centre for Continuing Vocational Training (EKEPIS), the agency with responsibility for the development and implementation of an accreditation system for continuing vocational training. The admission criteria vary according to the particular programme for which a person is applying. Upon successful completion of a programme, participants are provided with a certificate of attendance by the KEK. However, such programmes are not integrated into the formal VET system.

In addition, there are some specialised Lyceums such as Ecclesiastic Lyceums (for religious studies), Minority Lyceums (for minority pupils), Cross-Cultural Lyceums, Experimental Lyceums (*Peiramatika*), Music Lyceums and Special Education Lyceums.

Tertiary education in Greece has two parallel sectors<sup>169</sup>: a) the university sector, which includes the universities, the technical universities and schools of fine arts; and b) the technological sector, which includes the Technological Educational Institutions (TEIs) and the School of Pedagogical and Technological Education (ASPETE). The majority of undergraduate programmes in universities and TEIs last eight semesters (4 years – 240 ECTS credits) and are fully compatible with the European Qualifications Framework. Many postgraduate programmes are also available at the tertiary education level (ISCED level 6).

Students' entry to HE institutions (universities and TEIs) depends on their performance in national examinations that take place at the end of upper secondary school. Tertiary education in Greece is public and funded primarily by the state. Higher education is free of charge, with the exception of some postgraduate programmes and courses at the Hellenic Open University and the International Hellenic University.

The Greek education system strongly values general education and progression to higher education. In consequence, IVET programmes and institutions struggle to gain recognition and status.

#### **4.8.2 Fundamental principles and objectives**

During the last decade, Greek educational policy has emphasised the modernisation and expansion of lifelong learning and tertiary education. Key policy goals include: the coordination and enhancement of lifelong learning; the establishment of vocational secondary schools (VOCATIONAL LYCEUMS (EPAL)); easier access to post-secondary non-tertiary and tertiary education; the reform of higher education and the introduction of mandatory pre-school education.<sup>170</sup>

The reform has resulted in extensive legislation: there are now over 16 laws that regulate different aspects of secondary education.

---

<sup>169</sup> Greek Law 2916/2001

<sup>170</sup> Eurydice, (2009) "Structures of Education and Training Systems in Europe – Greece 2009/10 Edition", Available at: [www.eurydice.org](http://www.eurydice.org)

In particular, concerning the legal framework for VET education in Greece there have so far been eight laws since 1970.

#### *4.8.2.1 Admission criteria and progression*

Entrance to a Vocational Lykeio (VOCATIONAL LYCEUMS (EPAL)) takes place without examinations and the only requirement is a leaving certificate from a *Gymnasio* (lower secondary school) or an equivalent foreign certificate. After the first year, at the school nearest to where they live students select an occupational specialism which may involve them moving to a school which offers this specialism.

There are no restrictions on entry to Vocational Schools (EPAS). The vocational specialisms offered depend on the demand of pupils and local labour market needs (defined by the Ministry). Students enrol based on a preference for the courses provided.

The system does permit movement between institutions. Pupils who have successfully completed the 1st grade/year of either Vocational or General Lykeia may subsequently enrol in the 1st grade/year of EPAS.

Graduates of Vocational Lykeia (VOCATIONAL LYCEUMS (EPAL)) receive a school-leaving certificate and a level 3 qualification, which is equivalent to the leaving certificate of a general upper-secondary school. The graduates can obtain a licence to practise a particular trade or they can continue their studies in the same vocational specialism at an IEK (a post-secondary, non-higher institution). Alternatively, they can take exams to gain admission to higher education. The graduates of Vocational Schools (EPAS) receive a certificate which permits them to enter the labour market. Alternatively, they can enter a Vocational Lyceum or continue their studies in an IEK.

#### *Quality Assurance*

There are three levels of evaluation: school, regional and national. Over the last few years, the Ministry of Education has promoted school self-evaluation. At the school level, the principal is responsible for evaluating and recording the organisational and administrative effectiveness of his or her school. The School Evaluation Committee (Self-evaluation Committee) comprises five members of the Teachers' Association. At the end of each academic year, the Committee prepares an evaluation report. This report is submitted to the Education Research Centre of Greece (KEE) which, in cooperation with the Pedagogical Institute (PI), draws on the data contained in the report for an evaluation of the education system as a whole. Heads of Directorates and Heads of Education Offices write a report on the evaluation of schools and teachers in the region of their jurisdiction. These reports are sent to the Ministry of Education, Lifelong Learning and Religious Affairs, which undertakes to study, analyse and further utilise the information contained therein.

At the regional level, Regional Education Directors, one for each of the 13 regions of Greece, compile annual reports on education in their region and submit them to the Minister of Education to inform future educational plans. Regional Heads of Scientific and Pedagogical Guidance for Secondary Education coordinate guide and assess School Advisers working in their region. They prepare annual reports on the educational work performed in their jurisdiction and submit them to the Minister of Education. Regional Support and Educational Planning Centres (PEKESES) are responsible for collecting and processing data in order to facilitate the appraisal of education and educational planning for secondary education. Personnel working at Vocational Guidance Centres assess school performance with respect to preparation for life after school and vocational guidance.

The evaluation of schools at the national level is conducted by the Ministry of Education. The Ministry collects and evaluates all the regional evaluation reports and uses the results for monitoring the imple-

mented educational policy. The Pedagogical Institute (PI) plays a major role in this national evaluation. Departments within the PI develop proposals for the Ministry to evaluate particular aspects of education, for example, assessment.

#### Inclusion of social partners

Policy in Greece places an emphasis on the involvement of social partners in CVET.<sup>171</sup> This involvement is seen as essential if CVET is to be effective and to meet the actual requirements of the labour market. The Law 3369/2005 called for an enhancement of the role of the social partners on the National Committee for Lifelong Learning.

### 4.8.3 Socio-demographic Characteristics and Transition to IVET – Comparative Aspects of VET Structures

#### 4.8.3.1 VET structures: Schools and programmes

In Greece there are two basic types of vocational upper secondary schools: the Vocational Lyceum (Epaggelmatiko Lykeio – VOCATIONAL LYCEUMS (EPAL)) and the Vocational Schools (Epangelmatiki Scholi, EPAS).

##### *Vocational lyceums (epangelmatiko lykeio, (EPAL))*

Vocational *lyceums* provide general as well as technical education – vocational education along with training and it is classified as secondary non-compulsory education. The pupils cannot be more than 25 years old and they have to hold a lower secondary education completion certificate. Lower-secondary education and compulsory education end at age 15 in Greece so at this point students may seek entry to an VOCATIONAL LYCEUM (EPAL). Vocational *lyceums* offer both day and evening classes. There are no fees for pupils.<sup>172</sup>

##### *Vocational schools (epangelmatiki scholi, EPAS)*

EPAS recruit students aged 16 upwards. Usually students are aged 16-18 but EPAS accepts pupils up to 25. These students must have completed the first year of either a Vocational or a General Lyceum. EPAS operate during the daytime and there are no fees for students.

##### *Post-secondary vocational education*

Post-secondary education includes Vocational Training Institutes (*Institouta Epangelmatikis Katartisis, IEK – ISCED level 4*), which can be private or public. They cater to the needs of pupils who do not wish to continue studies in tertiary education nor to immediately enter the labour market as unskilled workers but who want to obtain vocational qualifications. Post-secondary education can also be provided by institutes run by various ministries.

##### *Continuing Education and Training (CET)*

In Greece, CET is the responsibility of the Ministry of Employment and its executive body, the National Accreditation Centre for Continuing Vocational Training (EKEPIS). The Greek CET system focuses on specific population groups: training for the unemployed; training for employees in the private sector; training for employees in the broader public sector; and training for socially vulnerable groups. Continuing Vocational Education and Training (CVET) is mainly provided by the Vocational Training Centres (KEK). KEKs can be public or private, profit or non-profit organisations. They are accredited by EKEPIS. They

---

<sup>171</sup> See Section A4

<sup>172</sup> Education in Greece for all levels of public education is free of charge and funded by the state. Teaching materials (e.g. textbooks, notes etc.) in secondary education are provided for free and the transportation costs of pupils from remote areas are also covered by the state. Some special benefits (free meals, housing and financial support) are provided to a certain number of pupils under specific conditions.

admit graduates of both secondary and tertiary education and they plan, organise and deliver short CVET programmes relating to different employment sectors for employees and the unemployed.

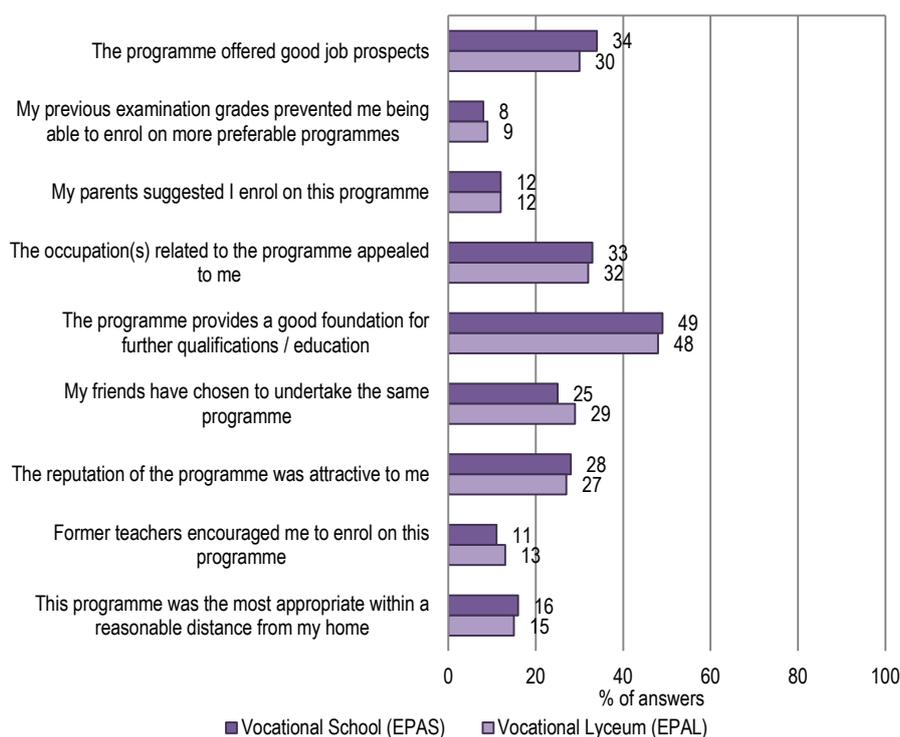
The vocational education and training system in Greece is school-based and characterised by two main structures – vocational school and vocational lyceums – that are delivering modularised curricula.

*Findings from the 7EU VET survey: Socio-demographic characteristics and the transition to VET*

*Students choose programmes that provide them with a foundation for further education, offer them good job prospects and programmes that are connected with an appealing occupation*

In general, Greek students more often choose their programme because they believe that the programme provides them with a good foundation for further education (49 percent), it offers them good job prospects and the occupation related to the programme appeals to them (32 percent) and offers good job prospects (44.5 percent). Far less often their decision is influenced by the reputation of the programme, friends' choice, the reasonable distance of the programme from their home, former teachers' encouragement, parents' suggestion or previous examination grades. For these factors affecting Greek students' choices, there are no significant differences because of the VET structure, i.e. among students in Vocational Schools (EPAS) as compared to students in Vocational Lyceums ((EPAL).

**Chart 4.96: Factors influencing students' programme choice by VET structures (in percent)**



Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Table 4.69 shows that girls in Vocational Schools are more often (33 percent) influenced by the reputation of the programme than boys (around 25 percent). More differences between genders can be noted among students in Vocational Lyceums where girls (18 percent) are more often influenced by their former teachers' suggestions than boys (10 percent).

**Table 4.69: Factors influencing students' programme choice by VET structures & gender (in percent)**

	Vocational School (EPAS)	Vocational Lyceum (EPAL)
<b>Male</b>		
The programme offered good job prospects	38	28
My previous examination grades prevented me being able to enrol in more preferable programmes	7	9
My parents suggested I enrol in this programme	12	12
The occupation(s) related to the programme appealed to me	29	35
The programme provides a good foundation for further qualifications / education	50	46
My friends have chosen to take the same programme	23	27
The reputation of the programme was attractive to me	24	25
Former teachers encouraged me to enrol in this programme	8	10
This programme was the most appropriate within a reasonable distance from my home	14	16
<b>Female</b>		
The programme offered good job prospects	30	36
My previous examination grades prevented me being able to enrol in more preferable programmes	10	8
My parents suggested I enrol in this programme	14	12
The occupation(s) related to the programme appealed to me	37	27
The programme provides a good foundation for further qualifications / education	47	53
My friends have chosen to take the same programme	28	34
The reputation of the programme was attractive to me	33	31
Former teachers encouraged me to enrol in this programme	14	18
This programme was the most appropriate within a reasonable distance from my home	18	12

*Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

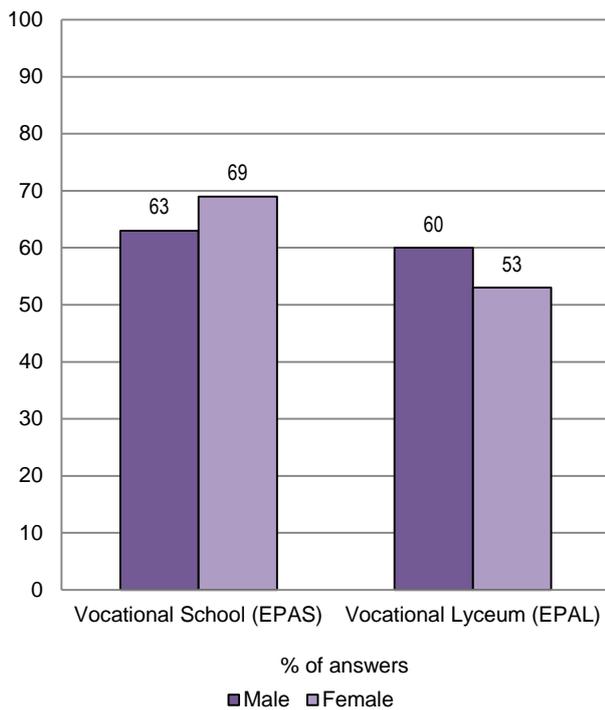
Former teachers' encouragement and suggestions more often influence pupils in service programmes in Vocational Lyceums (EPAL)(17 percent) than pupils in industrial programmes (10 percent).

Parents' education only influences the choice based on the distance of the programme from pupils' homes for students of VOCATIONAL LYCEUMS (EPAL); the lower the parents' education, the stronger influence this has. Similarly, parents' employment status impacts significantly only on a couple of the factors for students' programme choices. In the less demanding VET structure (EPAS), students with a part-time employed father claim more that the reputation of the programme played an important role (39 percent) than students whose father has a full-time job (22 percent). In the more demanding VET structures (VOCATIONAL LYCEUMS (EPAL), students whose mother has a full-time job claim more that the factor "the occupation related to the programme appeals to them" played an important role (38 percent) than students whose mothers have part-time jobs (28 percent).

*Most students in the process of enrolling in VET considered an alternative programme*

The majority of students (in both types of programmes) considered at least one alternative programme (61 percent) when deciding on the current one. Female students in more demanding programmes less often considered alternative programmes (53 percent) than female students in less demanding ones (69 percent). However, the sector of the programmes does not influence the differences between the two types (EPAS and VOCATIONAL LYCEUMS (EPAL)) of programmes in considering at least one other alternative programme.

Chart 4.97: Percentage of students also considering alternative programmes by VET structures & gender



Question: A6 Did you consider any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't considered any alternative programme", 2=" I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"

Students from more demanding programmes (EPAL) more often consider other alternative programmes if their parents have a higher education. However, parents' employment status does not exert an influence on students having more than one alternative.

#### 4.8.4 Vocational Curricula, Teaching Learning and School Success – Results from the Large-Scale Survey

##### *Vocational Curricula (school-based and practical training)*

According to Greek Law (3475/2006), both kinds of upper secondary vocational schools aim to combine general education with vocational education and their basic objectives are to: develop their pupils' abilities, initiative, creativity and critical thinking and to provide pupils with the required skills, technical and professional knowledge and development of relevant skills required for employment; and offer pupils the necessary knowledge and abilities in order to continue their studies at the next level of education.

##### *Vocational lyceums (epangelmatiko lykeio, (EPAL))*

During the first year, there is an emphasis on general education and modules from all vocational cycles<sup>173</sup> are offered by each school, but in the second and third years there is greater specialisation. In consequence, students commence their programme in the school nearest their home, but they may have to change school in subsequent years depending on their vocational specialisation.

##### *Vocational schools (epangelmatiki scholi, EPAS)*

The focus of EPAS is acquiring the skills and knowledge required to enter identified occupations. There are 33 identified occupational specialisms, e.g. Interior Design, Refrigeration, Ventilation and Air Condi-

<sup>173</sup> Technological, Services and Marine (Nautical - Shipping) cycle

tioning Technicians, Assistant Dental Technician, and Culinary Art. The curriculum includes technical knowledge as well as practical skill development.

*Assessment*

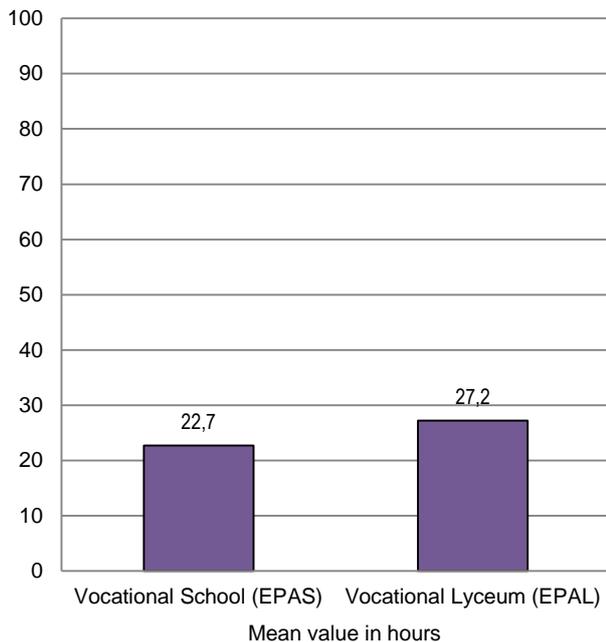
For the assessment of pupils in the VOCATIONAL LYCEUMS (EPAL) and EPAS, a variety of assessment methods and techniques is used in order to foster self-knowledge, to keep pupils and guardians fully informed and to enable teachers to draw conclusions about the results of their efforts and provide feedback for the teaching process<sup>174</sup>. Usually, pupils' evaluation is based on: participation in daily classroom work and overall activity at school; performance on written tests during the two four-month terms of the school year; composite creative projects; and individual files (keeping such files is elective for the school).

*Findings from the 7EU VET survey: Teaching Learning and School Success*

*VET students spent only a little time studying outside school*

It is not surprising that students in the more demanding programmes spend more time in school (27.2 hours per week) than those in the less demanding programmes (22.7 hours). In less demanding programmes, there are no differences in the time spent in school between genders, but that is not the case in more demanding programmes where boys spend 26.5 hours per week compared to girls who spend 29.0 hours in school. There is also a difference in the time spent in Vocational Lyceums depending on the sector orientation of the programmes: (27.8 hours/week in the industrial sector and 26 in the service sector).

*Chart 4.98: Students spending of time in school by VET structures*

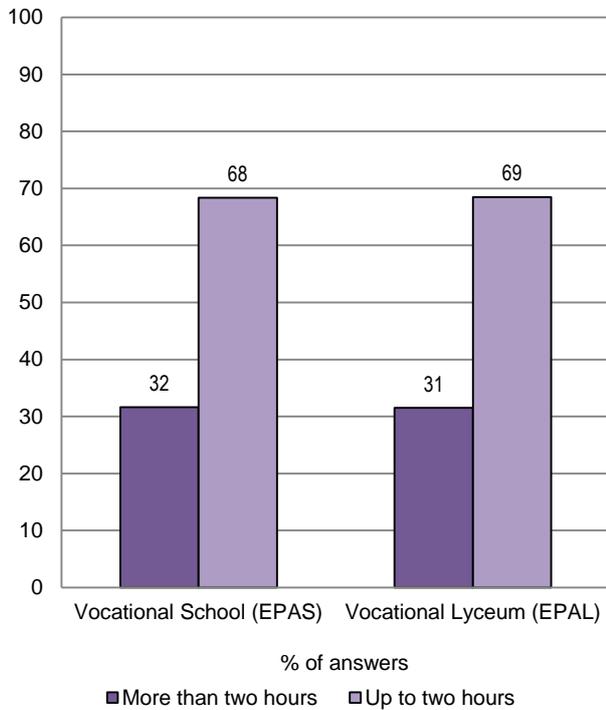


*Question: B3 How many school hours per week do you spend at school?*

<sup>174</sup> Eurydice, (2009) "Organisation of the education system in Greece", Available at: [www.eurydice.org](http://www.eurydice.org)

The majority of students in both programmes (almost 68 percent) spend less than two hours per week studying outside school. By contrast, only 32 percent of the students spend more than two hours studying out of school (Chart 4.99). These findings suggest that motivation, at least for independent study, is not high although it is reported that many Greek learners have other commitments such as paid employment (see below).

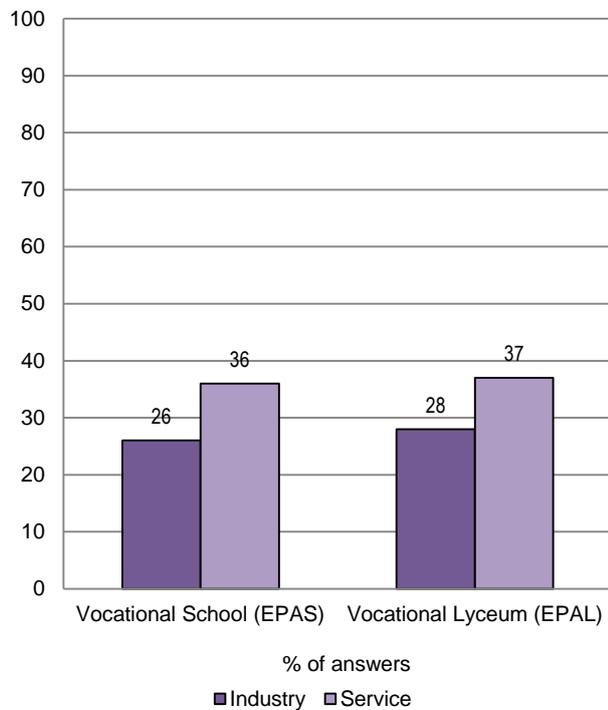
Chart 4.99: Hours students spend learning outside school by VET structures (in percent)



Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?

In Chart 4.100 we can see that in both types of programmes students spend more time studying outside school if they are in service programmes (36 percent) than students from industry programmes (27 percent).

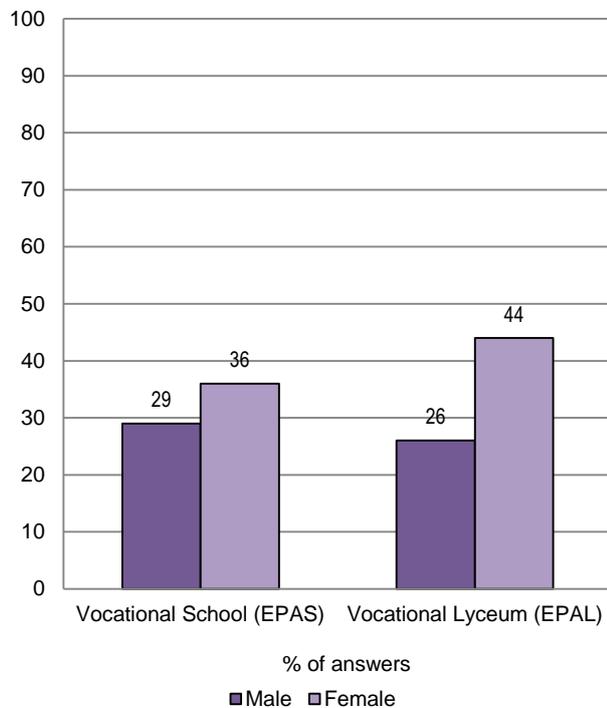
Chart 4.100: Hours students spend learning outside school by VET structures & programme orientation (in percent)



Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"

As expected, we can note from Chart 4.101 in both programmes that girls spend more time studying outside school than boys. This is especially true for female students in more demanding VET programmes (44 percent) in contrast to male students in the same type of programme (26 percent).

Chart 4.101: Hours students spend learning outside school by VET structures & gender (in percent)

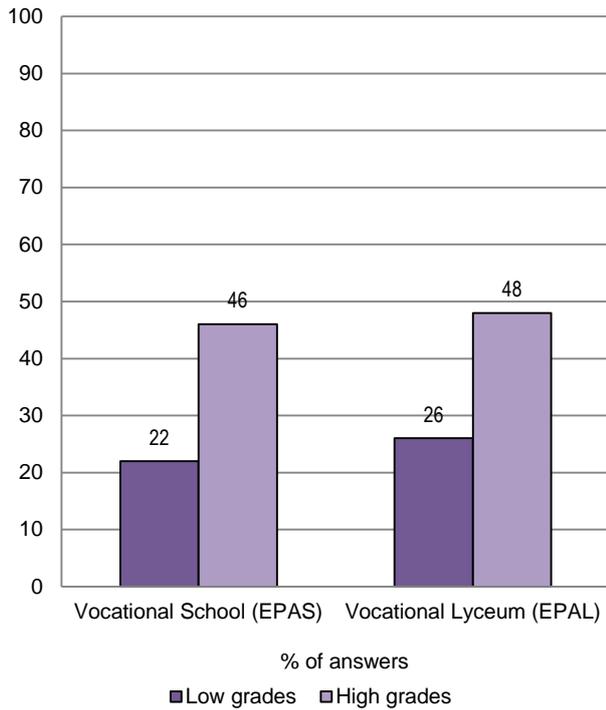


Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"

There are also important differences concerning the socio-economic status of students. In more demanding programmes, students with an above-average socio-economic status spend more time studying outside school (46 percent) than those with a below-average socio-economic status (26 percent : 39 percent).

Chart 4.102 shows another expected result. In both types of programmes, students with higher grades spend more time studying outside school (47 percent study for more than two hours per week) than students with low grades (24 percent). There are differences between the two programme types: in more demanding programmes only 26 percent of students with low grades learn more than two hours outside school compared to 48 percent of those with high grades, while in less demanding programme the figures are much lower: 46 percent and 22 percent.

Chart 4.102: Hours students spend learning outside school by VET structures & school success (in per-cent)

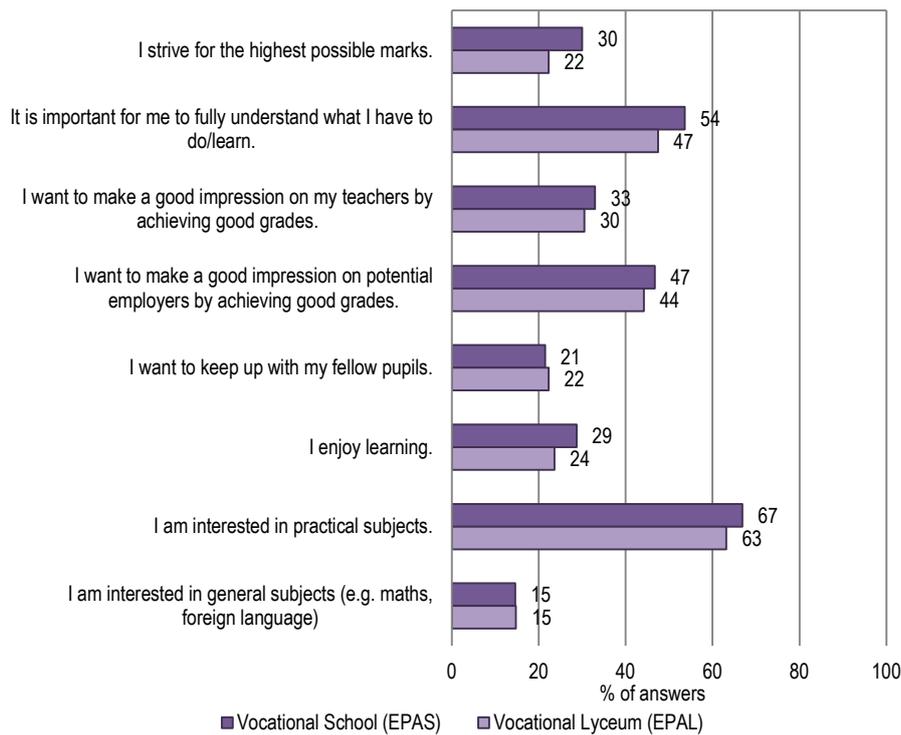


Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"

*VET students enjoy practical learning, are concerned to fully understand what they learn and they want to make a good impression on potential employers*

Following Chart 4.103, there are no larger differences in study behaviour between learners in the two types of vocational school, except in seeing the importance of fully understanding what they need to learn and striving for the highest possible marks, which are slightly more mentioned by students from less demanding programmes. Students from both types of programmes are less interested in general subjects and a low percentage agreed that they enjoy learning. The low level of reported enjoyment and relatively low levels of competition and ambition, with respect to grades, confirm the comments of the interviewed experts about motivation.

Chart 4.103: Students' learning incentives towards learning by VET structures (in percent)



Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

When comparing students by programme orientation, we can find some small differences (but not statistically significant ones). For example, in both types of school a higher percentage of students from the industry sector enjoy practical training than those from service programmes. Further, students in the service sector strive a little more often for higher grades and want to understand what they need to learn or do than students in industrial programmes. Similarly, there are minor differences when comparing students by gender.

Concerning the socio-economic status of students, in more demanding programmes students with an above-average status more often like to strive for the highest possible marks (42 percent) and more often like to keep up with fellow students (38 percent) than students with another socio-economic status (the corresponding shares for a below-average status are 22 percent and 17 percent, while for students with an average socio-economic status they are 21 percent and 25 percent).

Students' performance in terms of grades is connected with students' study behaviour in both types of programmes (Table 4.70), but the connection is stronger in more demanding programmes. In both types of programmes, students with lower grades less often strive for higher marks, find it important to fully understand what they have to learn, enjoy learning and are interested in general subjects than those with higher grades. In more demanding programmes, students with lower grades are also less often interested in practical subjects and want to make a good impression on potential employers by achieving good grades, while in less demanding programmes students with lower grades also less often want to make a good impression on teachers by achieving good grades.

**Table 4.70: Students' learning objectives by VET programme & grade (in percent)**

	Vocational School (EPAS)	Vocational Lyceum (EPAL)
<i>Low grades</i>		
I strive for the highest possible marks.	17	17
It is important for me to fully understand what I have to do/learn.	45	42
I want to make a good impression on my teachers by achieving good grades.	26	29
I want to make a good impression on potential employers by achieving good grades.	45	40
I want to keep up with my fellow pupils.	18	19
I enjoy learning.	21	17
I am interested in practical subjects.	63	61
I am interested in general subjects (e.g. maths, foreign languages)	12	11
<i>High grades</i>		
I strive for the highest possible marks.	45	35
It is important for me to fully understand what I have to do/learn.	64	61
I want to make a good impression on my teachers by achieving good grades.	44	39
I want to make a good impression on potential employers by achieving good grades.	54	60
I want to keep up with my fellow pupils.	24	27
I enjoy learning.	33	37
I am interested in practical subjects.	70	73
I am interested in general subjects (e.g. maths, foreign languages)	22	23

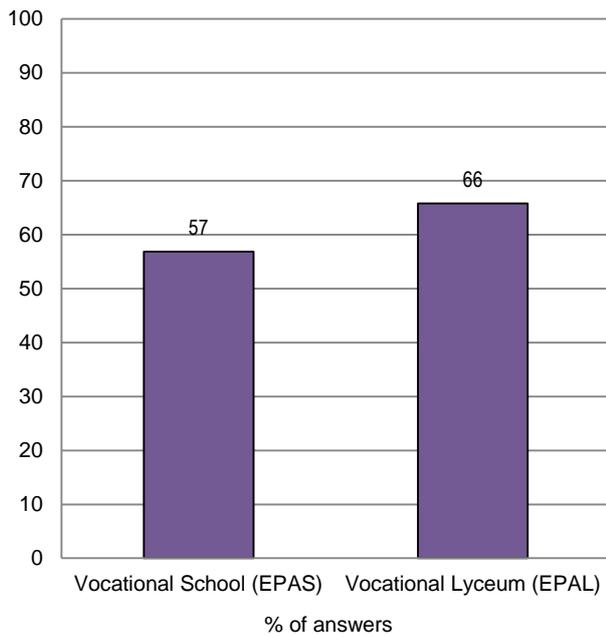
*Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*( ) n is less than 10, (()) n is less than 5*

*A surprisingly high percentage of VET students do paid work*

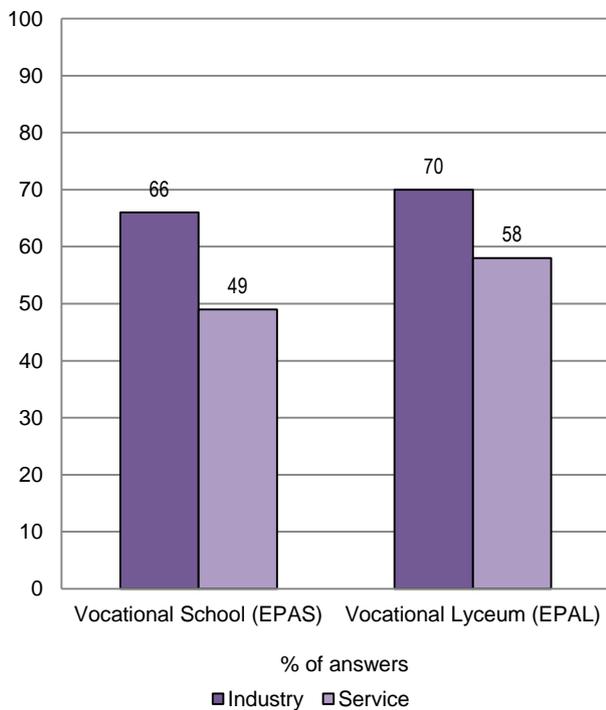
As seen in Chart 4.104, on average 62 percent of the interviewed VET students were doing paid work and the difference based on VET structure is insignificant, with only 9 percent more in the more demanding programmes. However, in both types of programmes students in industrial programmes more often did paid work than those from service programmes (Chart 4.105).

Chart 4.104: Students doing paid work by VET structures (in percent)



Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

Chart 4.105: Students doing paid work by VET structures & programme orientation (in percent)



Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

In addition, there are significant differences when comparing students by gender, while male students more often have work experience than female students in both types of programmes. In less demanding programmes, 68 percent of male students have done paid work in contrast to 42 percent of female students. The corresponding percentages in more demanding VET programmes are 73 percent for male and 50 percent for female students.

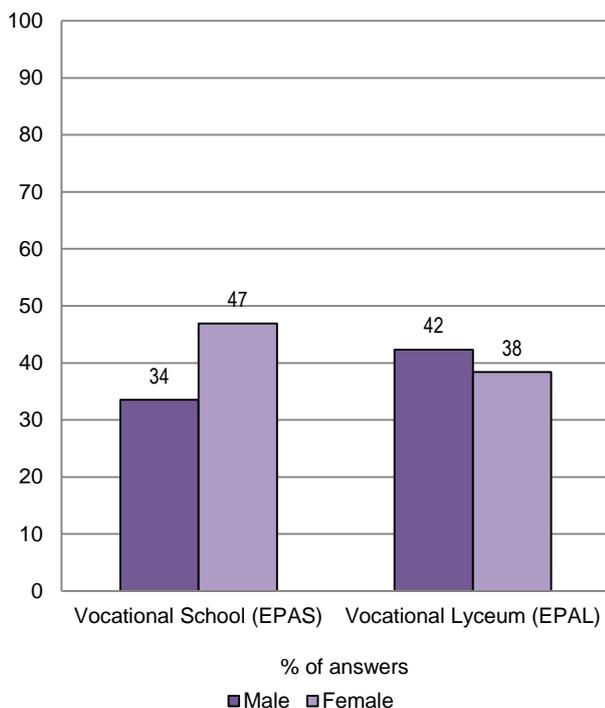
There are no significant differences among students' working status concerning other demographic variables. However, a couple of small (statistically insignificant) differences can be mentioned. For example, the lower the socio-economic status or grades of the students, the higher the percentage of working students. In addition, in Greece males are more likely to have paid employment and, in particular, more likely to work regularly (as opposed to during their holidays). This result can be interpreted considering the related gendered expectations about lifestyles and spending.

Concerning the work experience and status of Greek students, it is also worth mentioning that students in Greece (63 percent) are mostly likely to report that they worked in employment that was unrelated to their programmes.

*Students with higher grades are much more satisfied with VET programmes than students with low grades*  
 Concerning the overall satisfaction with the VET programmes, the survey shows that in both types of VET programmes the share of unsatisfied students is 60 percent. However, there is an important difference in less demanding programmes among the sectors. Students in programmes of the service sector express greater dissatisfaction (46 percent) than students in the industrial sector (31 percent).

In less demanding programmes, differences are also noticed in satisfaction between genders where 34 percent of the males are satisfied with their programme in contrast to 47 percent of the female students.

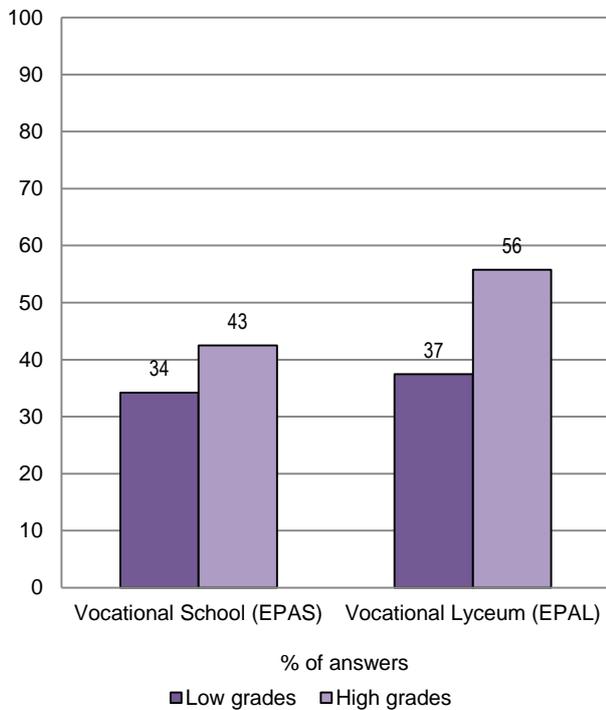
Chart 4.106: Satisfaction with the current programme by VET structures & gender (in percent)



Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all, I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Chart 4.107 also shows that performance at school influences students' satisfaction with the programme in both less and more demanding programmes, where those with high grades are more often satisfied than those with low grades. Statistically significant differences exist for students in more demanding programmes, where students with high grades are more satisfied than those with low grades.

*Chart 4.107: Students' overall satisfaction with the programme by VET structures & school success (in percent)*

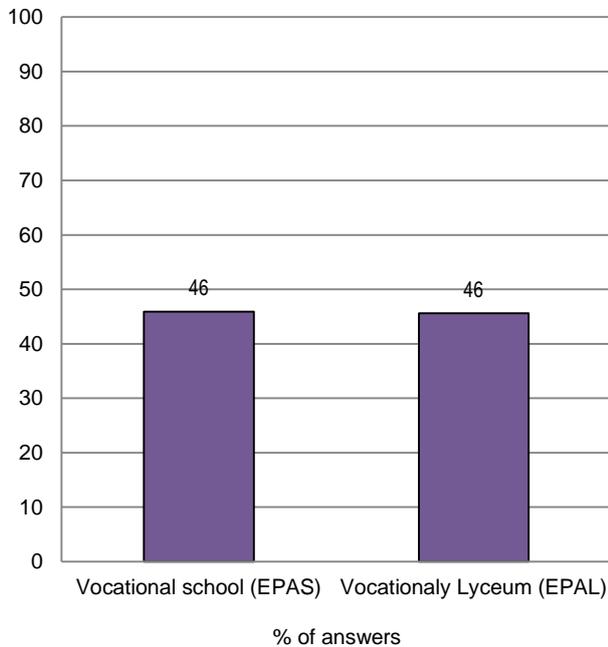


*Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all, I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*Grades importantly impact upon learners' perceptions of how well they are prepared for work*

Chart 4.108 reveals that in more and less demanding programmes almost half (46 percent) of students believe they are skilled to manage occupational tasks independently.

*Chart 4.108: Percentage of VET students who acquired selected competencies by type of programme (in percent)*



*Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently. Presented answers on a scale from 1="Poor" to 5="Excellent"*

Programme orientation, gender, parents' educational background and socio-economic status do not influence the acquisition of competencies for students in either type of programme.

However, acquisition of the skill to be able to manage occupational tasks independently is influenced by school performance, where in both less and more demanding programmes a bigger percentage of students with high grades acquired competencies than those with low grades. Especially among students with low grades, where only 41 percent (the overall percentage for both types of programmes) believe so, while 56 percent of students with high grades believe the programme prepares them well.

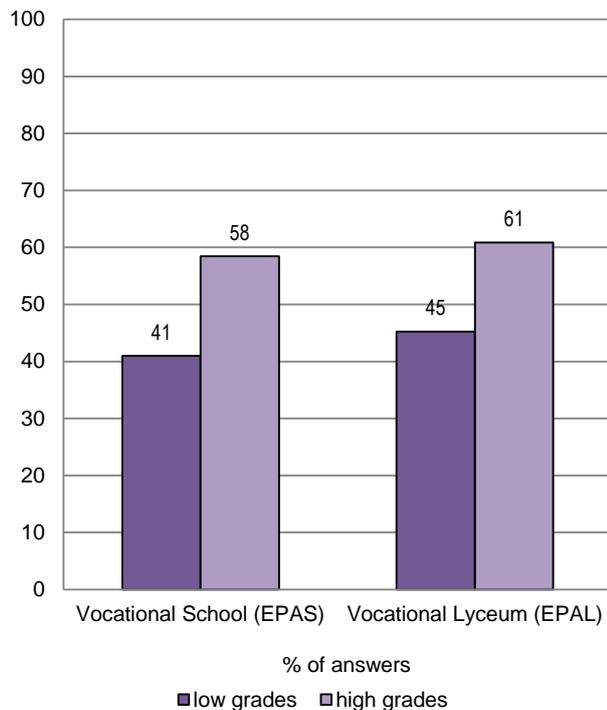
Half of the students from both types of programmes (51 percent and 51 percent) believe they are not prepared well overall. The overall acquisition of competencies is only influenced by gender, while a higher percentage of female students acquired competencies than male students. This is especially true in less demanding VET programmes.

A programme's orientation seems to influence students' beliefs about their overall preparation. In less demanding programmes, students in the service sector believe more that their current programme prepares them for occupational activities (57 percent) than students in the industrial sector (40 percent).

The overall acquisition of competencies is also strongly influenced by performance at school, where in both less and more demanding programmes a greater percentage of students with high grades acquired competencies than those with low grades.

Chart 4.109 shows that few students with a low grade believe that the programme prepares them well for all activities. Especially among students with low grades in more demanding programmes, where only 45 percent believe so, while 61 percent of students with high grades believe the programme prepares them well. Similar differences are also noted in less demanding programmes.

*Chart 4.109: Percentage of VET students who believe they have acquired overall competencies by programme and grade (in percent)*



*Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

This was confirmed in the students' focus groups where students expressed doubts about their programmes' abilities to prepare them for their future occupation.

#### **4.8.5 Career Guidance and Progression of IVET Graduates**

The Greek education system is under the supervision of the Ministry of Education. In Greece, the Ministry of Education also has the responsibility for VET education lasting 3 years and the Vocational Training Institutes (IEK) are part of post-secondary education offering formal education.

VET schools carry the main responsibility for vocational and educational guidance. Vocational guidance activities include lectures, visits to educational institutions, employers' visits, workshops and one-on-one interviews. The main purpose of these activities is to prepare students to enter the job market.

##### *National System of Career Guidance*

The National Centre for Vocational Orientation (EKEP) is a legal entity under private law, established under Law 2224/1994 and 2525/1997. It has been operating since 2000 under the supervision of the Ministry of Employment and Social Protection and the Ministry of National Education and Religious Affairs, pursuant to Presidential Decree 232/29-07-1998, as modified by Presidential Decree 44/9-2-2004. EKEP is the competent national coordination body in designing and implementing a National Policy on Guidance and

Counselling in the field of education/training and employment. Since 2010 EKEP has been under the supervision of the Ministry of Education, Lifelong Learning and Religious Affairs (Presidential Decree 24 - Government Gazette A 56/15.4.2010).

In the framework of the new policy in relation to lifelong learning, EKEP has been placed in the National Network of Lifelong Learning as one of the administrative bodies for lifelong learning regarding its responsibilities that are linked to counselling and vocational guidance in the lifelong learning framework. Counselling services and/or Vocational Guidance service providers are also part of the National Network of Lifelong Learning as the relevant bodies providing lifelong learning services.

At the national level, EKEP is the competent national coordination body responsible for:

- providing scientific and technical support to the relevant stakeholders in the ministries of education and employment in designing and implementing a National Policy on Guidance and Counselling;
- the development of communication and coordination of actions taken by private and public counselling and guidance service providers, aimed at the improvement of existing services;
- the education, initial and continuous training of counselling and guidance practitioners in collaboration with/or supplementing those provided by current training services in the relevant ministries of employment and education, defining the conditions and rules under which guidance and counselling services should operate, the relevance and adequacy of counselling and guidance practitioners' qualifications and keeping the relevant registers;
- establishing a National Information Network to be used by all relevant stakeholders and individuals regarding matters of education, training and exchange with other EU countries;
- developing criteria and human resource assessment standards regarding education and training, designing and implementing projects that are relevant to EKEP's mission either by the Centre's own structures or in collaboration with other private or public structures in the context of national, European and international programmes;
- conducting and commissioning surveys, research and projects to achieve its aims;
- cooperating on issues relevant to its responsibilities with organisations, centres and other key actors in Greece or abroad in order to achieve its aims; and
- organising conferences, meetings and other events relevant to its aims.

In Greece, the responsibility for managing, maintaining and developing information, guidance and counselling services lies with the Ministry of Education which is responsible for the provision of career information, guidance and counselling to students in the sectors of education and training, and the Ministry of Labour which is responsible for the provision of guidance and counselling services in the employment sector.

The Administration of Career Guidance and Educational Activities (SEPED) – Department A' School Career Guidance, Ministry of Education Lifelong Learning and Religious Affairs, has the following responsibilities: dealing with issues regarding Counselling/Career Guidance, providing educational and career information, coordinating the activities of the Career Counselling Centres (KESYPs) and School Bureaus of Educational and Career Counselling (GRASEPs), as well as being the responsible body for the administrative supervision, organisation and support of the above structures' actions. It is also the responsible body for managing actions regarding the creation and/or restructuring of Vocational Guidance structures as well as the responsible body for organising in-service and pre-service training courses for Guidance Counsellors.

*Career guidance services in secondary education*

- 81 Counselling and Guidance Centres (KESYPs): services provided include Counselling and Career Guidance at prefecture level. The target group is students and young people up to 25 years of age and also their parents.
- 570 School Career Counselling Offices (GRASEPs): Services provided include Counselling and Career Guidance in schools of secondary general education throughout the country. The target group is students and their parents.

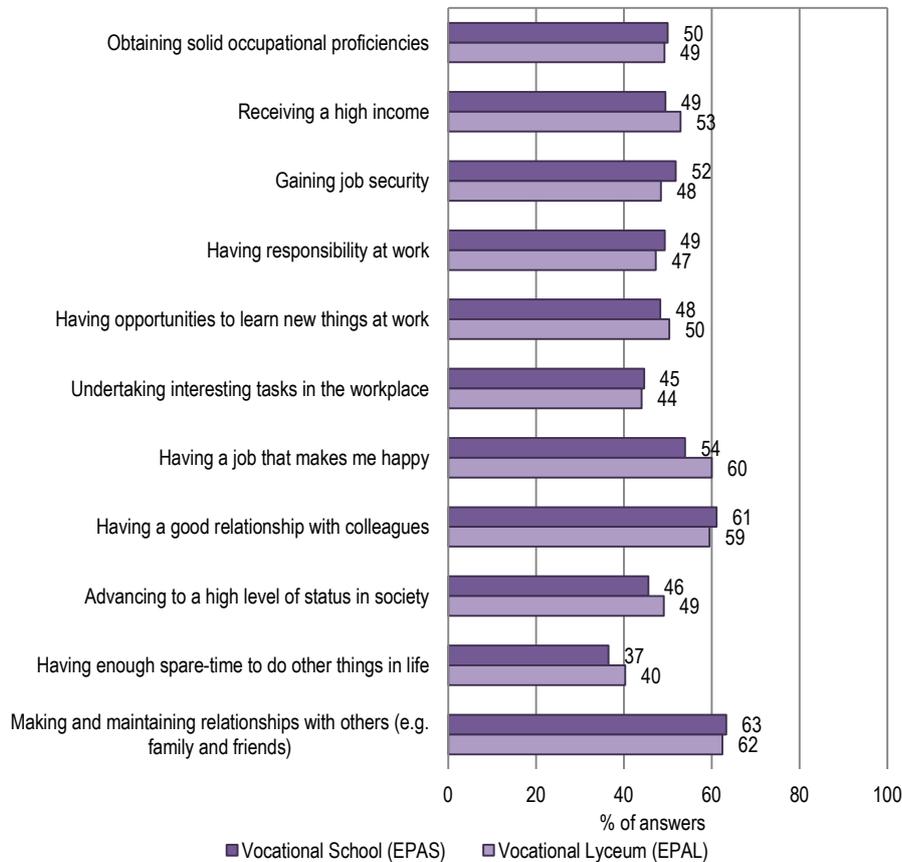
*Survey Results*

The survey provides strong feedback about the career goals of students and the reasons for choosing VET programmes in relation to their other (e.g. socio-demographic) characteristics.

*The majority of students (almost the same for both programmes) emphasise the making and maintaining of relationships with others as a career goal.*

Most often (approximately 62 percent) VET students strive for a job that makes and maintains relationships with others, a job that allows them to have good relationships with colleagues, that will make them happy, and a job that allows them to receive a higher income. Further, it is very important for students of both programmes to obtain solid occupational proficiencies (50 percent) and gain job security in this period of financial crisis.

*Chart 4.110: Drivers of VET students' professional development by programme type (in percent)*



*Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

Gender influences striving towards goals in more demanding VET programmes, where male students less often strive towards having enough spare time to do other things in life (37 percent) than female students (47 percent).

Striving towards goals was also influenced by the programme sector in the case of students from more demanding programmes. Students in service sector programmes would like to have more time to do other things in life (47 percent) and to make/maintain relationships with others (69 percent) than students in the industrial sector (37 percent and 59 percent, respectively).

Differences also exist concerning particular goals among students in less demanding programmes with different parental educational backgrounds. Students whose parents have an upper secondary and non-tertiary education more often strive towards having a good relationship, having a job that makes them happy and makes/maintains relationships with others than students whose parents have another educational background.

Similarly, students from more demanding programmes and with an above-average socio-economic status more often strive towards gaining job security (84 percent), obtaining solid occupational proficiencies (84 percent) and receiving a higher income (80 percent). In contrast, students from more demanding programmes with a below-average or average socio-economic status present much lower figures (45-50 percent) regarding these particular goals.

For students from less demanding programmes the influence of place of residence is stronger in a couple of goals. Students from big cities or the suburbs less often than the other two groups (students in farms/villages and small towns) strive towards having a good relationship with colleagues and having enough spare time to do other things in life.

As shown in Table 4.71, students from more demanding programmes and with high grades more often strive towards having a responsibility at work (57 percent) and undertaking tasks in the workplace (55 percent) than students with low grades. On the other side, students from less demanding programmes and with high grades more often strive towards having a job that makes them happy (61 percent), obtaining solid occupational proficiencies (60 percent), having opportunities to learn new things at work (58 percent) and undertaking tasks in the workplace (53 percent), in contrast to students with low grades where the respective percentages for these goals are considerably lower.

Table 4.71: Drivers of VET students' professional development by programme type and grade (in percent)

	Vocational School (EPAS)	Vocational Lyceum (EPAL)
<i>Low grades</i>		
Obtaining solid occupational proficiencies	43	46
Receiving a high income	47	52
Gaining job security	51	47
Having responsibility at work	47	43
Having opportunities to learn new things at work	39	49
Undertaking interesting tasks in the workplace	39	40
Having a job that makes me happy	48	59
Having a good relationship with colleagues	57	58
Advancing to a high level of status in society	42	47
Having enough spare-time to do other things in life	39	38
Making and maintaining relationships with others (e.g. family and friends)	62	62
<i>High grades</i>		
Obtaining solid occupational proficiencies	60	57
Receiving a high income	53	62
Gaining job security	55	56
Having responsibility at work	50	57
Having opportunities to learn new things at work	58	56
Undertaking interesting tasks in the workplace	53	55
Having a job that makes me happy	61	67
Having a good relationship with colleagues	66	66
Advancing to a high level of status in society	50	52
Having enough spare time to do other things in life	36	46
Making and maintaining relationships with others (e.g. family and friends)	65	70

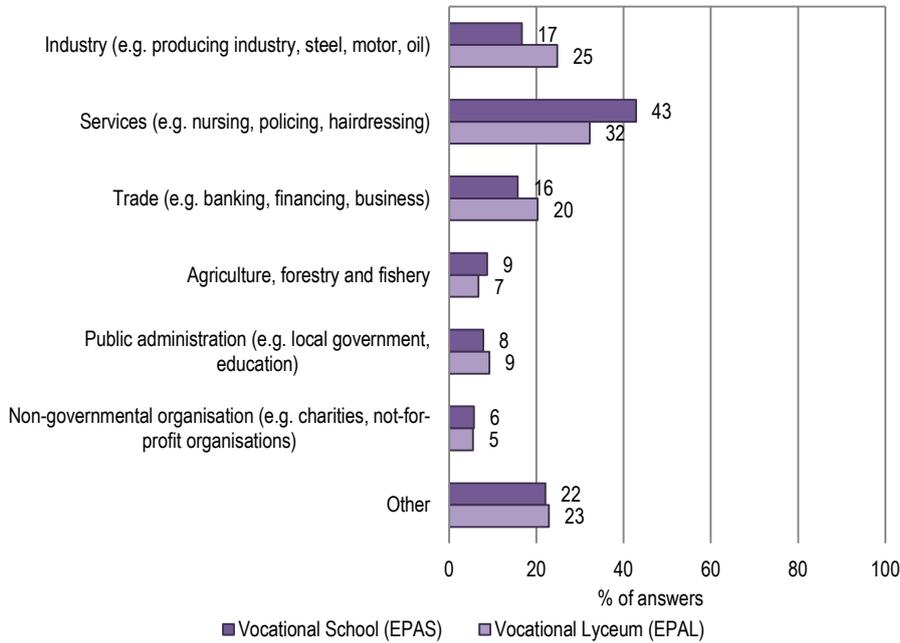
Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

( ) n is less than 10, (()) n is less than 5

*The most popular employment sector among students is services, followed by industry and trade*

Students in both programme types would like more to work in services and, after that, in trade, industry, public administration and other.

**Chart 4.111: Sectors students would like to work in by VET structures (in percent)**



Question: D5 Which sector would you like to work in the most?

In both types of programmes, students in industrial programmes more often choose industry and less often services than students from service programmes who more often choose services and less often industry. In addition, in less demanding industrial programmes students in industry programmes more often prefer trade and agriculture than students in service programmes.

*Table 4.72: Sector students would like to work in by VET structures & programme orientation (in percent)*

	Vocational School (EPAS)	Vocational Lyceum (EPAL)
<b>Industry</b>		
Industry (e.g. producing industry, steel, motor, oil)	31	33
Services (e.g. nursing, policing, hairdressing)	18	22
Trade (e.g. banking, financing, business)	20	21
Agriculture, forestry and fishery	12	8
Public administration (e.g. local government, education)	8	9
Non-governmental organisation (e.g. charities, not-for-profit organisations)	(4)	5
Other	24	25
<b>Service</b>		
Industry (e.g. producing industry, steel, motor, oil)	5	10
Services (e.g. nursing, policing, hairdressing)	63	52
Trade (e.g. banking, financing, business)	12	19
Agriculture, forestry and fishery	6	(4)
Public administration (e.g. local government, education)	8	10
Non-governmental organisation (e.g. charities, not-for-profit organisations)	7	7
Other	20	18

*Question: D5 Which sector would you like to work in the most?*

*( ) n is less than 10, (( )) n is less than 5*

Students from more demanding programmes and with an average socio-economic status more often prefer the service sector (40 percent) than students from more demanding programmes with a below- or above-average socio-economic status.

In more demanding programmes, students from a country village or farm more often choose agriculture, forestry and fishery (18 percent) than students from small towns or big cities (almost 4 percent in both cases).

Differences also exist among students in less demanding VET programmes with different parental educational backgrounds. The lower the education of students' parents, the stronger the preference of students for services and the lower the preferences for the industrial sector.

Concerning how gender influences students' decisions on sectors, Table 4.73 shows that in both types of programmes male students more often choose industry and agriculture and less often services than female students. Female students in more demanding programmes more often choose non-governmental organisations than male students, while male students in less demanding programmes more often choose trade than female students.

Table 4.73: Sectors students would like to work in by VET structures and gender (in percent)

	Vocational School (EPAS)	Vocational Lyceum (EPAL)
<b>Male</b>		
Industry (e.g. producing industry, steel, motor, oil)	26	34
Services (e.g. nursing, policing, hairdressing)	21	21
Trade (e.g. banking, financing, business)	21	23
Agriculture, forestry and fishery	13	9
Public administration (e.g. local government, education)	7	9
Non-governmental organisation (e.g. charities, not-for-profit organisations)	5	4
Other	25	25
<b>Female</b>		
Industry (e.g. producing industry, steel, motor, oil)	(4)	(5)
Services (e.g. nursing, policing, hairdressing)	72	58
Trade (e.g. banking, financing, business)	9	15
Agriculture, forestry and fishery	(4)	((3))
Public administration (e.g. local government, education)	8	10
Non-governmental organisation (e.g. charities, not-for-profit organisations)	7	9
Other	18	18

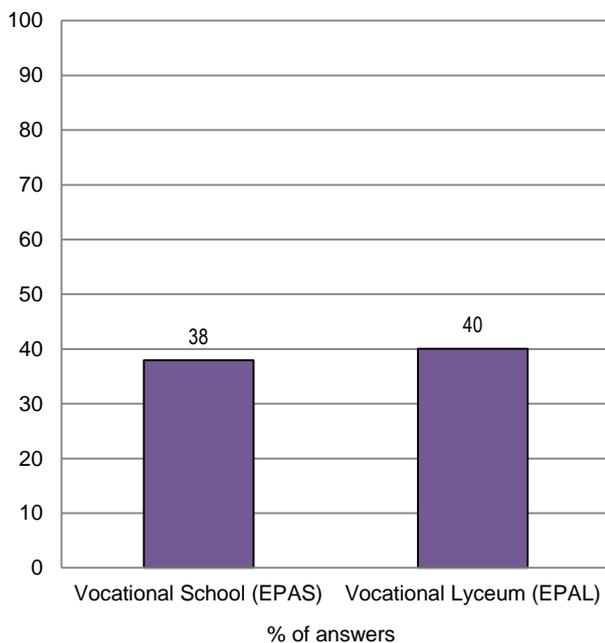
Question: D5 Which sector would you like to work in the most?

( ) n is less than 10, (( )) n is less than 5

Performance at school also significantly influences the students' choices of the sector they would like to work in. In less demanding programmes, students with high grades more often choose services (52 percent) than students with low grades (32 percent). In more demanding programmes, students with high grades less often choose industry (18 percent) and more often non-governmental organisations (9 percent) than students with low grades (27 percent and 4 percent, respectively).

In both programme types the majority of students reported they are not likely to continue on to further education.

Chart 4.112: Percentage of VET students who intend to continue schooling by VET structures (in percent)



Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example, doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

In both types of programmes, female students (49 percent) and students in service programmes (47 percent) would like to continue their education more than male students (33 percent) and students in industrial programmes (32 percent).

In more demanding programmes, there are some differences concerning the socio-economic status of the students, as well as their parents' education background. Students with an above-average socio-economic status are more willing to continue education (61 percent) than students with an average (46 percent) or below-average socio-economic status (34 percent). Further, in more demanding programmes, the higher the education of the parents, the greater the willingness of the students to continue their education.

Performance at school only significantly influences the students' choices to continue education in less demanding programmes. In these programmes, students with high grades more often claim that they would like to continue schooling or further education (48 percent) than students with low grades (33 percent).

Residency does not significantly influence students' intentions to continue schooling.

#### 4.8.6 Conclusion

VET students in Greece have a low level of satisfaction with their programmes and do not believe they offer great opportunities to enter the job market. There is currently no clear institutional framework (provided by the Greek government) for the role and the function of secondary VET. The secondary VET system was described by the participants in the second focus group as a field for "political experiments" because there are so many laws covering VET education.

The majority of VET students reported that their main career goals are to enjoy their work and have good relationships with their colleagues. A majority of Greek vocational learners do not intend to continue their education or training.

According to the survey, the interviews with VET students and the qualitative interviews with experts we may conclude that the biggest issue for VET in Greece is its low status. This can be explained by the low level of learning skills of the pupils and the weaknesses of VET schools (for example, poor infrastructure and inadequate teachers' training). These weaknesses explain the low satisfaction and widespread belief that VET does not greatly add to employment chances.

There are important differences among Greek regions concerning the infrastructure for VET. For example, in Crete the infrastructure for VET schools is relatively good in comparison with other Greek regions.

The connection between initial VET and the market is becoming weaker because of the economic crisis. The role of the social partners (e.g. chambers) in formulating the VET strategy needs to be upgraded. The Ministry of Education plans to reform the initial VET system. The two main secondary schools that offer VET (VOCATIONAL LYCEUMS (EPAL) and EPAS) will be abolished and in their place a new form of school (Technological Lyceum) will be created. The experts in the project's interviews claimed that this is the "last opportunity" for VET education, but they expressed doubts about the outcomes because the educational reform will be connected strongly with the current austerity measures, which means the reforms are likely to be under-resourced.

## 5 DIFFERENCES AND SIMILARITIES OF VET SYSTEMS IN THE 7EU-VET COUNTRIES

In this chapter we explore differences and similarities of the Initial Vocational Education and Training (VET) systems of the seven countries under study. As in Chapter 4, the main data source used is the one generated in the 7EU-VET project (including 17- and 18-year-old VET students) and at relevant points complemented with the Eurobarometer and Labour Force surveys. Six main sections address the following key issues:

- *Socio-demographic Characteristics*
- *Transition from previous education into VET*
- *Perception, learning and satisfaction with VET programmes*
- *Information and Communication Technology*
- *Acquired Competencies and School Success*
- *Future Career Perspectives and Further Education*

On the basis of this chapter together with the third and fourth chapters, we aim to draw methodological and policy conclusions.

Samo Pavlin and  
Božidar Grigić

### 5.1 Socio-demographic Characteristics in the 7EU-VET Countries

*The starting points for considering the similarities and differences of VET systems relate to multiple aspects such as adult involvement in lifelong learning, the ratio of graduates between VET graduates and graduates of general education.*

There are several possible approaches and sources which offer an international comparison of VET students in Europe. In this section, we only present those which hold relevance to later sections. One of the many possible starting points to look at an international comparison of the VET system is to consider the adult participation in lifelong learning which is becoming increasingly 'an extension' of formal education, and hence indicates to what extent particular EU countries are modernising non-formal education. As Table 5.1 shows, lifelong learning refers to persons aged 25 to 64 who stated that they had received education or training in the four weeks preceding the survey (numerator). The denominator consists of the total population of the same age group, excluding those who did not answer the question on "participation in education and training". The information collected relates to all education or training whether or not it was relevant to the respondent's current or possible future job.

Table 5.1: Adult participation in lifelong learning (in percent)

GEO/TIME	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EU (27 countries)	:	:	:	:	:	:	:	:	7.1e	7.1e	7.2	8.5 b	9.2	<b>9.6</b>	<b>9.5</b>	9.3	<b>9.4</b>	9.3	9.1	8.9
Belgium	2.3	2.7	2.7	2.8	2.9	3.0	4.4	6.9 b	6.2 i	6.4	6.0	7.0	<b>8.6 b</b>	<b>8.3</b>	<b>7.5</b>	7.2	6.8	6.8	7.2	7.1
Bulgaria	:	:	:	:	:	:	:	:	:	<b>1.4</b>	1.2	1.3	1.3	1.3	1.3	1.3	<b>1.4</b>	<b>1.4</b>	1.2	1.2
Czech Republic	:	:	:	:	:	:	:	:	:	:	5.6	5.1 b	5.8	5.6	5.6 i	5.7	<b>7.8</b>	6.8	<b>7.5</b>	<b>11.4b</b>
Denmark	16.2	15.6	15.1	16.8	18.0	18.9	19.8	19.8	19.4b	18.4	18.0	24.2b	25.6	27.4	29.2	29.0	29.9	<b>31.2</b>	<b>32.5</b>	<b>32.3</b>
Germany	:	:	:	:	5.7	5.4	5.3	5.5	5.2	5.2	5.8	6.0 i	7.4 i	7.7	7.5	<b>7.8</b>	<b>7.9</b>	<b>7.8</b>	7.7	<b>7.8</b>
Estonia	:	:	:	:	:	4.3	6.3	6.5	6.5 b	5.4	5.4	6.7	6.4	5.9	6.5	7.0	9.8	<b>10.5</b>	<b>10.9</b>	<b>12.0</b>
Ireland	3.4	3.5	3.9	4.3	4.8	5.2	:	:	:	:	5.5	5.9 b	6.1	<b>7.4</b>	<b>7.3</b>	<b>7.6</b>	7.1	6.3	6.7	6.8
Greece	1.2	1.1	1.0	0.9	0.9	0.9	1.0	1.3	1.0	1.2	1.1	2.6 b	1.8	1.9	1.9	2.1	<b>2.9</b>	<b>3.3</b>	<b>3.0</b>	2.4
Spain	3.4	3.5	3.9	4.3	4.4	4.4	4.2	5.0	4.5 b	4.4	4.4	4.7	4.7	<b>10.5b</b>	10.4	10.4	10.4	10.4	<b>10.8</b>	<b>10.8</b>
France	2.9	3.0	2.9	2.9	2.7	2.9	2.7	2.6	2.8	2.7	2.7	<b>6.8 b</b>	6.0	5.9	<b>6.4</b>	<b>6.1</b>	6.0	5.7	5.0	5.5
Italy	3.0	3.3 b	3.4	3.8	4.1	4.6	4.8	5.5	4.8 b	4.5	4.4	4.5	6.3 b	5.8	6.1	<b>6.2</b>	<b>6.3</b>	6.0	<b>6.2</b>	5.7
Cyprus	:	:	:	:	:	:	:	3.0	3.1	3.4	3.7	7.9 b	<b>9.3</b>	5.9 b	7.1	<b>8.4</b>	<b>8.5</b>	7.8	7.7	7.5
Latvia	:	:	:	:	:	:	:	:	:	:	7.3	<b>7.8</b>	<b>8.4</b>	<b>7.9</b>	6.9	7.1	6.8	5.3	5.0	5.0
Lithuania	:	:	:	:	:	:	:	3.9	2.8	3.5	3.0 b	3.8	<b>5.9 b</b>	<b>6.0</b>	4.9	5.3	4.9	4.5	4.0	<b>5.9</b>
Luxembourg	2.9	2.6	3.3	2.9	2.9	2.8	5.1 b	5.3	4.8	5.3	7.7	6.5 b	9.8	8.5	8.2	7.0	8.5	<b>13.4b</b>	<b>13.4</b>	<b>13.6</b>
Hungary	:	:	:	:	:	2.9	3.3	2.9	2.9	2.7	2.9	<b>4.5 b</b>	<b>4.0</b>	<b>3.9</b>	3.8	3.6	3.1	2.7	2.8	2.7
Malta	:	:	:	:	:	:	:	:	4.5	4.6	4.4	4.2	4.3 b	5.3	5.4	6.0	<b>6.3</b>	6.1	<b>6.2</b>	<b>6.6</b>
Netherlands	15.1	14.3	13.6	13.1	12.5	12.6	12.9	13.6	15.5	15.9	15.8	16.4b	16.4	15.9	15.6	16.6	<b>17.0</b>	<b>17.0</b>	16.6b	<b>16.7</b>
Austria	:	:	:	7.7	7.9	7.8	:	9.1	8.3	8.2	7.5	8.6 b	11.6i	12.9	13.1	12.8	13.2	<b>13.8</b>	<b>13.7</b>	<b>13.4</b>
Poland	:	:	:	:	:	:	:	:	4.3	4.2	4.4	4.4	<b>5.0 b</b>	4.9	4.7	<b>5.1</b>	4.7	4.7	<b>5.3</b>	4.5
Portugal	3.6	3.2	3.5	3.3	3.4	3.5	3.1 b	3.4	3.4	3.3	2.9	3.2	4.3 b	4.1	4.2	4.4	5.3	<b>6.5</b>	<b>5.8</b>	<b>11.6b</b>
Romania	:	:	:	:	:	0.9	1.0	0.8	0.9	1.0	1.0	1.1	<b>1.5 b</b>	<b>1.6</b>	1.3	1.3	<b>1.5</b>	<b>1.5</b>	1.3	<b>1.6</b>
Slovenia	:	:	:	:	:	:	:	:	:	7.3	8.4	13.3b	<b>16.2</b>	15.3	15.0	14.8	13.9	14.6	<b>16.2</b>	<b>15.9</b>
Slovakia	:	:	:	:	:	:	:	:	:	:	<b>8.5</b>	3.7 b	<b>4.3</b>	<b>4.6</b>	4.1	3.9	3.3	2.8	2.8	3.9
Finland	:	:	:	:	16.3	15.8	16.1	17.6	17.5b	17.2	17.3	22.4b	22.8	22.5	<b>23.1</b>	<b>23.4</b>	<b>23.1</b>	22.1	23.0	<b>23.8</b>
Sweden	:	:	:	:	<b>26.5</b>	<b>25.0</b>	:	<b>25.8</b>	21.6	17.5b	18.4	:	:	17.4p	18.4p	18.6p	22.2b	22.2p	24.5	<b>25.0</b>
United Kingdom	12.5	10.8	11.5	:	:	:	:	19.2	20.5b	20.9	21.3	<b>27.2b</b>	<b>29.0</b>	<b>27.6</b>	26.7	20.0b	19.9	20.1	19.4	15.8p
Iceland	:	:	:	14.1	15.7	16.5	19.3	20.2	23.5	23.5	24.0	<b>29.5b</b>	24.2	25.7	<b>27.9</b>	<b>27.0</b>	25.1	25.1	25.2	25.9
Liechtenstein	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Norway	:	:	:	:	16.5	16.4	:	:	13.3	14.2	13.3	17.1b	17.4	17.8	<b>18.7</b>	18.0	<b>19.3</b>	18.1	17.8	<b>18.2</b>
Switzerland	:	:	:	:	29.5	29.8	33.3	31.1	<b>34.7</b>	<b>37.3</b>	<b>35.8</b>	24.7b	28.6	27.0	22.5i	26.8	27.9	23.9i	30.6	29.9
Montenegro	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Croatia	:	:	:	:	:	:	:	:	:	:	1.9	1.8	1.9	2.1	<b>2.9</b>	<b>2.4</b>	2.2	<b>2.3</b>	2.2	<b>2.3</b>
Former Yugoslav Republic of Macedonia, the	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.3	2.8	2.5	<b>3.3</b>	<b>3.2</b>	<b>3.4</b>
Turkey	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.8	1.5	1.9	<b>2.3</b>	<b>2.5</b>	<b>2.9</b>

:=not available e=estimated b=break in series i=see metadata p=provisional u=unreliable

Source: Eurostat. 2012. Labour force study. Adult participation in Lifelong Learning.

The EU-27 has now reached the participation rate of 8.9 percent but data show that performance has slightly declined since 2005 (9.6 percent). There are significant differences between the countries included in the 7-EU-VET study with Slovenia (15.9 percent), United Kingdom (15.8 percent) and Austria (13.4 percent) being highly above the EU average and Latvia (5.0 percent), Lithuania (5.9 percent) and especially Greece (2.4 percent) highly below the average. Germany's performance is closest to the EU-27 average (7.8 percent), however it is not reaching it.

Countries with the most comprehensive lifelong learning strategies appear to be northern countries (Finland, Sweden and especially Denmark) that all have exceptionally high overall participation rates (more than 20 percent, in the case of Denmark even more than 30 percent). The UK used to be a member of this

group, however its performance has gradually declined since 2004 (from 29 percent to 15.8 percent), therefore this data puts it in the second group together with Slovenia, Austria, Luxembourg (13.6 percent) and the Netherlands (16.7 percent). We can compare Germany's result with e.g. Belgium (7.1 percent), Ireland (6.8 percent) and Cyprus (7.5 percent). The results for Lithuania and Latvia can also be compared with France (5.5 percent), Italy (5.7 percent) as well as Poland (4.5 percent). Greece was lowest with only 2.4 percent and falls into the group of worst performing countries together with Bulgaria (1.2 percent), Hungary (2.7 percent), Romania (1.6 percent) and Slovakia (3.9 percent).<sup>175</sup> Next, the share of the population aged 20 to 24 that completed at least upper-secondary education is presented in Table 5.2. The latest (2011) EU-27 average for the population aged 20 to 24 is 79.5 percent and has slightly improved (by 2.9 percent) since the year 2000.

---

<sup>175</sup> Eurostat. 2012. Adult participation in Lifelong Learning.

Table 5.2: Percentage of youth education attainment level, by country

GEO/TIME	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
European Union (27 countries)	:	:	:	:	:	:	:	:	76.6	76.6	76.7	77.1	77.3	77.5	77.9	78.1	78.4	<b>78.6</b>	<b>79.0</b>	<b>79.5</b>
Belgium	74.4	74.8	76.3	77.6	80.2	80.1	79.6	76.2i	81.7b	81.7	81.6	81.2	81.8	81.8	82.4	<b>82.6</b>	82.2	<b>83.3</b>	<b>82.5</b>	81.6
Bulgaria	:	:	:	:	:	:	:	:	75.2	78.1b	77.4	76.3	76.1	76.5	80.5i	83.3	<b>83.7</b>	<b>83.7</b>	<b>84.4</b>	<b>85.5</b>
Czech Republic	:	:	:	:	:	:	<b>92.2</b>	91.8	91.2	90.6	<b>92.2</b>	<b>92.1</b>	91.4	91.2	91.8	91.8	91.6	91.9	91.9	91.7
Denmark	78.7	<b>87.5</b>	<b>84.9</b>	<b>89.3</b>	74.6b	73.6	76.3	73.2	72.0	78.4i	78.6	76.2b	76.2	77.1	77.4	69.4b	68.9	69.9	68.6	70.0
Germany	<b>82.4</b>	<b>81.3</b>	<b>82.8</b>	79.4	74.9b	74.8	:	74.6	74.7	73.6	73.3	72.5	72.8	71.4b	71.9	72.9	74.1	73.7	74.4	75.8
Estonia	:	:	:	:	:	:	<b>83.1</b>	<b>83.0</b>	79.0b	79.8	81.4	81.5	80.3	<b>82.6</b>	82.0	80.9	82.2	82.3	83.2	<b>82.6</b>
Ireland	67.5	71.8	72.2	73.8	77.3	77.4	:	82.0	82.6	83.9	84.0	85.1	85.3	85.8	85.8	<b>86.8</b>	<b>87.7</b>	86.4	86.5	<b>86.9</b>
Greece	71.2	70.9	71.4	73.8	75.3	76.8	76.4	78.6	79.2	80.2	81.1	81.7	83.0	<b>84.1</b>	81.0	82.1	82.1	82.2	<b>83.4</b>	<b>83.6</b>
Spain	52.7	55.4	56.1	59.0	61.5	63.7	64.6i	<b>65.2i</b>	<b>66.0</b>	<b>65.0</b>	63.7	62.2	61.2	61.8	61.6	61.1	60.0	59.9	61.2	61.7
France	:	76.6	77.5	78.6	75.2	76.3	78.9	80.0	81.6	81.8	81.7	82.8b	83.0	83.4	83.3	82.4	<b>83.8</b>	<b>83.6</b>	83.2	<b>83.8</b>
Italy	55.1	54.7b	56.3	58.9	60.9	62.4	65.3	66.3	69.4b	67.9	69.6	71.0	73.4	73.6	75.5	76.3	<b>76.5</b>	<b>76.3</b>	<b>76.3</b>	<b>76.9</b>
Cyprus	:	:	:	:	:	:	:	80.8	79.0	80.5	83.5	79.5	77.6	80.4	83.7	85.8	85.1	<b>87.4</b>	<b>86.3</b>	<b>87.7</b>
Latvia	:	:	:	:	:	:	78.5	74.6b	76.5	71.7i	77.1b	75.4	79.5	79.8	<b>81.0</b>	80.2	80.0	<b>80.5</b>	79.9	<b>80.4</b>
Lithuania	:	:	:	:	:	:	83.2	81.3	78.9i	80.5	81.3b	84.2	85.0	87.8	<b>88.2</b>	<b>89.0</b>	<b>89.1</b>	86.9	86.9	86.9
Luxembourg	45.6	52.8	54.0	51.9	49.5	53.1	:	71.2b	<b>77.5</b>	68.0	69.8	72.7b	72.5	71.1	69.3	70.9	72.8	<b>76.8b</b>	<b>73.4</b>	73.3
Hungary	:	:	:	:	:	77.7	81.5	<b>85.2</b>	83.5	84.7	<b>85.9</b>	<b>84.7b</b>	83.5	83.4	82.9	84.0	83.6	84.0	84.0	83.3
Malta	:	:	:	:	:	:	:	:	40.9	40.1	39.0	45.1b	51.0	53.7	51.1	<b>55.5</b>	51.1	<b>53.3</b>	<b>53.3</b>	<b>59.2</b>
Netherlands	:	:	:	:	67.6	70.3	72.9	72.3	71.9	72.7	73.1	75.0	75.0	75.6	74.7	76.2	76.2	<b>76.6</b>	<b>77.6b</b>	<b>78.2</b>
Austria	:	:	:	79.2	80.5	81.8	84.4	84.7	85.1b	85.1	85.3	84.2	<b>85.8i</b>	<b>85.9</b>	<b>85.8</b>	84.1	84.5	<b>86.0</b>	85.6	85.4
Poland	:	:	:	:	:	85.1	84.5	81.6i	88.8b	89.7	89.2	90.3	90.9	91.1	<b>91.7</b>	<b>91.6</b>	<b>91.3</b>	<b>91.3</b>	91.1	90.0
Portugal	35.0	37.8	41.3	45.1	46.2	47.1	39.3b	40.1	43.2	44.4	44.4	47.9	49.6	49.0	49.6	53.4	54.3	<b>55.5</b>	<b>58.7</b>	<b>64.4i</b>
Romania	:	:	:	:	:	<b>82.0</b>	<b>81.0</b>	77.8	76.1	77.3	76.3	75.0	75.3	76.0	77.2	77.4	78.3	78.3	78.2	<b>79.6</b>
Slovenia	:	:	:	:	84.4	85.7	86.8	85.8	88.0b	88.2	<b>90.7</b>	<b>90.8</b>	90.5	90.5	89.4	<b>91.5</b>	90.2	89.4	89.1	90.1
Slovakia	:	:	:	:	:	:	93.4	93.3	<b>94.8</b>	<b>94.4</b>	<b>94.5</b>	94.1	91.7	91.8	91.5	91.3	92.3	93.3	93.2	93.3
Finland	:	:	:	82.4	81.9	85.9	85.2	<b>86.8</b>	<b>87.7b</b>	86.1	85.8	85.3	84.5	83.4	84.7	<b>86.5</b>	86.2	85.1	84.2	85.4
Sweden	:	:	:	<b>88.1</b>	86.3	86.6	<b>87.5</b>	86.3	85.2	85.5b	86.7	85.8	86.0	<b>87.5p</b>	84.9p	85.5p	85.6p	86.4p	85.9p	<b>88.7p</b>
United Kingdom	57.1	57.8	61.0	64.0	62.2	65.8	:	75.3b	76.7	76.9	77.1	78.6	77.0	78.1	78.8	78.1	78.2	<b>79.3</b>	<b>80.4</b>	<b>80.1</b>
Iceland	:	:	:	:	:	:	:	43.8	46.1	46.1	48.5	51.2	51.7	50.8	49.3	52.9	<b>53.6</b>	<b>53.6</b>	53.4	<b>56.9</b>
Norway	:	:	:	:	90.1	92.9	93.4	94.4	95.0	<b>96.2</b>	94.8	93.7	<b>95.1</b>	<b>96.2</b>	68.6b	67.9	70.1	69.7	71.1	71.2
Switzerland	:	:	:	:	<b>83.7</b>	81.0	77.0	76.0	77.7	80.4	79.4	77.5	78.7	78.3	78.1	81.2	<b>82.6</b>	79.0	82.3	<b>83.0</b>
Croatia	:	:	:	:	:	:	:	:	:	:	90.6	91.0	93.5	93.8	94.6	95.3	<b>95.4</b>	95.2	<b>95.7</b>	<b>95.6</b>
Former Yugoslav Republic of Macedonia, the	:	:	:	:	:	:	:	:	:	:	:	:	:	:	75.8	79.2	79.7	<b>81.9</b>	<b>82.8</b>	<b>85.3</b>
Turkey	:	:	:	:	:	:	:	:	:	:	:	:	:	:	46.0	47.7	48.9	<b>50.0</b>	<b>51.1</b>	<b>52.6</b>

:=not available b=break in series i=see metadata p=provisional

Source: Source: Eurostat. 2012. Youth education attainment level by gender; Youth attainment level - percentage of the population aged 20 - 24 having completed at least upper-secondary education.

Amongst the countries included in the 7EU-VET study, attainment rates are highest in Slovenia (90.1 percent), Lithuania (86.9 percent) and Austria (85.4 percent). Due to the specifics of its VET education, Germany has the lowest completion rate (75.8 percent), followed by the United Kingdom (80.1 percent) and Latvia (80.4 percent). The latter two countries are closest to the EU-27 average, while Lithuania, Austria and especially Slovenia are above-average.

Slovenia can be included in the group of countries with the highest attainment rates, together with Czech Republic (91.7 percent), Poland (90 percent) and Slovakia (93.3 percent). The averages are also quite high for Lithuania and Austria and can mainly be compared with Bulgaria (85.5 percent), Ireland (86.9 percent) and Finland (85.4 percent). The performances of the United Kingdom and Latvia seem similar to Belgium (81.6 percent), Estonia (82.6 percent), the Netherlands (78.2 percent) as well as Romania (79.6 percent). Germany's result is comparable, e.g. to Italy (76.9 percent) and Luxembourg (73.3 percent).<sup>176</sup> Further, Table 5.3 presents the participation of pupils in general and vocational education for 2010.

---

<sup>176</sup> Eurostat. 2012. Youth education attainment level by gender; Youth attainment level – percentage of the population aged 20–24 having completed at least upper secondary education.

Table 5.3: Percentage of students participating in general and vocational education, by country (in percent)

GEO/TIME	Students at ISCED level 3- General orientation - as % of all students at ISCED level 3	Students at ISCED level 3- Vocational orientation - as % of all students at ISCED level 3	Students at ISCED level 4- Vocational orientation - as % of all students at ISCED level 4
	2010	2010	2010
European Union (27 countries)	50.1	49.9	83.7
Belgium	27.0	73.0	99.3
Bulgaria	47.8	52.2	100.0
Czech Republic	26.9	73.1	63.5
Denmark	53.5	46.5	0.0
Germany (including former GDR from 1991)	48.5	51.5	74.0
Estonia	65.8	34.2	100.0
Ireland	62.5	37.5	100.0
Greece	69.3	30.7	100.0
Spain	55.4	44.6	:
France	55.7	44.3	61.6
Italy	40.0	60.0	100.0
Cyprus	86.8	13.2	:
Latvia	64.0	36.0	100.0
Lithuania	72.3	27.7	100.0
Luxembourg	38.7	61.3	100.0
Hungary	74.2	25.8	100.0
Malta	50.7	49.3	85.6
Netherlands	33.0	67.0	100.0
Austria	23.2	76.8	100.0
Poland	51.8	48.2	100.0
Portugal	61.2	38.8	100.0
Romania	36.2	63.8	100.0
Slovenia	35.4	64.6	38.8
Slovakia	28.7	71.3	100.0
Finland	30.3	69.7	100.0
Sweden	43.9	56.1	84.3
United Kingdom	67.9	32.1	0.0
Iceland	65.7	34.3	100.0
Liechtenstein	19.7	80.3	0.0
Norway	46.1	53.9	88.0
Switzerland	33.8	66.2	38.4
Croatia	27.9	72.1	:
Former Yugoslav Republic of Macedonia, the	40.0	60.0	100.0
Turkey	57.1	42.9	:
Albania	:	:	:
United States	:	:	100.0
Japan	76.5	23.5	:

Notes: Data for Luxembourg refer to 2009. Data for EU-27 are estimated

:=Not available e=Estimated value b=Break in series i=See explanatory text p=Provisional value u=Unreliable or uncertain data

Source: Eurostat. 2012. Participation in general and vocational education.

As Table 5.3 shows, the average in the EU-27 shows almost equal proportions among students enrolled in vocational programmes and general programmes (49.9 percent versus 51.9 percent). However, the EU average masks significant differences among the countries. Germany comes closest to the average with 51.5 percent of pupils enrolled in vocational programmes, together with Bulgaria (52.2 percent), Malta (49.3 percent), Denmark (46.5 percent), Poland (48.2 percent) and Sweden (56.1 percent). The share of pupils enrolled in vocational programmes is (for 7-EU VET countries) the highest in Austria (76.8 percent), that has, together with Belgium (73 percent), Czech Republic (73.1 percent), Slovakia (71.3 percent) and Liechtenstein (80.3 percent), one of the highest overall participations in VET. In Slovenia (64.6 percent) participation is above the EU average, and its participation is comparable to Italy (60 percent), Luxembourg (61.3 percent), the Netherlands (67 percent) and Romania (63.8 percent).

The proportion of students who were enrolled in vocational programmes at the upper-secondary level of education (ISCED level 3) is lower especially in Lithuania with just 27.7 percent of pupils. Together with Hungary (25.8 percent) and Cyprus (13.2 percent), these are the three countries with the lowest share of students enrolled in vocational programmes. A low participation rate is also seen in Greece (30.7 percent), Latvia (36 percent) and the UK (32.1 percent). Participation is similar to Estonia (34.2 percent), Ireland (37.5 percent) and Portugal (38.8 percent).<sup>177</sup>

Following the Eurostat data, trends in VET enrolments vary across the countries included in the 7EU VET survey. In Germany, there were 554,608 graduates in the year 2000 and the number of graduates was slowly increasing during the period 2000-2006 (596,549 graduates) when it dropped sharply to just 565,770 graduates. Over the period 2006-2010 the numbers were still dropping, arriving at only 456,017 in 2010. The pattern seems similar in Greece where there were 36,568 graduates in the year 2000. Over the period 2002-2005 (48,853) the numbers were slowly increasing, reaching their peak in 2003 (50,317). After 2005, the number of graduates dropped sharply to 33,382 in 2008. There are no data available for 2009-2010.

In the period 2000-2005, the number of graduates of vocational upper-secondary education was slowly dropping (from 9,292 to 7,427) in Latvia, however the numbers increased in 2006 (8,140). There were 7,682 graduates in 2010. In Lithuania, 9,354 pupils graduated in 2000 compared to only 6,883 in 2005 and 6,616 in 2006. However, in 2007 there was gradual growth leading to 7,847 graduates in 2010. There are no obvious differences over the period 2001-2006 in Austria, although the number of graduates increased in 2007 (49,024 in 2006 to 55,158 in 2007) and even more in 2010 (58,936). In Slovenia, the number of graduates was slowly dropping over the period 2000-2010. There were 24,396 graduates in 2000 and the numbers were dropping year by year to only amount to 15,232 in 2010. There are no data available for the UK.<sup>178</sup> In addition to the general trends, it is important to consider the percentage of school dropouts.

---

<sup>177</sup> Eurostat. 2012. Participation in general and vocational education.

<sup>178</sup> Eurostat. 2012. Upper secondary education – level 3 – vocational programmes (ISCED 1997).

Table 5.4: Percentage of the population (aged 18 to 24) with at most lower-secondary education without further education or training, by country

GEO/TIME	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EU (27 countries)	:	:	:	:	:	:	:	:	17.6e	17.2e	17.0	16.5b	16.0	15.8	15.5	15.1	14.9	<b>14.4</b>	<b>14.1</b>	<b>13.5</b>
Belgium	18.1	17.4	16.1	15.1	12.9	12.7	14.5	15.2b	13.8	13.8	14.1	14.3	13.1b	12.9	12.6	12.1	<b>12.0</b>	<b>11.1</b>	<b>11.9</b>	12.3
Bulgaria	:	:	:	:	:	:	:	:	:	20.5	20.7	21.9	21.4	20.4	17.3	14.9	14.8	<b>14.7</b>	<b>13.9</b>	<b>12.8</b>
Czech Republic	:	:	:	:	:	:	:	:	:	:	5.7	6.5 b	6.3	6.2	<b>5.1</b>	5.2	5.6	5.4	<b>4.9</b>	<b>4.9</b>
Denmark	15.2	<b>8.5</b>	<b>8.6</b>	<b>6.1</b>	12.1b	10.7	9.8	11.5	11.7	9.2	9.0	10.4b	8.8	8.7	9.1	12.9b	12.5	11.3	11.0	9.6
Germany	:	:	:	:	13.3	12.9	:	14.9	14.6	12.3	12.5	12.8i	12.1	13.5b	13.7	12.5	<b>11.8</b>	<b>11.1</b>	11.9	<b>11.5</b>
Estonia	:	:	:	:	:	:	<b>12.6</b>	14.0	15.1	14.4	13.2	12.9	13.1	13.4	13.5	14.4	14.0	13.9	<b>11.6</b>	<b>10.9</b>
Ireland	27.1	24.0	22.9	21.4	18.9	18.9	:	:	:	:	14.6	13.1b	13.1	12.5	12.1	11.6	<b>11.3</b>	11.6	<b>11.4</b>	<b>10.6</b>
Greece	25.2	25.0	23.2	22.4	20.7	19.9	20.7	18.6	18.2	17.1	16.5	16.0b	14.7	<b>13.6</b>	15.5	14.6	14.8	14.5	<b>13.7</b>	<b>13.1</b>
Spain	40.4	37.7	36.4	33.8	31.4	30.0	29.6	29.5	<b>29.1</b>	29.7	30.7	31.6	32.0	30.8b	30.5	31.0	31.9	31.2	<b>28.4</b>	<b>26.5</b>
France	:	17.2	16.4	15.4	15.2	14.1	14.9	14.7	13.3	13.5	13.4	12.4b	<b>12.1</b>	12.2	12.4	12.6	<b>11.5</b>	12.2	12.6	<b>12.0</b>
Italy	37.5	37.1b	35.1	32.8	31.7	30.1	28.4	27.2	25.1	25.9	24.2	23.0	22.3	22.0	20.6	19.7	19.7	<b>19.2</b>	<b>18.8</b>	<b>18.2</b>
Cyprus	:	:	:	:	:	:	:	17.5	18.5	17.9	15.9	17.3b	20.6	18.2b	14.9	<b>12.5</b>	13.7	<b>11.7</b>	12.6	<b>11.2</b>
Latvia	:	:	:	:	:	:	:	:	:	:	16.9	18.0	14.7	14.4	14.8	15.1	15.5	<b>13.9</b>	<b>13.3</b>	<b>11.8</b>
Lithuania	:	:	:	:	:	:	:	:	16.5	14.9b	13.4b	11.4	10.5b	8.1	8.2	<b>7.4</b>	<b>7.4</b>	8.7	8.1	<b>7.9</b>
Luxembourg	42.2	36.8	34.4	33.4	35.3	30.7	:	19.1b	16.8	18.1	17.0	12.3b	12.7	13.3	14.0	12.5	13.4	<b>7.7 b</b>	<b>7.1 u</b>	<b>6.2 u</b>
Hungary	:	:	:	:	:	17.8	15.9	13.0	13.9	13.1	12.2	12.0b	12.6	12.5	12.6	11.4	11.7	<b>11.2</b>	<b>10.5</b>	<b>11.2</b>
Malta	:	:	:	:	:	:	:	54.2	54.4	53.2	49.9	42.1b	38.9	39.9	38.3	38.1	38.1	<b>36.8</b>	<b>36.9</b>	<b>33.5</b>
Netherlands	:	:	:	:	17.6	16.0	15.5	16.2	15.4	15.1	15.3	14.3b	14.1	13.5	12.6	11.7	11.4	<b>10.9</b>	<b>10.0b</b>	<b>9.1</b>
Austria	:	:	:	13.6	12.1	10.8	:	10.7	10.2	10.2	9.5	9.0 b	9.5 i	9.1	9.8	10.7	10.1	<b>8.7</b>	<b>8.3</b>	<b>8.3</b>
Poland	:	:	:	:	:	:	:	:	7.4	7.2	6.0	5.6 b	<b>5.3</b>	5.4	<b>5.0</b>	<b>5.0</b>	<b>5.3</b>	5.4	5.6	5.6
Portugal	50.0	46.7	44.3	41.4	40.1	40.6	46.6b	44.9	43.6	44.2	45.0	41.2	39.4b	38.8	39.1	36.9	35.4	<b>31.2</b>	<b>28.7</b>	<b>23.2i</b>
Romania	:	:	:	:	:	19.7	19.1	21.5	22.9	21.7	23.0	22.5	22.4b	19.6	17.9	<b>17.3</b>	<b>15.9</b>	<b>16.6</b>	18.4	17.5
Slovenia	:	:	:	:	:	:	:	:	6.4	5.1	4.6 u	<b>4.3 u</b>	4.9 u	5.6	<b>4.1 u</b>	5.1 u	5.3 u	5.0 u	<b>4.2 u</b>	
Slovakia	:	:	:	:	:	:	:	:	:	6.7	5.3 b	6.8	6.3	6.6	6.5	6.0	<b>4.9</b>	<b>4.7</b>	<b>5.0</b>	
Finland	:	:	:	11.1	<b>8.1</b>	<b>7.9</b>	9.9	<b>9.0 b</b>	9.5	9.7	10.1b	10.0	10.3	9.7	9.1	9.8	9.9	10.3i	9.8	
Sweden	:	:	:	7.5	<b>6.8</b>	:	<b>6.9</b>	7.3	10.2b	10.0i	9.2 p	9.2 p	10.8p	13.0p	12.2p	12.2p	10.7p	9.7 p	<b>6.6 p</b>	
United Kingdom	34.7	36.3	32.3	:	:	:	:	19.8b	18.2	17.8	17.6	:	<b>12.1</b>	<b>11.6</b>	<b>11.3</b>	16.6b	17.0	15.7	14.9	15.0
Iceland	:	:	:	:	:	:	30.3	29.8	30.9	28.8	<b>20.3b</b>	24.9	24.9	25.6	23.2	24.4	<b>21.3</b>	22.6	<b>19.7</b>	
Liechtenstein	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Norway	:	:	:	10.9	7.3	:	12.9	8.9	13.5	<b>6.3 b</b>	<b>4.7</b>	<b>4.6</b>	17.8b	18.4	17.0	17.6	17.4	16.6		
Switzerland	:	:	:	<b>6.1</b>	6.5	<b>4.9</b>	<b>5.0</b>	7.3	6.6	6.7	9.7 b	9.5	9.7	9.6 i	7.6	7.7	9.1 i	6.6	6.3	
Montenegro	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Croatia	:	:	:	:	:	:	:	:	8.0	7.9	5.4	5.1 u	4.7 u	<b>3.9 u</b>	<b>3.7 u</b>	<b>3.9 u</b>	<b>3.7 u</b>	<b>3.7 u</b>	4.1 u	
Former Yugoslav Republic of Macedonia, the	:	:	:	:	:	:	:	:	:	:	:	:	:	22.8	19.9	19.6	<b>16.2</b>	<b>15.5</b>	<b>13.5</b>	
Turkey	:	:	:	:	:	:	:	:	:	:	:	:	:	48.8	46.9	45.5	<b>44.3</b>	<b>43.1</b>	<b>41.9</b>	

Source: Eurostat. 2012. Upper-secondary education - level 3 - vocational programmes (ISCED 1997).

As seen in Table 5.4, the percentage of the population aged 18 to 24 with at most lower-secondary education without further education or training. The EU-27 average for 2011 is 13.5 percent and it has gradually dropped since the year 2000 (17.6 percent). There are large differences between the countries included in the 7EU VET study, however all of them except for the UK are below the EU-27 average or around the

average. The most promising result is shown by Slovenia with only 4.2 percent of early school leavers, however the data for Slovenia are possibly unreliable or uncertain. The share is also low in Austria (8.3 percent) and Lithuania (7.9 percent) and can be compared to northern countries Denmark (9.6 percent), Finland (9.8 percent) and the Netherlands (9.1 percent).

The results for Germany (11.5 percent) and Latvia (11.8 percent) appear to be a little below-average and can be compared to Estonia (10.9 percent), Ireland (10.6 percent), Cyprus (11.2 percent) and Hungary (11.2 percent). Greece (13.1 percent) falls around the EU-27 average together with Bulgaria (12.8 percent), Belgium (12.3 percent) and France (12.0). The United Kingdom has the biggest share of early school leavers (15 percent) and can be included in a group together with Romania (17.5 percent).<sup>179</sup>

At this point, we turn our attention to the countries surveyed in the 7EU-VET project, and 17- and 18-year-old VET students. We make a country comparison based on gender, place of living in terms of population density, country of origin, parents' education, and programme structures.

### 5.1.1 Place of living and country of origin

The studied countries are also highly characterised by place of living in terms of population density. In Germany and Slovenia, the ratio between students coming from a city and those from a country village or farm is almost 1:1. In Austria there are more (60 percent) of those students from the countryside, while in the other countries most (on average 76 percent) students are from cities with the highest percentage in the UK at 89 percent.

Table 5.5: Settlement of students, by country (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
City	40	52	80	68	70	45	89
Country village or farm	60	48	20	32	30	55	11

Question: G7 Which phrase below best describes the area where you live?

In all 7EU VET countries, most (96 percent) students were born in the country where they study, with the lowest percentage in Greece at 84 percent.<sup>xlvii</sup> Similarly, when looking at parents' birth place, most of them (96 percent) were born in the country where their children study, with again the lowest percentage in Greece, again at 84 percent.

Table 5.6: Students' place of birth, by country (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
In own country	96	96	84	99	98	96	95
In other country	4	4	16	1	2	4	5

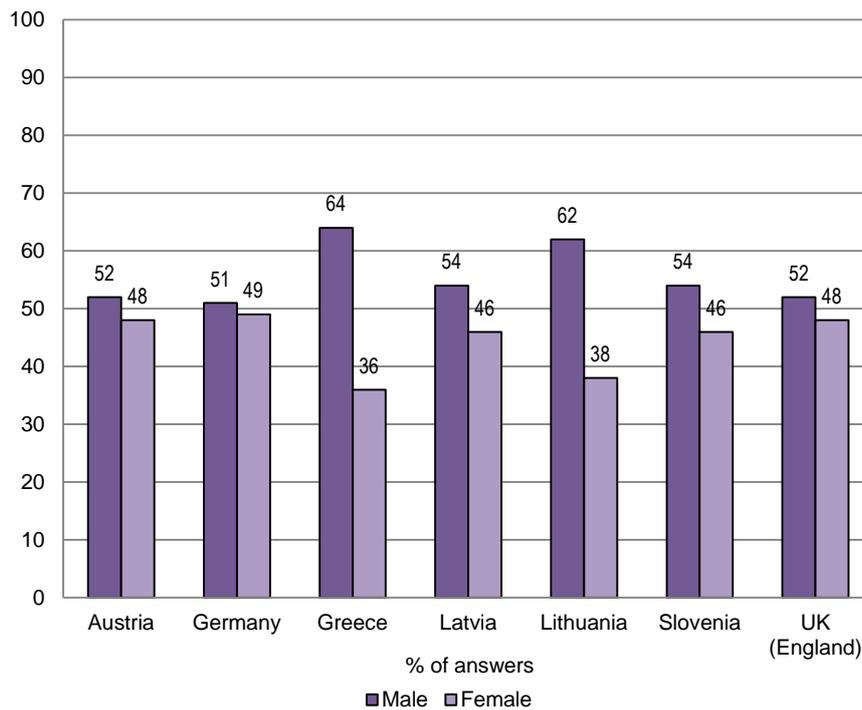
Question: G3a Where were you born?

### 5.1.2 Gender and programme sector orientation

When we look at gender distribution in VET, we can note that according to our data there is a slightly higher percentage of male students in all 7EU VET countries, with the highest share in Greece (64 percent) and Lithuania (62 percent), while in the other five countries the ratios of male and female students are very similar with differences of just a few percent (2-8 percent).

<sup>179</sup> Eurostat. 2012. Early leavers from education and training.

Chart 5.1: Students' gender distribution, by country ( in percent)

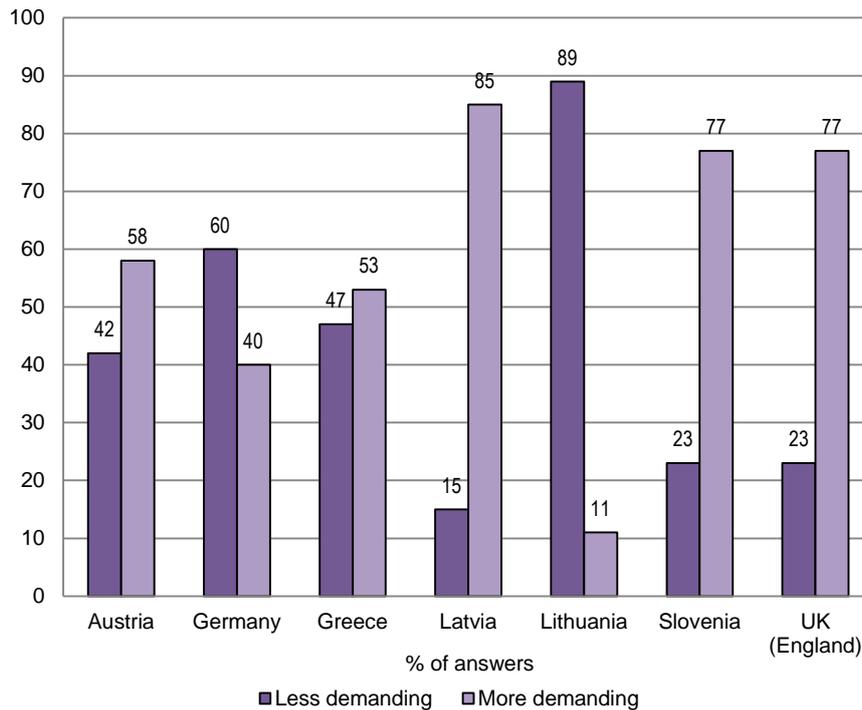


Question: G1 Are you male or female?

In the UK, Slovenia, Latvia, Greece and Austria there are more students enrolled in more demanding programmes<sup>180</sup>, while in Germany and Lithuania the situation is reversed. In Lithuania, 89 percent of students are enrolled in less demanding programmes while, on the other side, 85 percent of students go to more demanding programmes in Latvia, which makes for an interesting comparison between these two neighbouring countries.

<sup>180</sup> See the appendix for a detailed elaboration.

Chart 5.2: Type of programme students are enrolled in, by country (in percent)

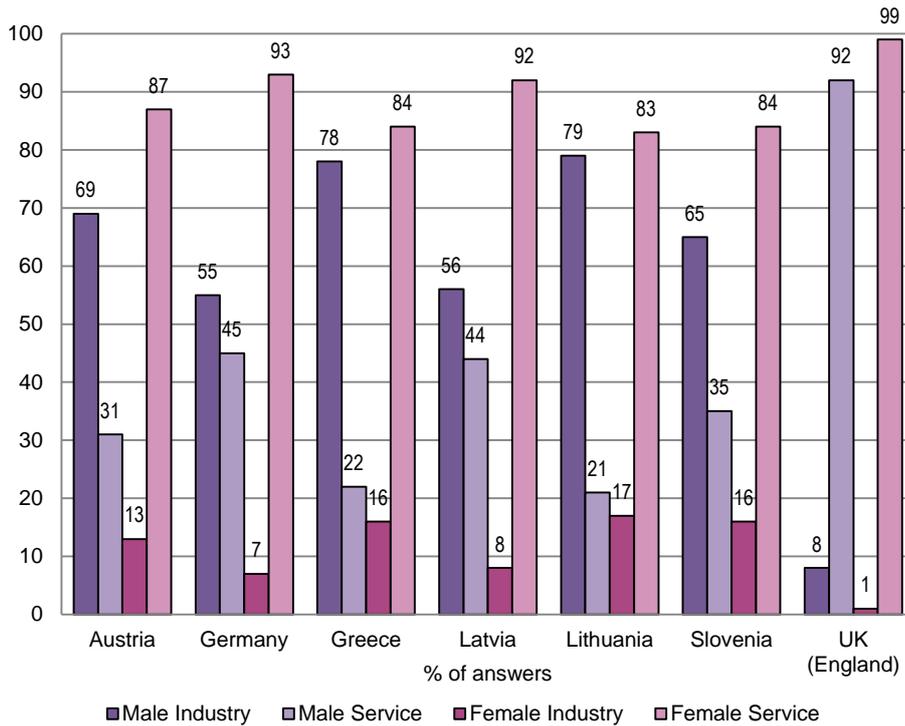


Question: B1 What type of school/programme are you enrolled in? and B2b What is the total duration of this programme?

In general, across all the countries there are more students enrolled in service programmes than in industry ones (the proportion is 2:3). However, industry sector programmes compared to service sector ones are more popular in Greece and Lithuania (56 percent), while there are bigger shares of students in the service sector programmes in the other four countries with the UK at the extreme with 95 percent of surveyed students being enrolled in service programmes.<sup>xlviii</sup>

To better understand the demographics in VET programmes, we also reviewed the gender distribution differences between sectors, industry and service. Also here we obtained the expected results, a very high percentage of female students in service programmes (above 83 percent) with Germany and Latvia above 92 percent, and the UK with 99 percent of female students. In the industry sector, we can note a higher percentage of male students (55 percent), with Greece and Lithuania having the highest percentages among the 7EU-VET countries (approximately 78 percent).

Chart 5.3: Percentage of gender distribution between industry and service, by country



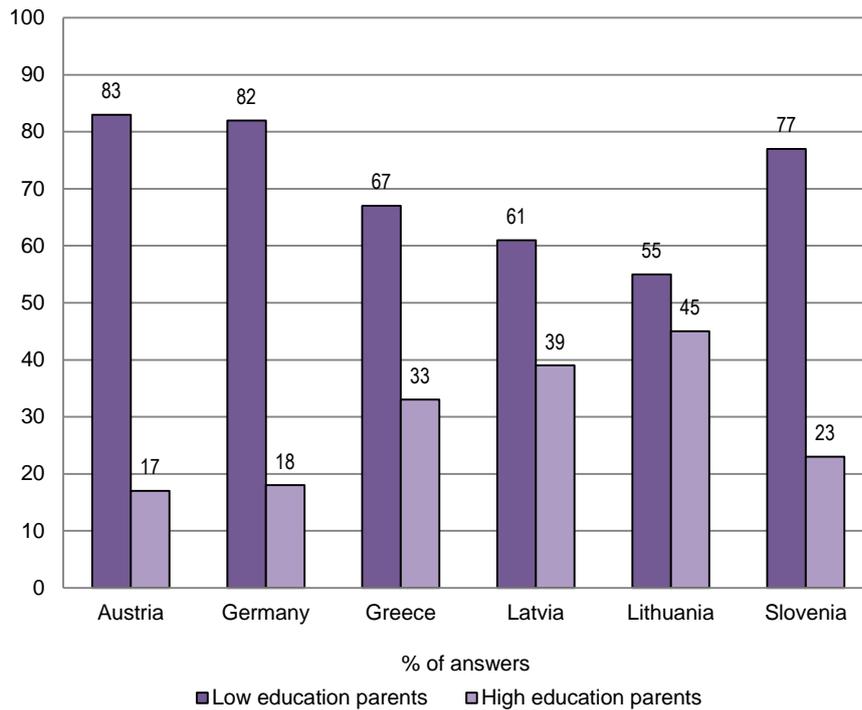
Question: B2a What is the title of the programme you are enrolled in?

### 5.1.3 Parents education and socio-economic status

When looking at parents' education we find there are higher percentages of students with lowly educated parents<sup>181</sup>. The biggest differences are seen in Austria and Germany (82 percent of students with lowly educated parents) and the smallest in Lithuania (55 percent).

<sup>181</sup> Appendix: Define high and low educated\*\*.

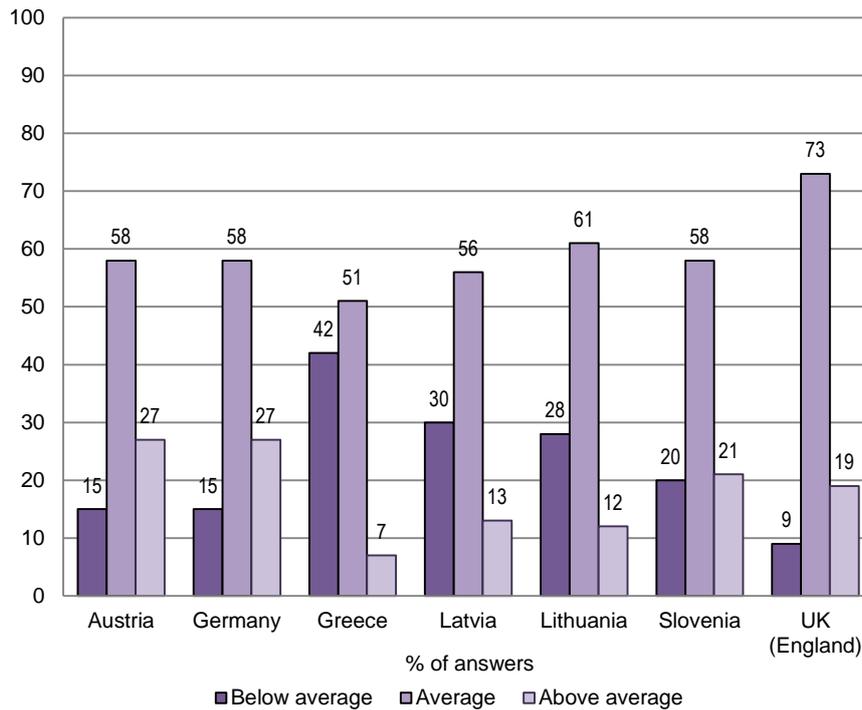
Chart 5.4: Parents' level of schooling, by country (in percent)



Question: G8 What is the 'highest level of schooling' completed by your father/mother?

In all seven countries, the majority (59 percent) of students come from families with an average socio-economic status with the highest rate in the UK, at 73 percent. In Austria (27 percent), Germany (27 percent) and the UK (19 percent) there are more students with an above-average socio-economic status than those from families with a below-average status, while in Greece and the two Baltic countries we can note the reverse situation. In Slovenia these two groups are equally represented (20 percent).

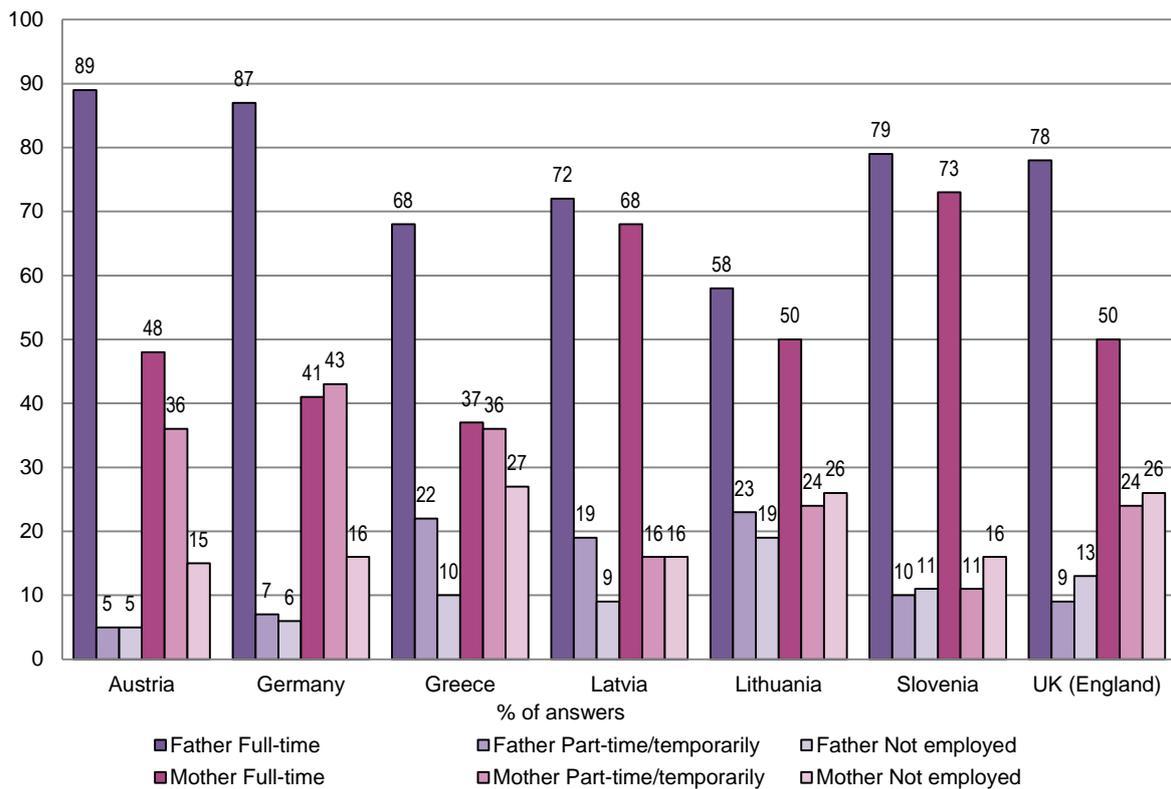
Chart 5.5: Level of family's income, by country (in percent)



Question: G14 Which of the descriptions below comes closest to how you feel about your family's income?

If we take a look at parents' employment status, we find that in all seven countries the majority of both parents are employed full-time. Across all the countries most fathers have a full-time job, with the lowest share in Lithuania (58 percent) and the highest in Austria and Germany (88 percent). In Latvia, Greece and Lithuania around 20 percent of students' fathers have part-time or temporary employment. With students' mothers' employment status it is a little different, there is a smaller share of those with full-time employment and a bigger share of those that are part-time employed or unemployed. Only around 50 percent of mothers across the seven countries have a full-time job, with the highest percentages in Slovenia (73 percent) and Latvia (68 percent) and the lowest in Greece (37 percent). Around 16 percent of mothers are unemployed, with the highest percentages in Greece, Lithuania and the UK (26 percent). In Lithuania, we can also note the highest rate of unemployed fathers (19 percent). There are no larger differences (no more than 10 percent) in the social-economic status of families among those where both parents were born in the country and those where one parent was born in another country.<sup>xlix</sup>

Chart 5.6: Parents' Employment Status, by country (in percent)



Question: G9 What is the employment status of your parents?

If we compare employment status in relation to the socio-economic status of the students' parents, we find that in all seven countries among parents with an average and above-average socio-economic status there are slightly bigger shares of full-time employed mothers and fathers and slightly smaller shares of parents without employment than among those with a below-average socio-economic status<sup>i</sup>. From the comparison of parents' employment status based on their education we can note that parents with a high education slightly more often have full-time employment and are slightly less often unemployed than those with a low education. These relations are more evident in Lithuania, Latvia and Greece<sup>ii</sup>.

#### 5.1.4 Conclusions and starting points

In the next sections of this chapter we explore in a country comparative fashion the survey results related to the following six different subject areas:

- the transition from earlier education to VET, where in particular we streamline the results towards exploring the determinants of the breadth of vocational choice;
- learning, perception and satisfaction with VET programmes. In this section we explore what drives VET students' learning habits in school and in their free time, how they perceive VET curricula and which factors determine satisfaction with school success, which is a strong indicator of student learning and career motivation;
- school success and acquired competencies. This section starts by exploring the determinants of school success. Further on in the section, we explore what impacts the perception of the ability to perform occupational tasks independently and team work. We end by looking at the link between school success and the impact of VET programmes on six generic competencies;
- information and communication technology. This section studies the characteristics of the VET programmes in the seven studied countries according to all break variables; and

- future career aspirations and further education. In this part, we look at which aspects make major differences with regard to future career aspiration, and what affects the motivation for further education.

All five sections of the chapter compare results on the country level, however within each country we consider similarities and differences in relation to gender, parents' education, socio-economic status, programme type and orientation, and school success (grades).

Samo Pavlin and  
Božidar Grigić

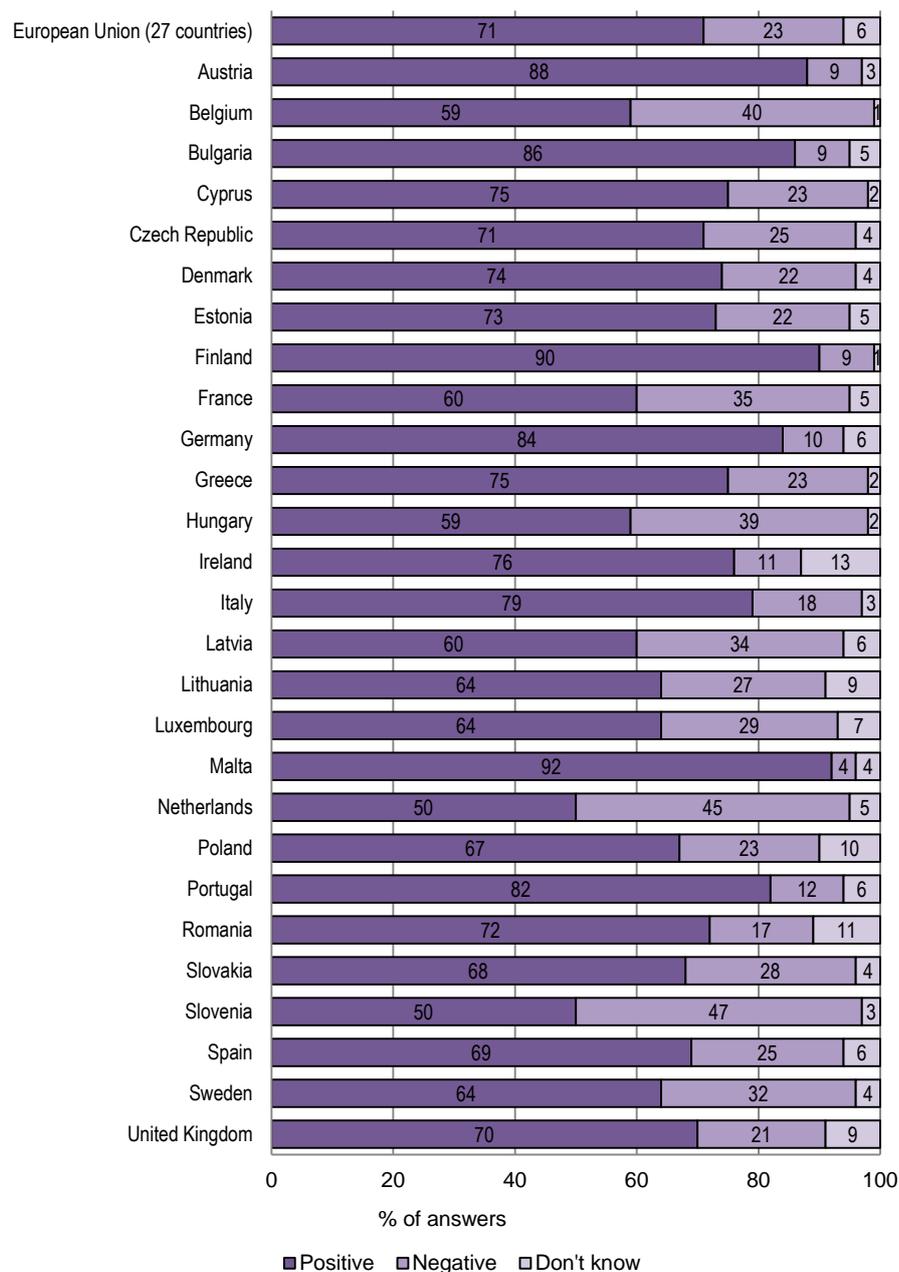
## **5.2 The transition from earlier education to vocational education and training**

This chapter addresses questions related to the transition from earlier education to vocational education and training. First, the context of the decision-making process which is related to the question of the general status of VET programmes in particular countries is considered. Second, the chapter explores which personal and external factors affected the personal decision to enrol in VET programmes. Third, it explains how VET students judge the importance of different information sources in their decision-making process. Lastly, it compares how broad the relative choice of VET students is across the countries. Following the report's overall logic, the comparative aspects include, in addition to countries, relevant socio-demographic factors.

### **5.2.1 Perceived Status of Vocational Education and Training in the EU-27 Countries**

In the decision-making process, it is important to consider the general status of VET in each country under observation. Despite the general trend of decreasing enrolments in VET, most European citizens believe that vocational education and training has a positive image. 71 percent of citizens see its image as fairly positive or very positive. However, there are considerable differences among the countries included in the 7EU VET study.

Chart 5.7: Perception of the image of vocational education and training (in percent)



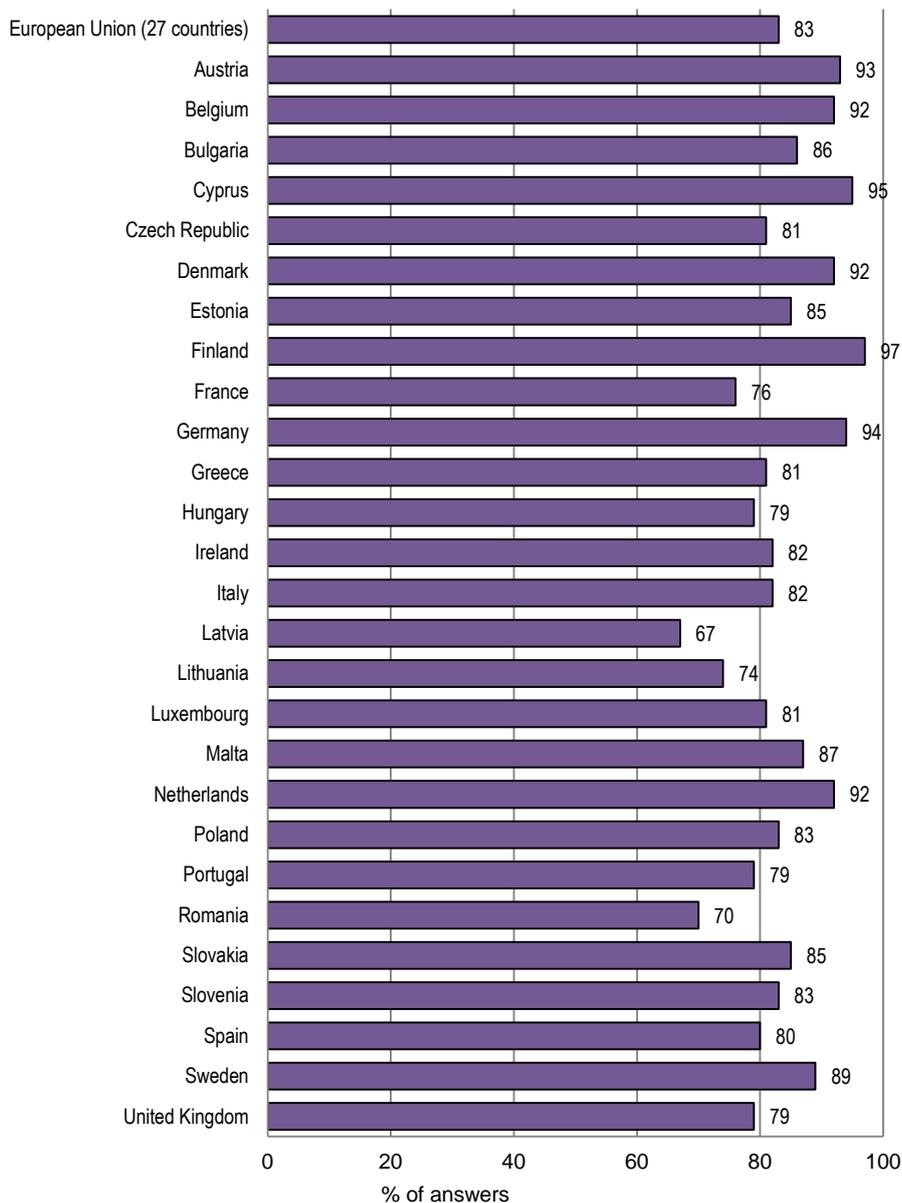
Question: QA9 And you think that vocational education and training has a very positive, fairly positive, fairly negative or very negative image in (OUR COUNTRY)?

Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training. Pg. 22

As Chart 5.7 shows, citizens in Austria (88 percent) and Germany (84 percent) show the highest level of approval, while those from Latvia (60 percent) and especially Slovenia (50 percent) show the lowest level. Austria and Germany therefore belong to the group of countries with the highest reputation of vocational education and training, together with Malta (92 percent) and Finland (90 percent). The reputation is also above-average in Greece (75 percent) and is comparable to Ireland (76 percent) or Denmark (74 percent). The UK comes closest to the average with 70 percent of citizens that see the image of VET programmes as positive, together with the Czech Republic (71 percent), Spain (70 percent) and Slovakia (69 percent). Their reputation in Lithuania (64 percent) and Latvia (60 percent) is similar in Sweden (64 percent) and Luxembourg (64 percent). In Slovenia, only every second person believes that VET has a positive image

and it is the country with the lowest level of approval together with the Netherlands (50 percent).<sup>182</sup> A similar question concerns the extent to which VET contributes to economic aims. The results about this are presented in the following chart.

*Chart 5.8: Percentage of students who agree that VET positively contributes to the economy of their country*



*Question: QA13.1 To what extent do you agree or disagree with each of the following statements? Vocational education and training contributes positively to the economy of (OUR COUNTRY)? Presented answer: Total "Agree"*

*Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training. Pg. 62*

The level of agreement with the statement that VET contributes positively to the economy of their country is very high (83 percent). Among the 7EU VET countries, exceptionally high levels of agreement are recorded in Germany (94 percent) and Austria (93 percent). Agreement is only higher in Finland (97 percent)

<sup>182</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 22

and Cyprus (95 percent). On the other hand, the economic benefits of VET are most widely questioned in Latvia (67 percent) and Lithuania (74 percent). The agreement in these two countries is similar to that in France (76 percent) and Romania (70 percent). Slovenia showed an average level of agreement (83 percent) and can be included in a group together with Poland (83 percent), Ireland (82 percent) and Italy (82 percent).<sup>183</sup>

In this context, in the following section we explore which factors affect the decision making of those students who enrol in VET programmes.

### **5.2.2 Which factors affected the decision making of learners with respect to VET programmes?**

In this section, we first look at which factors impact the vocational pathway of the decision-making process in 27 European countries. Observations are made from diverse positions after respondents completed education. Later on, we explore this issue further, focusing only on those students that are enrolled in Vocation Education and Training, who were approached while they were still in the education process.

---

<sup>183</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 62

Table 5.7: Factors influencing students' choice of their vocational pathway (in percent)

	Personal interest in the subject		Future employment opportunities		Type of teaching (practical or academic)		Image of the school, institution or employer		Length of studies		Costs (including study costs and living expenses)		Distance from your place of living	
	VET	General education	VET	General education	VET	General education	VET	General education	VET	General education	VET	General education	VET	General education
European Union (27 countries)	<b>94</b>	<b>86</b>	<b>89</b>	81	<b>86</b>	78	73	70	70	68	61	66	58	58
Belgium	<b>82</b>	<b>86</b>	77	75	<b>81</b>	78	70	77	56	49	45	41	44	43
Bulgaria	<b>94</b>	71	<b>95</b>	65	79	56	<b>91</b>	70	69	53	60	59	41	45
Czech Republic	<b>94</b>	<b>94</b>	<b>96</b>	93	88	86	79	85	73	79	77	79	67	72
Denmark	<b>88</b>	<b>94</b>	<b>75</b>	72	72	67	59	64	40	45	30	37	32	38
Germany	<b>94</b>	81	<b>89</b>	83	<b>84</b>	79	68	61	60	65	53	65	53	59
Estonia	<b>89</b>	<b>86</b>	<b>79</b>	75	72	71	60	69	53	51	45	63	41	46
Ireland	<b>91</b>	77	<b>91</b>	80	<b>84</b>	75	67	69	75	64	70	63	70	67
Greece	<b>98</b>	84	<b>98</b>	83	<b>92</b>	76	91	76	83	70	72	69	64	61
Spain	<b>94</b>	<b>88</b>	<b>88</b>	80	<b>92</b>	82	64	70	72	69	58	68	54	59
France	<b>92</b>	86	<b>88</b>	82	<b>87</b>	79	70	66	70	66	50	63	46	45
Italy	<b>95</b>	84	<b>93</b>	81	<b>88</b>	79	<b>88</b>	78	85	80	79	69	75	59
Cyprus	<b>96</b>	87	<b>95</b>	87	<b>95</b>	83	91	82	80	73	66	69	59	62
Latvia	<b>84</b>	<b>80</b>	<b>82</b>	75	76	68	51	51	55	52	42	55	36	35
Lithuania	<b>88</b>	<b>93</b>	84	<b>88</b>	83	78	64	68	67	72	62	82	49	57
Luxembourg	<b>95</b>	<b>91</b>	<b>84</b>	81	83	<b>84</b>	72	73	61	59	39	42	42	42
Hungary	<b>95</b>	85	<b>94</b>	84	<b>89</b>	80	87	81	78	76	80	77	68	69
Malta	<b>99</b>	84	<b>95</b>	83	<b>96</b>	81	72	67	83	67	56	53	48	41
Netherlands	<b>97</b>	<b>90</b>	77	61	84	<b>86</b>	67	66	45	34	37	33	43	34
Austria	<b>96</b>	<b>91</b>	<b>96</b>	84	89	81	83	82	85	82	83	80	72	73
Poland	<b>90</b>	<b>91</b>	87	<b>93</b>	86	87	76	85	82	82	72	84	68	74
Portugal	<b>93</b>	89	<b>94</b>	88	<b>93</b>	83	81	84	90	82	89	86	87	81
Romania	<b>91</b>	73	<b>89</b>	72	73	59	<b>81</b>	66	77	63	75	70	61	59
Slovenia	<b>90</b>	<b>88</b>	<b>87</b>	76	67	63	58	57	57	45	61	50	52	43
Slovakia	<b>94</b>	91	<b>94</b>	<b>92</b>	91	81	78	76	80	78	77	81	64	72
Finland	<b>91</b>	<b>91</b>	<b>85</b>	79	71	62	53	68	56	42	50	50	51	49
Sweden	<b>92</b>	<b>95</b>	<b>88</b>	81	84	73	62	65	48	44	33	30	31	41
United Kingdom	<b>96</b>	88	<b>93</b>	80	<b>93</b>	83	73	65	75	66	63	64	61	60

Question: QA4a When you decided to follow a vocational pathway, how important was each of the following factors for you?

QA4b If applicable, when you decided to follow general secondary or higher education, how important was each of the following factors for you? Presented answer: Total "Important"

Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 96

Table 5.7 presents different factors relevant to choosing a vocational path. On the level of the EU-27 countries, the most important factor is personal interest in study, followed by future employment opportunities, type of teaching, school status, length of studies, costs and distance from home<sup>184</sup>.

Hence, it is very important to stress that differences among the countries have been highly impacted in the way people perceive the term "vocational path" (Kramberger, 1999) and therefore the presented results would require further consideration. Nevertheless, these results can give some idea when comparing the seven studied countries in a broader context. *Personal interest in the programme* has the highest im-

<sup>184</sup> In this survey, the most common source of advice for EU respondents to enrol in VET are parents or other family members (22 percent), followed by someone from the world of work (15 percent), a teacher (15 percent), a friend (11 percent) and a headmaster (5 percent). The centrality of some of these items is further elaborated in section 6.2.3.

portance in Greece (98 percent), followed by Austria and the UK (both 96 percent). The importance in Germany is average (94 percent) and comparable to Bulgaria or the Czech Republic. Other EU VET countries are below the average, starting with Slovenia (90 percent) and Lithuania (88 percent). The importance of personal interest is the lowest in Latvia (84 percent).

Respondents in Greece seem to take *future employment opportunities* particularly seriously, followed by those in Austria (96 percent). Future employment is also quite important in the UK (93 percent), and can be compared to Italy (93 percent), as well as Hungary, Poland and Slovakia (all 94 percent). The importance of this factor in Germany is average (89 percent). Results for Slovenia are close to the average (87 percent), together with Poland (87 percent). Those in Lithuania (84 percent) and Latvia (82 percent) are below-average. *Type of teaching* was highly considered in the UK (93 percent) and Greece (92 percent). This factor is also important for Austrians (89 percent) who can be included in a group together with respondents from France (87 percent) or Italy (88 percent)). The importance in Germany (84 percent) is closest to the EU-27 average, while the percentage in Lithuania (83 percent) is slightly below-average. Type of teaching is much less important in Latvia (76 percent) and Slovenia, where only 67 percent say it is an important factor.

*The image of the school institution* influenced 73 percent of people and the level of importance varies highly among the 7EU VET countries. Greece and Austria have a high percentage of those that believe the image of the school institution or employer is important, while the figure for the UK is the same as the average (73 percent). This factor is considered slightly less important in Germany (68 percent) and Lithuania (64 percent) that can be put in the same group with Ireland, the Netherlands (both 67 percent), or Spain (64 percent). Percentages are far below the average in Slovenia (58 percent) and Latvia (51 percent) that are, together with Finland (53 percent), countries with the lowest share of people regarding the image of the school institution as an important factor. Interesting results are also found for the factor *distance from place of living*. Among the observed countries, the highest share was found for Austria (72 percent), followed by Greece (64 percent) and the UK (61 percent). Relatively few people factored distance in their decision making in Germany (53 percent), Slovenia (52 percent), as well as Lithuania (49 percent). The share among the 7EU VET countries is, however, the lowest in Latvia (36 percent).<sup>185</sup>

When looking at the relative importance of the factors among 17- and 18-year-old students, we see some similarities and differences with regard to the 7EU-VET data, which can allow some speculation, e.g. the VET population and also the younger generation are driven by different factors when choosing VET education, even though the results cannot be compared directly. One observation may be related to the fact that the population approached in the 7EU-VET study is much more pragmatically or extrinsically driven compared to the general education population in the 7EU-VET countries; as presented in Table 5.8, we can notice that the most common factors that influenced students' decisions on VET programmes across all seven countries were the programme providing *a good foundation for a further career and good job prospects*.

---

<sup>185</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 96

**Table 5.8: Factors affecting students' decision making about the programme, by countries (in percent)**

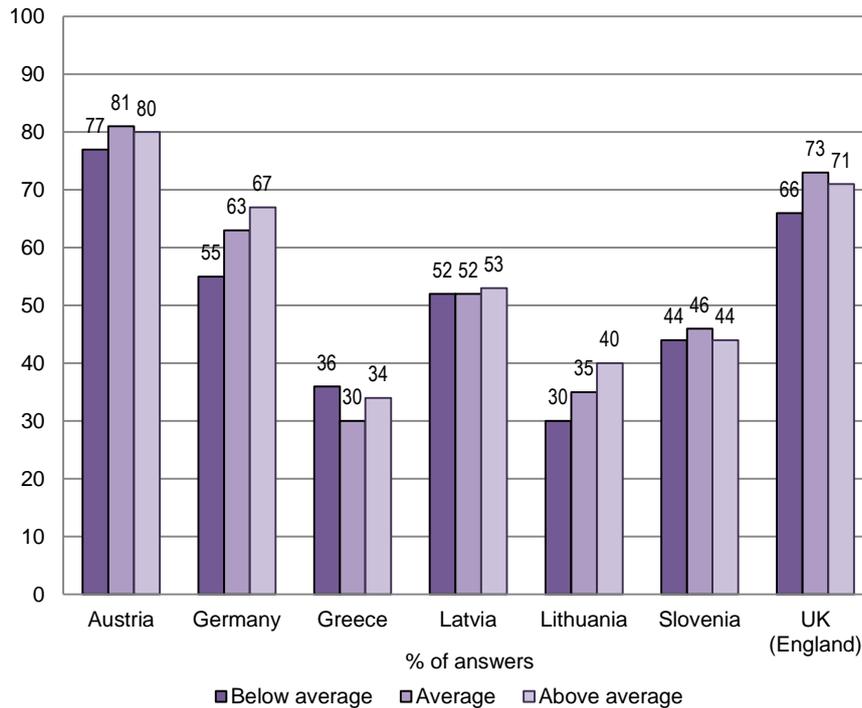
	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
The programme offered good job prospects	<b>78</b>	<b>63</b>	<b>32</b>	<b>53</b>	<b>32</b>	<b>45</b>	<b>70</b>
My previous examination grades prevented me being able to enrol on more preferable programmes	3	7	8	11	9	7	13
My parents suggested I enrol on this programme	13	12	12	20	14	11	14
The occupation(s) related to the programme appealed to me	<b>71</b>	<b>72</b>	<b>32</b>	<b>39</b>	<b>43</b>	<b>57</b>	<b>71</b>
The programme provides a good foundation for further qualifications / education	<b>83</b>	<b>79</b>	<b>48</b>	<b>56</b>	<b>50</b>	<b>56</b>	<b>70</b>
My friends have chosen to undertake the same programme	21	17	27	22	16	10	14
The reputation of the programme was attractive to me	48	41	27	32	28	25	59
Former teachers encouraged me to enrol on this programme	8	12	13	7	5	5	19
This programme was the most appropriate within a reasonable distance from my home	36	36	16	36	18	20	51

*Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

In Germany and Austria, more than 80 percent of students believe that their programme provides them with a good foundation for further education and there were no larger differences noted among the students with different grades, once already in the programme. Such differences are noted in the UK and Greece where students with higher grades are more likely to regard their programme as a good foundation for further education. In general, students are likely to report that the appeal of an occupation influenced their choice of programme. In Germany, Austria and the UK, around 70 percent of students reported this, while in the other countries about 50 percent were of this view, with the exception of Greece where only 34 percent of students agreed with this statement. Not a lot of students (around 20 percent) admitted that they chose the programme because of their friends (see Table 5.8). The highest percentage of students agreeing with this statement is in Greece (26 percent). Students usually choose their programme on factors other than simply because their friends chose the same programme. A relatively small proportion of students stated their previous examination grades had prevented them from enrolling in more preferable programmes, across the countries the figure is around 10 percent or less. This is perhaps surprising given that examination grades are held to be important within general education.

We did not find much evidence concerning family socio-economic status affects students' choice of VET programmes, although this might have been expected.<sup>iii</sup> However, there are some aspects that vary depending on parents' status.

Chart 5.9: Importance of “The programme offered good job prospects”, by country and socio-economic status (in percent)

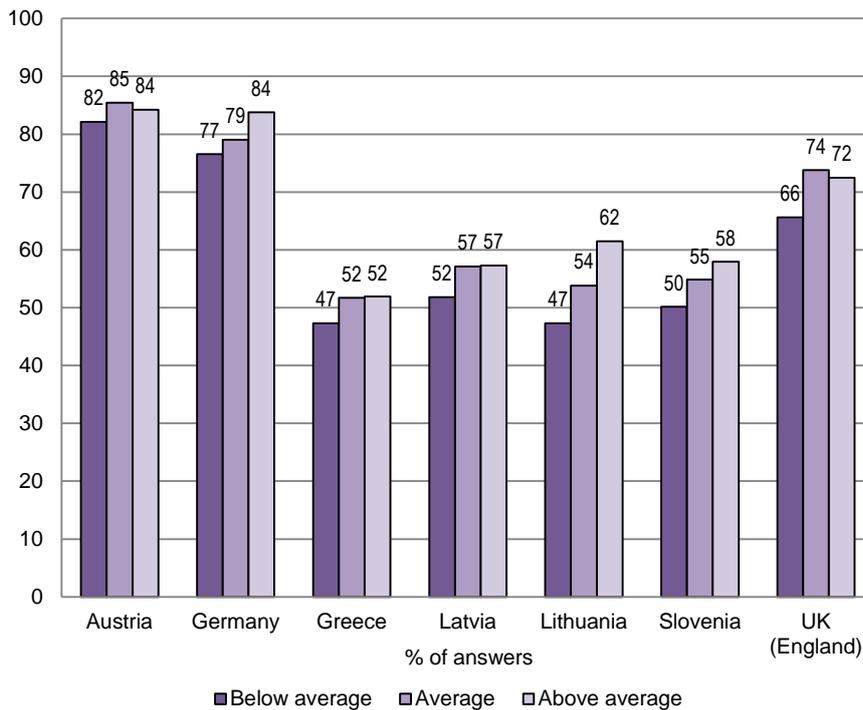


Question: A4\_1 How important were the following aspects for you when you were choosing your current programme? The programme offered good job prospects. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

In Germany students from families with a higher socio-economic status took decisions based on the belief that their programme offers them good job prospects. 55 percent of students from families with a socio-economic status below average agreed with the statement as against 63 percent of those with an average economic status and 67 percent of students from families with an economic status above the average. Moreover, and seen in Chart 5.9, the higher the socio-economic status of a student’s family, the more likely they are to choose a programme based on the appeal of the occupation related with the programme, but the differences are only relevant for some countries.

Lithuanian students are more likely to choose their programme because they believed the programme is a good foundation for their further education or qualification when they come from families with a higher socio-economic status. 62 percent of students with a socio-economic status that is above-average agree with the statement, 54 percent of students that are in the average socio-economic class and only 47 percent of those with a below-average status.

Chart 5.10: Importance of “The programme provides a good foundation for further education”, by socio-economic status and country (in percent)



Question: A4\_5 How important were the following aspects for you when you were choosing your current programme? The programme provides a good foundation for further qualifications /education. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

In a nutshell, we can conclude that only some socio-economic backgrounds of VET students influence particular factors of school enrolment. However, based on the survey results one can speculate that current school success importantly contributes to the perception of factors related to decision making. The higher the school success, the stronger is VET students' belief they enrolled in the programme based on the attractiveness of the occupation or the job prospects<sup>liii</sup>.

Particularly interesting differences are seen in the case of selecting programmes based on friends' participation in Austria and Germany. Students with low grades are more likely to believe they were influenced by friends' programme choice than those with high grades. On the other side, in Latvia and Greece students with an average or below-average socio-economic status also more often decide on their programme based on friends' choices<sup>liv</sup>. Apparently due to their lower aspirations, students with lower grades or with a lower socio-economic status more often follow their friends' choices rather than their own desires, the social aspect seems to be more important for them. Due to the survey's limitations this should be explored further.

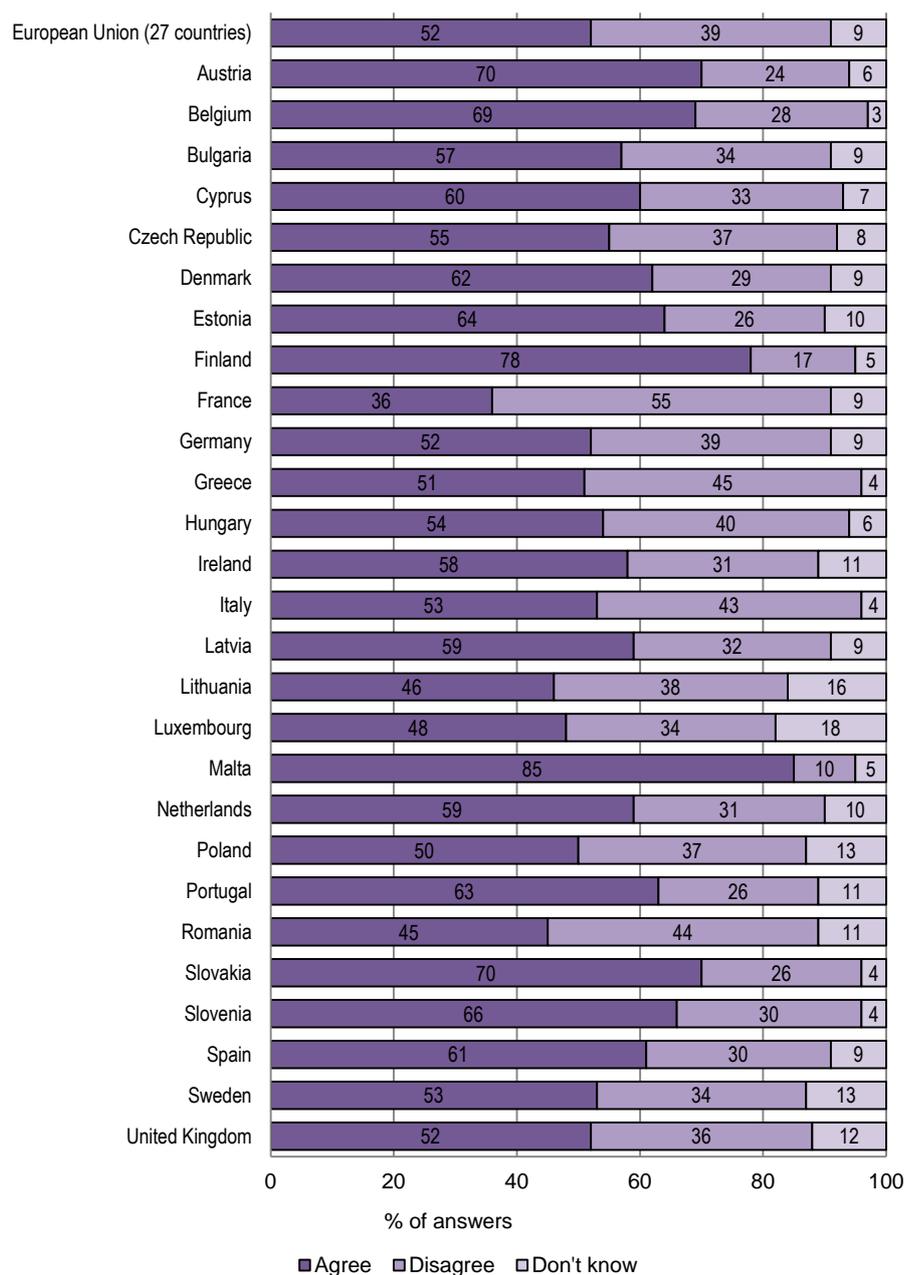
Lastly, it is important to stress parents' education from the viewpoint of the surveyed population, in our survey did not make any differences with regard to perceived decision-making factors (<sup>liv</sup>link to table Factors by parents' education).

### 5.2.3 How do learners judge the importance of different information sources in relation to choosing their VET programmes?

While in the previous section we considered the assessment of how the spectrum of different personal and external factors impacted particular decision-making choices of individuals, here we explore how VET

students evaluate external factors as information sources. First, we look again at the general Eurobarometer EU-27 data and then to the results of the 7EU-VET survey. The importance of information sources in the international comparison can first be framed by the general assessment of the appropriateness of information young people receive from schools and employment services. This has been asked in the Eurobarometer survey (see Chart 5.11).

*Chart 5.11: Students' opinion about the statement that young people in their country receive enough advice concerning their learning and career opportunities from schools and employment services*



Question: QA6. Could you tell me to what extent you agree or disagree with the following statement: In (OUR COUNTRY) people receive enough advice concerning their learning and career opportunities from schools and employment services.  
 Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 76

Chart 5.11 presents the data on whether young people receive enough advice concerning their learning and career opportunities from schools and employment services in each country. A majority (52 percent) of EU citizens totally agree or tend to agree with this statement, however 39 percent disagree. Among the seven countries, the level of agreement is highly above-average in Austria (70 percent) and Slovenia (66 percent). The results for these two countries are similar to those for Slovakia (70 percent) and Belgium (69 percent).

Latvia's result is also above-average with 59 percent of those claiming that people receive enough advice concerning their learning and career opportunities. This puts Latvia in a group together with Denmark (61 percent), Cyprus (60 percent), the Netherlands (59 percent) and Ireland (58 percent). Agreement in other 7EU VET countries is average (UK and Germany) or below-average (Greece and Lithuania). Especially Lithuania shows the least promising results (46 percent) and falls into a group of countries with the lowest agreement, together with Luxembourg (50 percent), Romania (45 percent) and especially France (only 36 percent).<sup>186</sup> One would expect that in countries where formal institutions do not provide sufficient information sources this would be compensated by other sources.

As can be seen from the 7EU-VET survey, across the countries the sources most often used are parents and family, online information, informative days, previous internships or work placements, and friends and classmates. Teachers are not generally considered an important source of information about VET programmes by students. Across all of the countries, around 10 percent of students rated teachers as an important information source with the exception of the UK where the percentage is higher at 30 percent. In the UK, concerns have been expressed that teachers in lower-secondary schools, who may not have expertise in vocational programmes, are an important source of advice for students who may be going on to different institutions to take VET programmes. In Germany, Latvia and the UK, students taking more demanding<sup>187</sup> vocational programmes were more likely than other students to rate teachers as an important source of information. Between 30 and 40 percent of students across all of the countries rated parents and family members as an important source of information and that share did not vary based on the level of programmes students were interested in.

*Table 5.9: Percentage of VET students reporting the strong relevance of selected information sources in the process of enrolling in the VET programmes, by country*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Teachers	9	11	17	13	6	7	<b>35</b>
Parents or family members	<b>39</b>	<b>40</b>	<b>22</b>	<b>29</b>	<b>18</b>	<b>22</b>	<b>35</b>
Friends or classmates	22	19	<b>22</b>	20	<b>12</b>	13	<b>27</b>
Job centre	6	14	9	8	4	7	6
Informative days / fair / open days at school	<b>48</b>	26	9	<b>27</b>	11	<b>39</b>	23
Online information and/or other public media (e.g. newspapers)	<b>28</b>	<b>39</b>	16	<b>27</b>	<b>23</b>	<b>21</b>	23
An aptitude test offered by an educational establishment	14	5	8	16	7	11	16
A previous internship or work placement (not asked in Slovenia)	18	<b>49</b>	17	13	6	NA	16
School counsellors or career advisors (not asked in Austria and Germany)	NA	NA	<b>18</b>	10	7	14	22

*Question: A5 How important were the following information sources when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

<sup>186</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 76

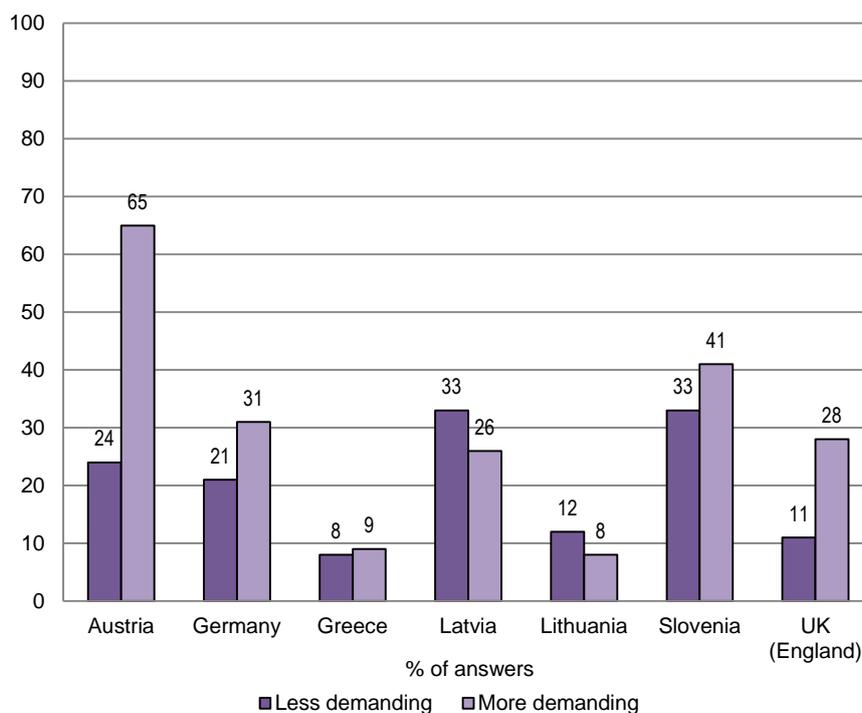
<sup>187</sup> Due to the fact that each country has a different structure of VET programmes, we grouped them in two main categories: more demanding and less demanding programmes. You can find the table of grouped programmes in the appendix.

Around 20 percent of students across the countries used their classmates or friends to obtain information about the programmes they were interested in. In Germany and Austria, students attending more demanding programmes were more likely than others to rate their classmates as an important information source, while in the UK the situation is reversed<sup>lvi</sup>. In the UK, the influence of peers is sometimes believed to lower expectations, whereas in Austria and Germany it may work to raise expectations.

Job or career centres were rated as important sources of information by approximately 10 percent of students in all seven countries, with the lowest percentages in the UK and Lithuania (4 percent). However, in Germany and Austria students from more demanding programmes gave a lower rating to information from job centres than students from less demanding ones. The differences in the shares are 5 percent in Germany and 8 percent in Austria.

As indicated in Chart 5.12, open days/information days were not rated as an important source of information by students in Greece (8 percent) and Lithuania (10 percent). In contrast, every second Austrian student rates open days/information days as an important source of information.

Chart 5.12: Importance of 'Information days', by country and type of programme (in percent)



Question: A5\_5 How important were the following information sources when you were choosing your current programme? Informative days / fair / open days at schools. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

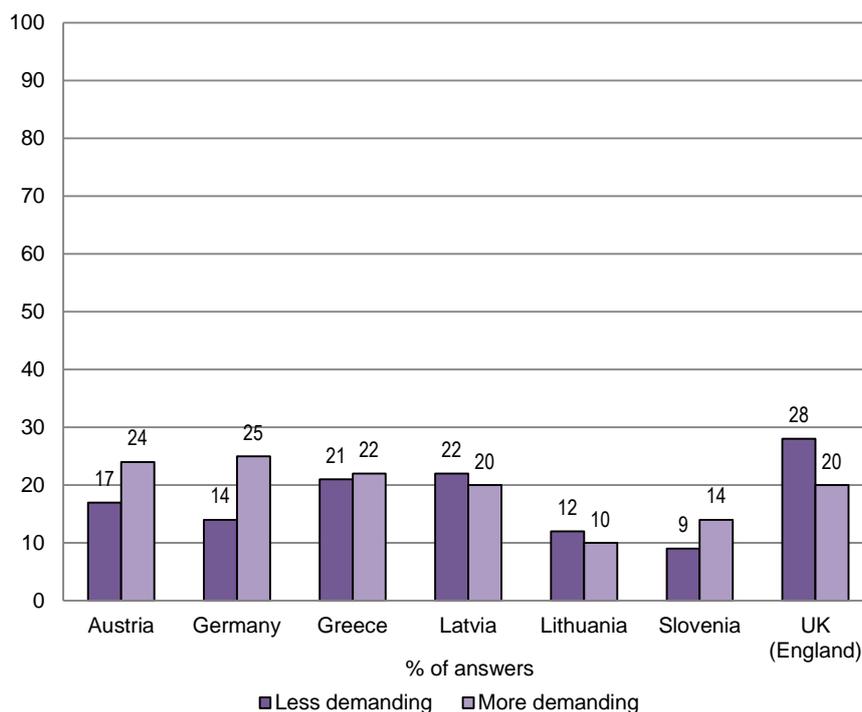
In other countries, around 25 percent of students rated open days/information days as important. In some countries, there are also differences among the two groups of students based on the level of the programme. In Slovenia, Austria, Germany and the UK, students in more demanding programmes were more likely to rate open days/information days as important, while in Lithuania we encounter a reverse situation. Lithuanian students in lower level programmes were more likely to value open days/information days. The greatest difference was found in Austria where 65 percent of students in more demanding programmes compared to 24 percent in less demanding programmes said they rated open days/information days as important.

Online information and other public media were highly valued by students in Germany (38 percent) and the least valued in Greece (16 percent) with Slovenia and the UK in the middle (around 20 percent). Again, there were some differences based on how demanding students' programmes are. Students enrolled in more demanding programmes in Slovenia and the UK were more likely to use online information, while in Germany such students were less likely to use online sources compared to those from less demanding programmes. In Latvia, students in less demanding programmes were more likely to rate school counsellors as an important source of information (16 percent) than those in more demanding programmes (9 percent).

Students in Slovenia and Austria most often use informative days and parents as a main source of information about the programmes they are interested in. In Lithuania and Germany most students get information about programmes online and from their parents or other family members. While Greek students most often relied on their parents or friends, Latvian students, besides using their parents, used informative days and online sources for information about programmes. Parents and teachers were the main source of information for UK students.

In Austria and Germany, students (24 percent) from more demanding programmes more often assess friends and classmates as an important information source than those in less demanding programmes (15 percent), while in the UK we can notice the reverse situation (20 percent : 28 percent). In the other countries there are no larger differences based on the type of programme.

Chart 5.13: Importance of "friends and classmates", by country and type of programme (in percent)

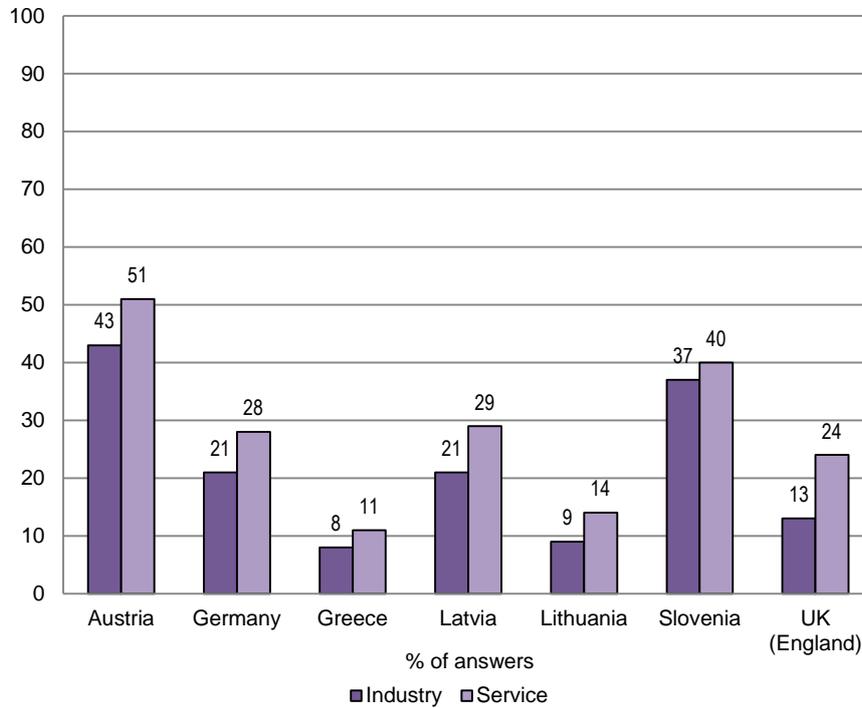


Question: A5\_3 How important were the following information sources when you were choosing your current programme? Friends or classmates. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

We also found that in Austria, Germany, Lithuania, Latvia, the UK and Greece open and information days were rated as important sources of information by more students following programmes relating to the service sector than by those following programmes relating to the industrial sector. These differences are the highest in the UK (9 percent), Austria, Latvia (8 percent) and Germany (7 percent). The biggest share

of students using this source can be noticed in Austria and Slovenia, which could mean these information days are well organised and visited in these two countries.<sup>188</sup>

Chart 5.14: Importance of 'Information days', by country and programme sector (in percent)

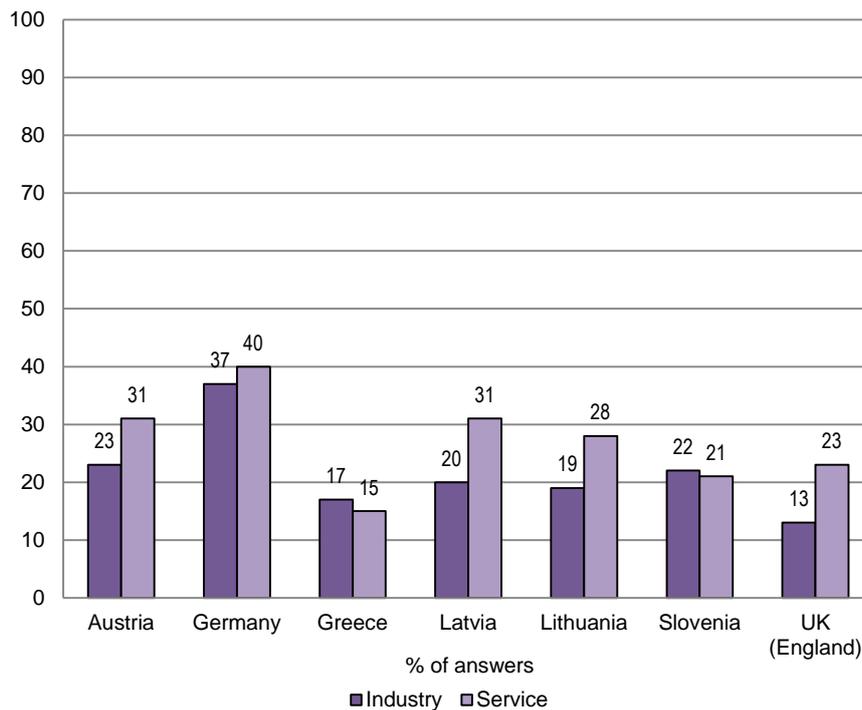


Question: A5\_5 How important were the following information sources when you were choosing your current programme? Informative days / fair / open days at schools. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

Online information was most often highly rated in Germany (around 39 percent) and least often in Greece (around 16 percent). In Latvia, the UK, Lithuania and Austria, students taking programmes relating to service sector employment were more likely to value online information than those taking programmes relating to industrial employment.

<sup>188</sup> Appendix Provide definition of sectors\*\*

Chart 5.15: Importance of “online information”, by country and programme sector (in percent)



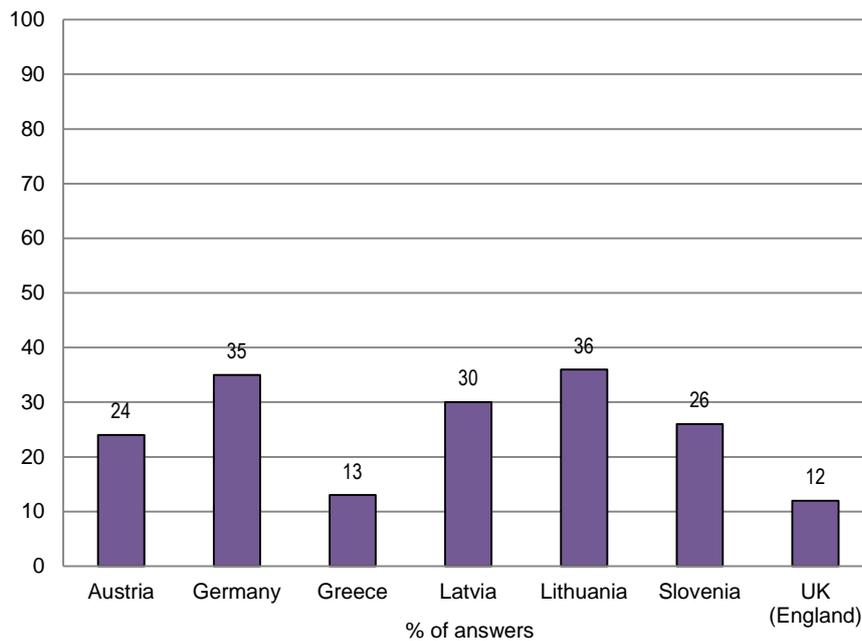
Question: A5\_6 How important were the following information sources when you were choosing your current programme? On-line Information and/or other public media (e.g. newspapers). Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

We can conclude from the results that students still very often search for information about programmes among their parents, family members, friends and teachers, which could mean that a programme’s reputation influences students’ decisions about the programme. A lot of students (in some countries the majority) use online information and information days to help them with their decisions. We also confirmed there are some associations between the use of the sources and the types of programmes and the sector of programmes, which would be interesting for further investigation.

#### 5.2.4 Choosing a VET programme – how wide is the choice, and why?

In this section, we explore the percentage of students that considered two or more alternative programmes when deciding on secondary education. The question of the relative choice in the decision making process is very important as in a way it indicates to what extent VET students are predetermined in their vocational path. The results from the 7EU-VET survey are quite surprising, indicating that in their final selection the majority of VET students did not (seriously) consider any alternative in their decision-making process.

Chart 5.16: Percentage of VET students considering more than one alternative when selecting programme, by country



Question: A6 Did you consider any alternative programme when you were selecting your current one? Presented answers 3, 4 and 5 on a scale from 1="No, I didn't consider any alternative programme", 2=" I was considering one other alternative programme", 3="I was considering two other alternative programmes" to 5="I was considering more than three alternative programmes"

From the results, we can see that on average only one out of four VET students considered an alternative in the decision-making process. The highest percentages of students considering alternatives are seen in Lithuania (36 percent) and Germany (35 percent), while the lowest are in Greece (13 percent) and the UK (12 percent). Therefore, the key concluding question in this section relates to the question of what determines the breadth of VET students' occupational choices. We assumed that, apart from the socio-demographic characteristics, the relative choice depends on one's personal preferences and the information a student relied upon.

Table 5.10: Effects of selected characteristics on considering alternatives to enrolment in the current VET programme, by 7EU-VET countries<sup>189</sup>

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Constant (Was considering other programme/s) (B)	3.865	1.647	1.929	0.666	0.217	1.300	0.435
<i>Rationale for programme selection</i>	Exp(B)	Exp(B)	Exp(B)	Exp(B)	Exp(B)	Exp(B)	Exp(B)
Appealing programme	0.647***	0.826*	0.887	0.937	0.812***	0.897	0.836*
Good foundation for further qualifications	0.846	0.946	0.738***	1.019	1.055	0.818*	1.003
Reasonable distance from my home	0.997	0.945	0.895	0.897*	0.960	1.214**	0.977
<i>Consideration of information sources</i>							
Teachers	0.984	0.792**	0.993	0.937	1.113	0.976	0.847**
Family members	1.050	1.039	0.980	1.010	1.137*	0.944	1.235***
Online info. and media	1.042	1.351***	1.024	1.132**	1.092	0.966	1.083
<i>Socio-demographic Characteristics and School Success</i>							
Gender (male)	1.208	0.936	1.052	1.255	0.929	1.300	1.021
Parents' primary and lower-secondary education	0.964	0.813	1.031	1.122	2.301*	2.209**	NA
Parents' tertiary education	0.730	1.218	0.624**	0.853	1.450**	1.279	NA
Below-average socio-economic status	0.911	0.689	1.074	1.094	0.573***	0.759	1.642
Above-average socio-economic status	1.157	0.615**	0.609	0.796	0.738	0.837	0.515***
<b>Nagelkerke R Square</b>	0.072	0.141	0.082	0.044	0.080	0.069	0.104

\*\*\* = p<0.01; \*\* = p<0.05; \* = p<0.10

In the survey we found no evidence that males consider a wider choice than females. However, we found some evidence that parents' education affects the breadth of choice but there are large differences among countries. For example, in Slovenia a lower level of parents' education has a positive effect of a wider choice which means VET students are freer in their decisions. In Lithuania, we found in a way the opposite result: a wider choice characterises students whose parents have a tertiary education. In Greece it is the opposite. Parents with a tertiary education have a negative effect on the breadth of choice.

Size of the environment in general does not impact the breadth of occupational choice, with the exception of Lithuania where VET students coming from smaller places usually choose from among several different options, and the UK where smaller places limit the available choice. As for socio-economic status, we found some evidence that VET students with a lower socio-economic background consider fewer alternatives when selecting education, while in Germany and the UK this is a characteristic of students from wealthier families. Lastly, in Austria the full-time employment of the mother limits vocational choices, while in Lithuania and Latvia we found some evidence that the full-time employment of the father stimulated students to consider more options. As for VET programme structures, we found no differences among more and less demanding programmes, except in Germany where VET pupils attending more demanding programmes consider a wider spectrum of choice prior to their enrolment in comparison to those in less demanding programmes.

It appears that, more than the abovementioned factors, the breadth of occupational choice is determined by information sources and one's own preferences for the programme that is finally selected. However, there are large differences among countries and no firm conclusions can be drawn. In Austria, Germany and Lithuania, for example, VET students who made their final decision on programme enrolment based

<sup>189</sup> In the model, we also tested the effects of programme type, place of living, father's and mother's employment status. In the case of the UK and Germany, VET students in the medium and more demanding programme types considered more alternatives than students in less demanding programme types. Only in Slovenia and the UK does living in smaller cities or a village have a positive effect on a wider occupational choice. In Latvia and Lithuania, the full-time employment status of fathers has a positive effect, while in Austria such an effect is held by the employment status of mothers.

on the fact the programme appealed to them did not consider many alternatives. In Greece, this was the case when VET students made their final enrolment decision based on the fact the programme provided a good foundation for further education. As for information sources, we found evidence that students in Germany who relied on the opinion of teachers and online information and public media were more (pre)determined in considering only one programme to enrol in. Teachers also impacted the more straightforward decision of students in the UK, while considering advice from parents or family members broadened the spectrum of choices.

### 5.2.5 Conclusions

The perception of VET's image in society varies considerably across the seven countries under observation. From the Eurobarometer EU-27 survey we can see that VET gains the highest reputation in Austria (88 percent) and Germany (84 percent), while Slovenia (50 percent) has the lowest level. Among the seven countries included in the survey, the most important factor influencing students' decisions on enrolment in VET programmes were related to vocational interest: the belief that the programme provides a good foundation for a further career, good job prospects or an appealing programme. A relatively small proportion of students stated that their previous examination grades prevented them from enrolling in more preferable programmes or that they chose the programme because of their friends.

We did not find much evidence that parents' education or family socio-economic status affects students' choices of VET programmes. However, we found the sources most often considered in the decision-making process related to VET enrolment are parents and family. Online information and previous work experiences in general take second place. Teachers or information days are generally not considered as an important source of information about VET programmes.

On average, only one out of four VET students consider an alternative in the decision-making process. The highest shares of students considering alternatives are seen in Lithuania (36 percent) and Germany (35 percent), while the lowest are seen in Greece (13 percent) and the UK (12 percent). We found some evidence that parents' education affects the breadth of choice but there are large differences among the countries. For example, in Slovenia a lower level of parents' education has a positive effect of wider choice which means VET students are freer in their decisions. In Lithuania, we found in a way the opposite result: a wider choice characterises students whose parents have a tertiary education. We found some evidence that VET students with a lower socio-economic background consider fewer alternatives in selecting education, while in Germany and the UK this is a characteristic of students from wealthier families. Such cross-country differences were also detected when considering personal factors and different information sources.

Samo Pavlin,  
Božidar Grigić and  
Julian Stanley

## 5.3 Learning, Perception and Satisfaction with VET Programmes

In this section, we focus on VET students' learning behaviour, perception of the programme and satisfaction. We take the view that vocational learners are agents. We therefore expect that their learning behaviour, decisions and objectives will help explain the school success presented in the next chapter. In the first section, we present students' learning behaviour aspects such as the quantity of time spent studying outside school, doing paid work, participation in exchange programmes and similar. In the second part,

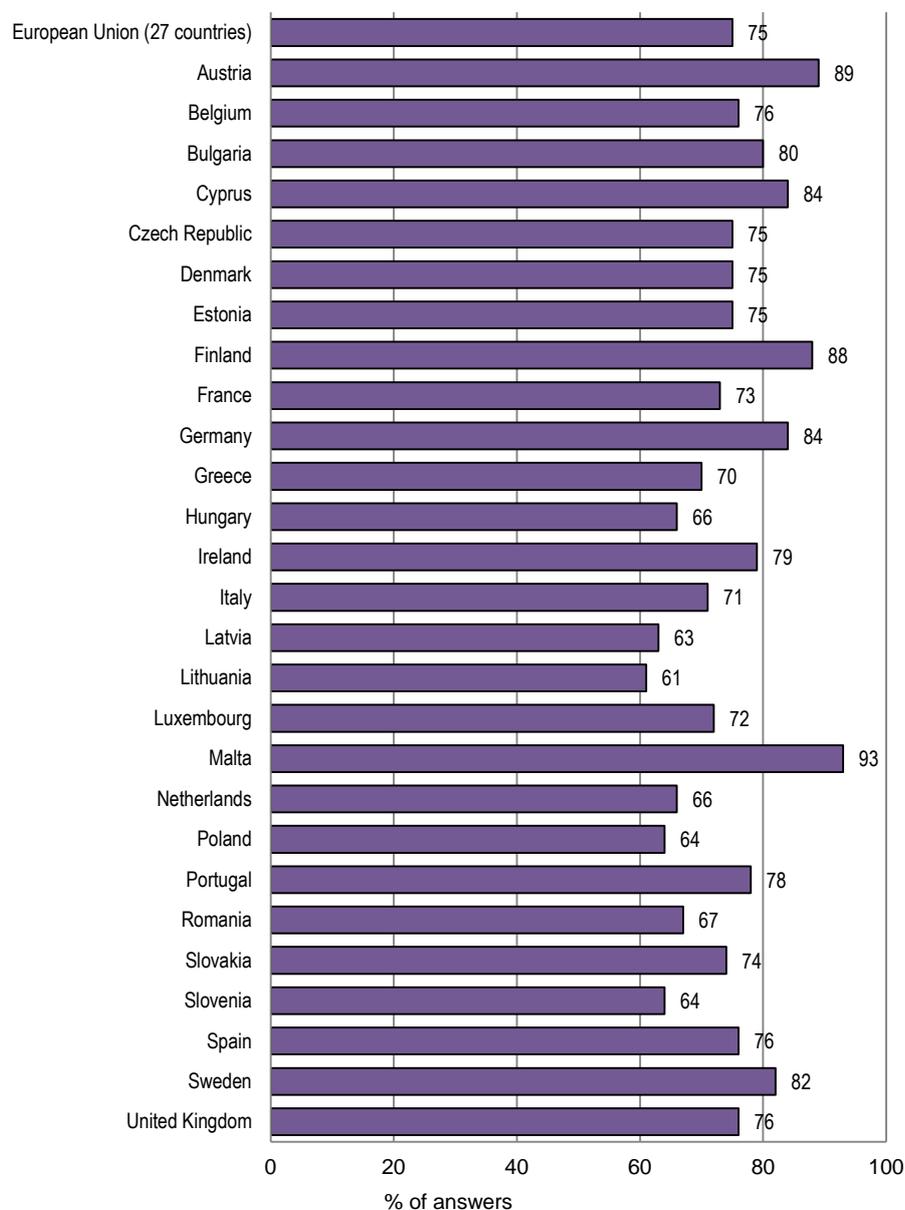
the perception of the programme and incentives towards learning are presented, while in the third part we discuss students' satisfaction with various elements of the programmes. In all three sections, we present the results by different socio-demographic characteristics and other relative comparative aspects.

### **5.3.1 Learning, free-time activities and working**

*The quality of VET education and teachers' competencies are an important benchmark regarding the extent to which VET schools prepare their graduates for their careers.*

This part of the report explores how much time VET students learn in school and at home and what are their key learning drivers. We also explore what students do in their free time and to what extent they are engaged in paid work. We are aware that any type of social engagement is associated with different learning activities that contribute either to the development of vocational or generic competencies. As often described in learning theories, school-based learning is best observed as information process learning and is associated with the process of reflection, while the process in practical learning or working is related to participation which is described as social learning. As a framework of VET curricula, we first look at the general perceptions of the VET curriculum quality and competence of VET students in EU-27 countries, which is an important indicator of the contribution of VET curricula to VET students' preparation for work and life in general.

Chart 5.17: Percentage of citizens agreeing with the statement “Vocational educational and training offers high quality learning”

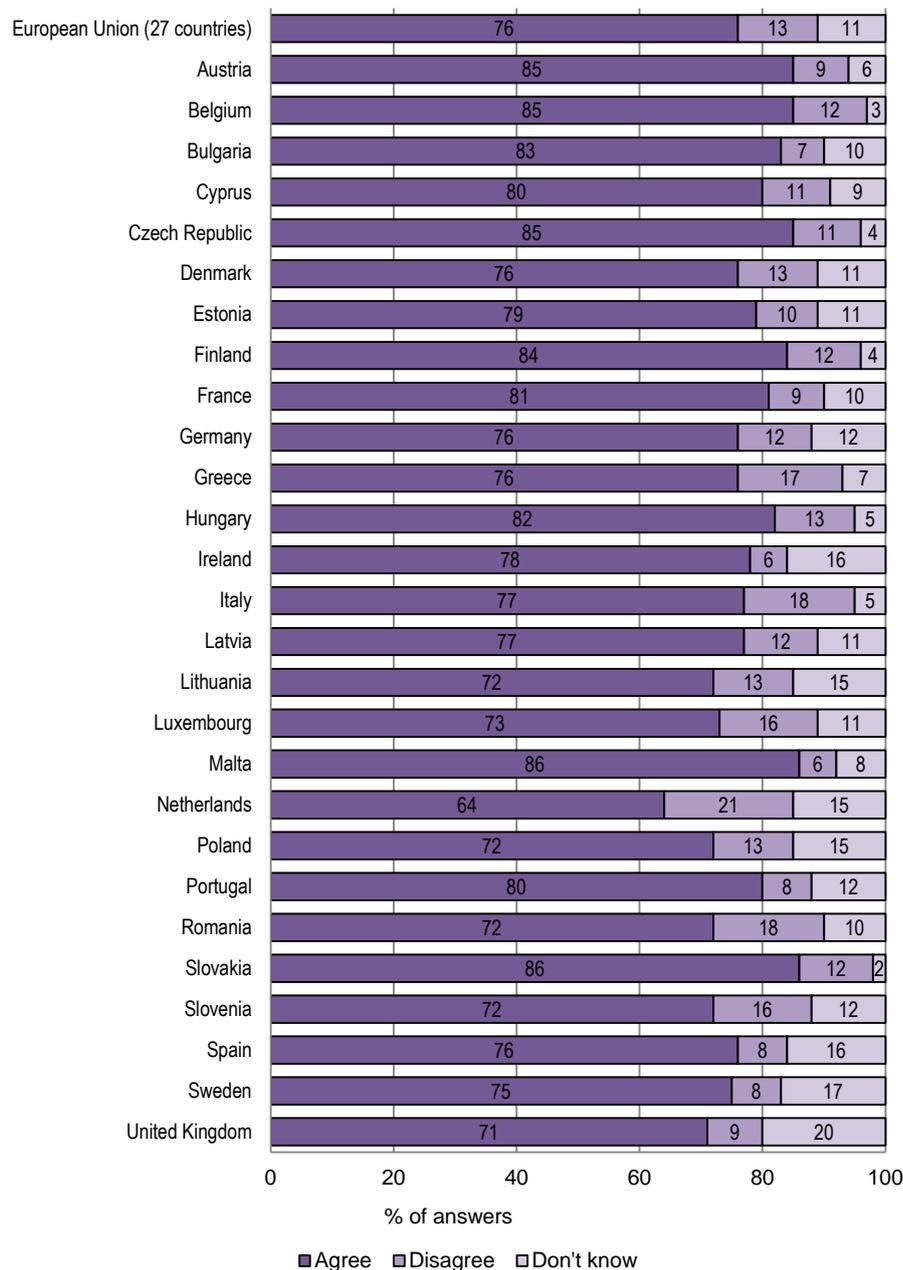


Question: QA10.1 Please tell me to what extent you agree or disagree with each of the following statements. Option: Vocational educational and training offers high quality learning. Presented answer: Total "Agree"  
 Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 33

As Chart 5.17 shows, approximately three-quarters of all respondents in the EU-27 agree that VET offers high-quality learning, with 22 percent totally agreeing and 53 percent tending to agree. Only 17 percent of citizens disagree, with 15 percent tending to disagree and 2 percent totally disagreeing. Amongst the 7EU VET countries, agreement is particularly strong in Austria (89 percent) and Germany (84 percent). These are the two Member States with the highest agreement, together with Malta (93 percent), Finland (88 percent), Cyprus (84 percent) and Sweden (82 percent). The UK's result comes closest to the average (74 percent) and can be interpreted together with Portugal (78 percent) or Belgium (76 percent). Other 7EU VET countries are below the average. The agreement that VET offers high quality learning is lower in Greece (70 percent), and especially Slovenia (64 percent), Latvia (63 percent) and Lithuania (61 percent).

The last three countries are at the very bottom of the list, together with Poland (64 percent).<sup>190</sup> This ranking is interesting to compare with the perceived competence levels of teachers and trainers in VET education.

**Chart 5.18: Percentage of citizens agreeing with the statement “Teachers and trainers in vocational education and training are competent”**



Question: QA10.3 Please tell me to what extent you agree or disagree with each of the following statements. Teachers and trainers in vocational education and training are competent.

Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 39

In Chart 5.18 we can see levels of agreement with the statement "Teachers and trainers in VET are competent". Similarly as in the case of the quality of VET education (see the previous chart), more than three-

<sup>190</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 33

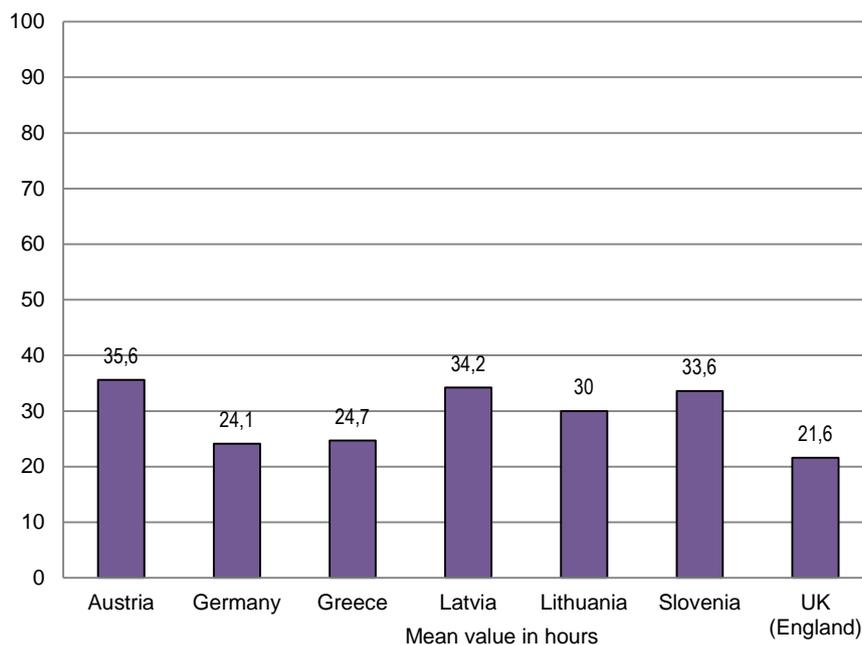
quarters of all EU respondents (76 percent) agree with this statement, and of these 23 percent totally agree and 53 percent tend to agree. Only 13 percent of people disagree with this statement. If we take a look at the 7EU-VET countries, it can be noticed the agreement level mainly hovers around the average (Latvia, Greece, Germany) or falls below it (Lithuania, Slovenia, UK). The exception is Austria (85 percent) that has, overall, one of the highest levels of agreement. Latvia (77 percent), Greece and Germany (both 76 percent) are comparable to Ireland (77 percent), Italy (77 percent) or Spain (76 percent). Lithuania, Slovenia (both 72 percent) and UK (71 percent) fall into a group of countries with the lowest agreement, together with Poland (73 percent) or Romania (72 percent). The percentage of those that disagree with the statement is highest in Greece (17 percent) and Slovenia (16 percent), and the UK has the largest share of those that answered "I do not know" (20 percent).<sup>191</sup>

Both data should be considered within the national context. The results indicate that high quality in the VET education on the system level can be different from high quality teachers, and vice versa. In the next section we look more deeply into this issue when considering only results from our 7EU-VET survey.

*There are large differences in time spent in school education among countries, e.g. 22 hours in the UK in comparison to 36 hours in Austria; in some countries, one out of four VET students does not learn at all after school.*

Chart 5.19 shows how much time VET students actually spend in schools. According to our survey across the 7EU-VET countries, students spend on average 29 hours. The most time in school spent by students is in Austria, Latvia and Slovenia (an average of 34 hours) and the least in the UK (21.6 hours).

*Chart 5.19: Students spending time in school, by country in hours per week*



*Question: B3 How many school hours per week do you spend at school?*

Male and female students spend relatively the same amount of time in school across the 7EU-VET countries, except in Austria, where males spend more hours (37) than females, who spend only 33 hours in school. Compared by the type of the programme, we can see that in Austria, Greece, Latvia, Slovenia and Germany students spend more time in more demanding programmes, while in Lithuania and the UK the situation is reversed<sup>lvii</sup>. Therefore, we can assume that in more demanding programmes students spend

<sup>191</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 39

more time in school and less time in practical training at companies, while in less demanding programmes the situation is most probably reversed.

When we looked at the time spent in school by parents' education, we noticed that in Latvia and Slovenia there is no association between the two. On the other hand, in Germany, Austria and Greece students with higher educated parents spend more time in school, while in Lithuania such students spend less time than students with lowly educated parents<sup>lviii</sup>. In Lithuania and Greece, students with a higher socio-economic status spend a little more time in school than those with a lower socio-economic status, while in Austria, Slovenia, Latvia and the UK students spend approximately the same amount of time in school regardless of their socio-economic status.<sup>lix</sup> This means that in most studied countries more educated parents and those with a higher economic status look after their children better in terms of how they participate in the school curriculum. As expected, another important determinant of the time spent in school is related to the type of study programmes. In all countries except Lithuania and the UK, students spent more time in school in more demanding programmes, with the biggest difference in Germany (31 hours in more demanding programmes and 19 hours in less demanding programmes), which strongly depends on programme-type particularities as well as the typology of the programme clustering developed in this report<sup>lx</sup>.

Differences in the time spent on learning outside school are more interesting. Our report shows that vocational learners spend little time studying outside of school. In Slovenia, Germany and Greece, over 80 percent of students studied less than four hours per week out of school. Out-of-school study is greatest in Austria (only 60 percent studied for less than four hours) and England (71 percent). In Austria, 10 percent reported that they studied up to 12 hours and 24 percent up to eight hours. More worrying are the percentages indicating students' reports of not learning in school at all: approximately one out of four VET students do not learn in Greece, Lithuania and the UK. The share of such students is much lower in Austria.

*Table 5.11: Students spending time learning outside school (C4), by country in hours per week (in percent)*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
No time at all	10	20	28	12	26	25	25
Up to two hours	23	40	41	41	43	43	22
Up to four hours	26	23	13	23	18	20	23
Up to eight hours	24	12	11	14	8	8	18
Up to twelve hours	10	3	4	5	3	2	5
Up to sixteen hours	3	1	1	2	1	1	2
More than sixteen hours	2	1	1	3	1	0	3

*Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?*

Out-of-school learning was strongly associated with gender: for example, in six of the seven countries males were twice as likely as females to report that they spent no time at all on study outside of school. In England, exceptionally, the relationship was reversed: 30 percent of females and 22 percent of males reported they did not study out of school at all.

Table 5.12: Students spending time learning outside school (C4), by country and gender in hours per week

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Male</i>							
No time at all	14	27	34	18	35	33	22
Up to two hours	26	42	39	45	41	44	23
Up to four hours	26	20	10	20	13	16	24
Up to eight hours	21	8	10	12	7	4	19
Up to twelve hours	8	2	4	3	3	1	5
Up to sixteen hours	3	0	2	1	1	0	3
More than sixteen hours	2	1	1	2	1	1	5
<i>Female</i>							
No time at all	7	13	17	6	11	15	30
Up to two hours	20	39	43	36	48	41	21
Up to four hours	26	25	19	27	26	25	23
Up to eight hours	27	15	13	18	10	11	17
Up to twelve hours	13	5	4	7	3	4	5
Up to sixteen hours	4	1	1	3	1	3	2
More than sixteen hours	3	1	2	4	1	0	2

Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?

Study time outside of school is in some countries associated with school success. Students reporting low grades also reported lower study times outside of school across all countries except Germany and the UK. In some countries, for example Greece, Lithuania and Latvia, the effect associated with differences in grades can be relatively large, for instance, lowly graded students were twice as likely as highly graded students to report they did not study at all outside of school. It is not easy to explain why this relationship is observed in some but not all countries; it is possible that in Germany and the UK the programmes are designed in such a manner that additional study outside of school contributes less to achievement.

Table 5.13: Students spending time learning outside school (C4), by country and school success in hours per week (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Low grades</i>							
No time at all	10	19	35	13	30	29	27
Up to two hours	26	41	41	43	46	46	25
Up to four hours	28	22	11	23	14	17	23
Up to eight hours	18	11	9	13	7	6	15
Up to twelve hours	13	4	3	4	2	1	5
Up to sixteen hours	3	1	1	1	1	1	2
More than sixteen hours	3	1	0	2	0	0	3
<i>High grades</i>							
No time at all	10	19	13	4	15	19	23
Up to two hours	21	40	39	23	39	40	20
Up to four hours	26	23	20	22	27	24	23
Up to eight hours	27	11	14	26	11	9	21
Up to twelve hours	10	4	6	11	4	4	5
Up to sixteen hours	3	2	3	5	2	3	3
More than sixteen hours	2	1	4	9	2	1	4

Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?

In Austria, Germany, Slovenia and the UK, learners in more demanding programmes spend more time on study outside of school than learners in less demanding programmes. In the other countries there was no significant association. This may relate to features of the programmes, for example, how many hours of school-based education are provided, but it is also evident that, in these four countries, there are differences in the extent of independent study which is associated with attending particular types of programmes. This finding is supported by the work of Hodkinson and others (Hodkinson 2000; Colley, James et al. 2003) who found that vocational programmes are characterised by a particular learning culture which shapes the learning behaviour and aspirations of learners.<sup>lxi</sup>

*Interest in practical subjects and understanding of learning material is the most important driver for learning for VET students, although VET students in general do not enjoy learning.*

In this section, we explore which factors shape the learning behaviour of vocational learners across the seven countries. Multiple motivational factors were investigated such as, for example, striving for marks (attainment), seeking to understand (intrinsic satisfaction), seeking to impress teachers, seeking to impress employers or keeping up with fellow pupils. The findings suggest that differences in motivation are associated with different countries and can be further explained by more than one possible factor, for example, the character of the institutions, their performance, and cultural norms.

As it can be seen in Table 5.14, the highest shares of students agreeing to student's incentives can be noticed in the UK (around 70 percent), followed by Austria and Germany (around 50 percent) and with the lowest share in Slovenia (30 percent). In all countries except Lithuania top three incentives expressed by students are importance to make good impression on potential employer by achieving good grades, interest in practical subjects and importance to fully understand what they need to learn. For Lithuanian students the highest ranked incentives are interest in practical subjects, keeping up with their fellow students and importance to fully understand what they need to learn. Students in Austria, Germany, Lithuania and Slovenia least often agreed they enjoy learning, while in Greece, Latvia and the UK least agreed on incentive was interest in general subjects.

Table 5.14: Students' incentives towards learning, by countries (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
I strive for the highest possible marks.	59	62	26	38	40	35	78
It is important for me to fully understand what I have to do/learn.	<b>70</b>	<b>70</b>	<b>50</b>	<b>58</b>	<b>44</b>	<b>51</b>	<b>82</b>
I want to make a good impression on my teachers by achieving good grades.	36	38	32	36	27	21	79
I want to make a good impression on potential employers by achieving good grades.	<b>72</b>	<b>81</b>	<b>46</b>	<b>52</b>	34	<b>38</b>	<b>87</b>
I want to keep up with my fellow pupils.	45	48	23	32	<b>45</b>	15	74
I enjoy learning.	10	10	27	26	23	7	69
I am interested in practical subjects.	<b>68</b>	<b>68</b>	<b>64</b>	<b>64</b>	<b>59</b>	<b>58</b>	<b>81</b>
I am interested in general subjects (e.g. maths, foreign language)	26	24	15	22	28	19	35

Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Table 5.15: Students' incentives towards learning, by countries & gender (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Male</b>							
I strive for the highest possible marks.	58	59	23	33	36	29	78
It is important for me to fully understand what I have to do/learn.	<b>69</b>	<b>67</b>	<b>48</b>	<b>53</b>	<b>40</b>	<b>45</b>	<b>79</b>
I want to make a good impression on my teachers by achieving good grades.	37	38	31	34	25	22	78
I want to make a good impression on potential employers by achieving good grades.	<b>69</b>	<b>78</b>	<b>45</b>	<b>50</b>	32	<b>35</b>	<b>85</b>
I want to keep up with my fellow pupils.	45	51	23	30	<b>42</b>	16	74
I enjoy learning.	9	10	26	21	20	9	68
I am interested in practical subjects.	<b>73</b>	<b>72</b>	<b>63</b>	<b>63</b>	<b>58</b>	<b>61</b>	<b>82</b>
I am interested in general subjects (e.g. maths, foreign language)	25	26	14	20	23	18	35
<b>Female</b>							
I strive for the highest possible marks.	60	<b>64</b>	31	43	45	<b>42</b>	78
It is important for me to fully understand what I have to do/learn.	<b>71</b>	<b>73</b>	<b>53</b>	<b>65</b>	<b>50</b>	<b>58</b>	<b>87</b>
I want to make a good impression on my teachers by achieving good grades.	36	38	32	38	30	20	<b>82</b>
I want to make a good impression on potential employers by achieving good grades.	<b>74</b>	<b>84</b>	<b>46</b>	<b>54</b>	36	41	<b>90</b>
I want to keep up with my fellow pupils.	45	45	22	35	<b>49</b>	14	74
I enjoy learning.	10	11	28	31	28	6	70
I am interested in practical subjects.	<b>62</b>	63	<b>66</b>	<b>65</b>	<b>61</b>	<b>54</b>	81
I am interested in general subjects (e.g. maths, foreign language)	28	22	18	25	35	21	35

Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

In Austria (58 percent), Germany (59 percent) and the UK (78 percent), the majority of male learners reported that they strived for the highest possible marks, while in Slovenia (29 percent), Lithuanian (36 percent), Latvia (33 percent) and Greece (23 percent) high marks were a less important motive. In every country except the UK, female learners were more likely than males to strive for the highest possible marks. Similarly, learners from Austria, Germany and the UK were considerably more likely to report that it was important for them to understand what they have to learn (intrinsic motivation); females in every country were more likely to report that they wanted to fully understand what they were supposed to learn. An interest in practical subjects was the most universally important motive for students from all seven countries (60–70 percent of students agreed in every country); this motive was slightly more important for

males than females in every country. By contrast, in all of the countries except the UK only a minority of students reported that they enjoy learning: Austria (9 percent), Greece (26 percent). It is difficult to explain why the enjoyment of learning is relatively high among English learners and relatively low among Slovenian learners. These findings are consistent with the view that motivation is multi-dimensional and that some dimensions are associated with national conditions.

Learners with an above-average socio-economic status were more likely to report that they were strongly motivated across almost all of the different dimensions of study behaviour in some but not all of the countries. Socio-economic status appears to be particularly powerful in the case of Germany and the UK, with weaker effects in Lithuania, Austria and Greece. Enjoying learning was significantly associated with socio-economic status in three countries: Germany, the UK and Lithuania.<sup>lxii</sup> Other socio-demographic factors such as parents' education or place of living did not indicate many important differences.

Drivers for learning were also analysed in relation to the level of achievement reported by learners. Higher achieving students reported higher levels of motivation with respect to almost all of the motivation factors across all of the countries. Three types of motivation had a significant association with levels of achievement in all of the countries: 'striving for highest possible marks', 'a commitment to full understanding' and 'interest in general subjects'. We can conclude that high levels of different kinds of motivation and high levels of achievement are closely associated, although it is difficult to draw any straightforward conclusions on causality. It is possible that some kinds of motivation cause higher achievement whilst others result from higher achievement. The relatively low levels of enjoyment that learners report is a cause for concern given that enjoyment is associated with higher achievement.

Table 5.16: Students' incentives towards learning, by countries & school success (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Low grades</i>							
I strive for the highest possible marks.	40	47	17	35	32	19	68
It is important for me to fully understand what I have to do/learn.	<b>60</b>	<b>64</b>	<b>43</b>	<b>57</b>	<b>38</b>	<b>40</b>	<b>78</b>
I want to make a good impression on my teachers by achieving good grades.	32	31	28	37	23	21	73
I want to make a good impression on potential employers by achieving good grades.	<b>62</b>	<b>76</b>	<b>43</b>	<b>52</b>	30	<b>31</b>	<b>81</b>
I want to keep up with my fellow pupils.	38	44	20	32	<b>42</b>	16	71
I enjoy learning.	5	7	20	24	19	7	60
I am interested in practical subjects.	<b>64</b>	<b>68</b>	<b>60</b>	<b>63</b>	<b>57</b>	<b>55</b>	<b>77</b>
I am interested in general subjects (e.g. maths, foreign language)	18	20	12	20	24	15	26
<i>High grades</i>							
I strive for the highest possible marks.	69	<b>77</b>	41	<b>66</b>	<b>60</b>	<b>58</b>	<b>88</b>
It is important for me to fully understand what I have to do/learn.	<b>75</b>	<b>77</b>	<b>63</b>	<b>80</b>	<b>59</b>	<b>68</b>	<b>87</b>
I want to make a good impression on my teachers by achieving good grades.	39	38	41	46	37	21	85
I want to make a good impression on potential employers by achieving good grades.	<b>77</b>	<b>86</b>	<b>58</b>	60	44	48	<b>93</b>
I want to keep up with my fellow pupils.	49	55	25	39	52	14	78
I enjoy learning.	12	16	35	42	32	8	78
I am interested in practical subjects.	<b>71</b>	69	<b>72</b>	<b>79</b>	<b>67</b>	<b>61</b>	<b>87</b>
I am interested in general subjects (e.g. maths, foreign language)	32	34	23	39	37	28	45

Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

In some cases, the analysis revealed that learners in more challenging programmes (higher level, longer duration) reported lower levels of motivation with respect to most dimensions of motivation across all seven countries: striving for marks, seeking to impress teachers, seeking to impress employers, keeping up with fellow pupils, enjoyment of learning, interest in practical subjects, interest in general subjects. This is a surprising finding since these less challenging programmes usually have a lower status and it might be expected that learners taking lower status programmes might be less highly motivated. However, the analysis suggests that motivation may be negatively associated with challenge.<sup>lxiii</sup>

*VET students spend most of their free time with friends, social networks and watching television – in general, parents' education brings changes for only some free-time activities and only in some countries.*

In the survey, we were also interested in how learners were spending their time outside of education. Socialising was the single most popular activity: on average, 66 percent of learners spent at least two hours per day on this activity. 35 percent of learners spent at least two hours per day watching TV. 32 percent of learners spent at least two hours per day surfing the Internet (the same proportion reported spending the same time social networking and 17 percent spent this time on computer games) 24 percent of learners spent at least two hours per day exercising, with Slovenian and Latvian students exercising somewhat less than in other countries.

*Table 5.17: Students spending time outside education<sup>192</sup>, by country (in percent)*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
Spending time with friends or peers (e.g. socialising)	<b>76</b>	<b>81</b>	<b>87</b>	<b>90</b>	<b>82</b>	<b>80</b>
Reading books	13	15	24	20	23	13
Watching television	<b>59</b>	<b>65</b>	<b>68</b>	<b>56</b>	<b>65</b>	<b>56</b>
Doing paid work (not related to your programme)	22	23	34	32	34	26
Exercising	43	52	49	34	53	42
Social networking	<b>52</b>	<b>54</b>	<b>59</b>	<b>60</b>	43	<b>57</b>
Surfing the Internet	51	52	<b>59</b>	51	<b>57</b>	53
Playing computer games	19	21	39	29	35	24
Doing voluntary work	15	15	14	13	13	14
Doing something creative	20	19	27	27	22	20
Caring for someone else	17	18	24	25	26	17
Commuting from home to school (and back)	42	42	19	41	33	36

*Question: C5 How much time in an average day do you usually spend doing the following things? If you don't do certain things daily, please estimate how much time you spend on them each day. Presented answers 3, 4, 5, 6 on a scale from 1="No time at all", 2="Up to one hour", 3="One hour until up to two hours" to 6="Four hours or more"*

About 15 percent of learners spend more than two hours per day on commuting, while about 22 percent of all learners spend more than 1 hour per day caring for someone else. More time is spent on caring in Lithuania, Latvia and Greece. Reading books is a relatively unpopular activity: across the seven countries, 52 percent of learners said that spend no time at all reading books. Reading books is slightly more popular in Latvia, Greece and Lithuania.

Spending more time on reading books is associated with higher grades in all countries except Germany (the question was not asked in the UK). Spending time on computer games is associated with lower grades in all countries except Greece. It is not obvious why spending time on computer games should be associated with lower grades when other leisure activities are not. This relationship merits further exploration. Other relationships between time use and current grades are limited to just a few countries. For ex-

<sup>192</sup> More than one hour

ample, in Slovenia and Lithuania high levels of paid employment are associated with lower reported grades. In Lithuania and Latvia, more time spent on commuting is associated with lower grades.

We also noticed that male students spend more time doing paid work, exercising, surfing the Internet and playing computer games, while female students spend more time reading books, social networking (only in Austria and Latvia), doing something creative (only in Lithuania and Latvia) and caring for someone else.<sup>lxiv</sup>

There are some differences in spending time between students from less demanding and students from more demanding programmes. Those in less demanding programmes more often spend time with friends or peers (Austria, Germany and Lithuania), work in a paid job (Austria, Latvia, Slovenia and the reverse situation in Germany) and watching television (only in Latvia and Slovenia, with the reverse situation in Austria). While students from more demanding programmes spend more time reading books (Austria, Germany, Lithuania and Slovenia) and doing something creative (Austria, Germany and Slovenia), the most common differences in spending time based on the type of programme are noted in Austria, Lithuania and Slovenia.<sup>lxv</sup>

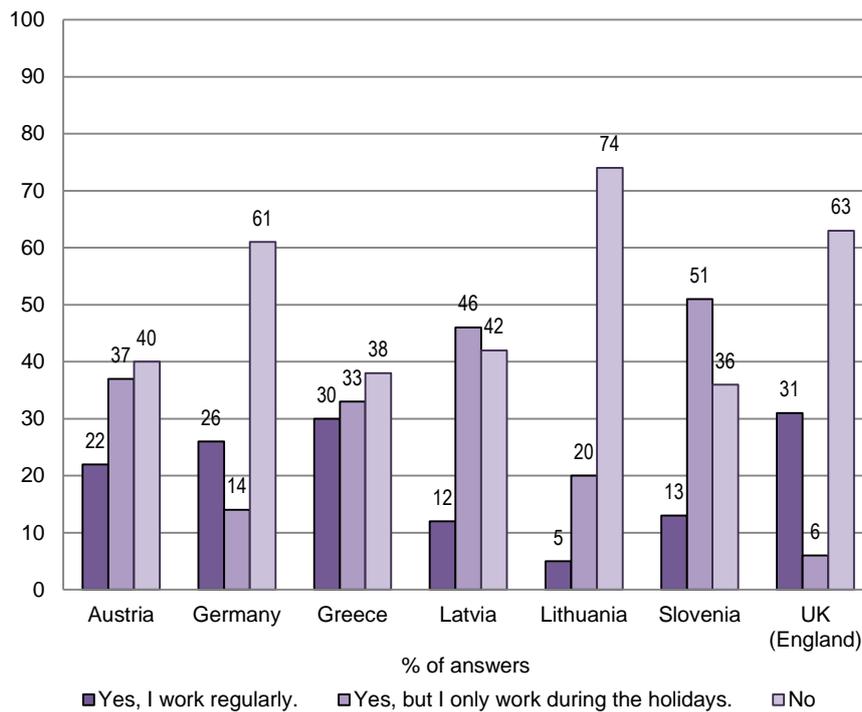
Reading books is significantly associated with a higher SES in four countries: Austria, Germany, Greece and Lithuania. As we know, reading books is associated with higher grades and, in these countries, this appears to be supported by the family culture. Spending time on creative activities is also associated with a higher SES in three countries, Austria, Lithuania and Slovenia, but not in other countries<sup>lxvi</sup>. Parents' education influences students' spending of time only in cases of exercising and doing something creative, which are more often done by students with highly educated parents. The biggest differences in spending time based on parents' education can be noted in Greece.<sup>lxvii</sup>

*In five out of the seven countries VET pupils do work for payment: in general one out of four students works more than 2 hours per day.*

Students in Greece (63 percent) and Slovenia (64 percent) and Austria (59 percent) are mostly like to report they work in employment unrelated to their programmes. In Lithuania (25 percent) and the UK (37 percent), participation in this kind of employment is much less common. On average, around 20 percent of learners spend at least two hours a day on paid employment unrelated to their programmes, which is much more than one would expect. Time commitment to paid employment was particularly high in Greece and Lithuania and relatively lower in Austria and Germany (see the next section for further information on paid work).

The balance of work between regular work and holiday work varies: regular work is reported by 31 percent of learners in the UK, 30 percent in Greece and 26 percent in Germany. Holiday work is most popular in Slovenia (62 percent), Latvia (46 percent) and Austria (37 percent). The weekly hours of students that work regularly range from 20 in Greece to 16 in Austria – weekly working hours during the holidays are usually shorter. In Austria, Germany, Greece, Lithuania and Latvia employment is associated with gender – males are more likely to have paid employment and, in particular, more likely to work regularly (as opposed to during their holidays). This is likely to be associated with gendered expectations about lifestyle and spending but also with the socio-economic condition of the family.

Chart 5.20: Percentage of students doing paid work, by country

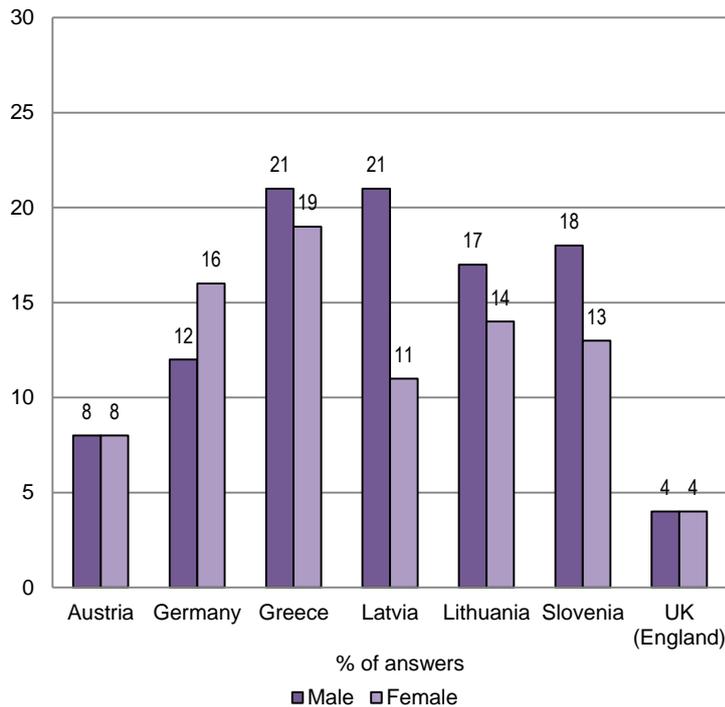


Question: C6a Have you worked for payment during the last year outside your programme (eg. work that is not part of the completion of the programme)?

Learners in programmes linked to employment in industrial rather than service occupations are also more likely to have a regular work commitment in all countries, except the UK. This association may be partly explained by gender but it is possible that students planning careers in services are willing to defer earning and spending.

Lastly, it is important to stress that doing paid work unrelated to the study programme is associated with socio-economic status: those with an above-average SES work fewer hours in all countries (except Lithuania and Greece) where this question was asked. This may be partly a consequence of expectations and culture and partly a result of economic need. This finding is confirmed by responses that reveal that in Austria, Lithuania, Latvia and the UK students with a below-average SES are more likely to work regularly in order to earn some pocket money to help them through school.<sup>lxviii</sup>

Percentage of students participating in international exchange programmes, by country and gender



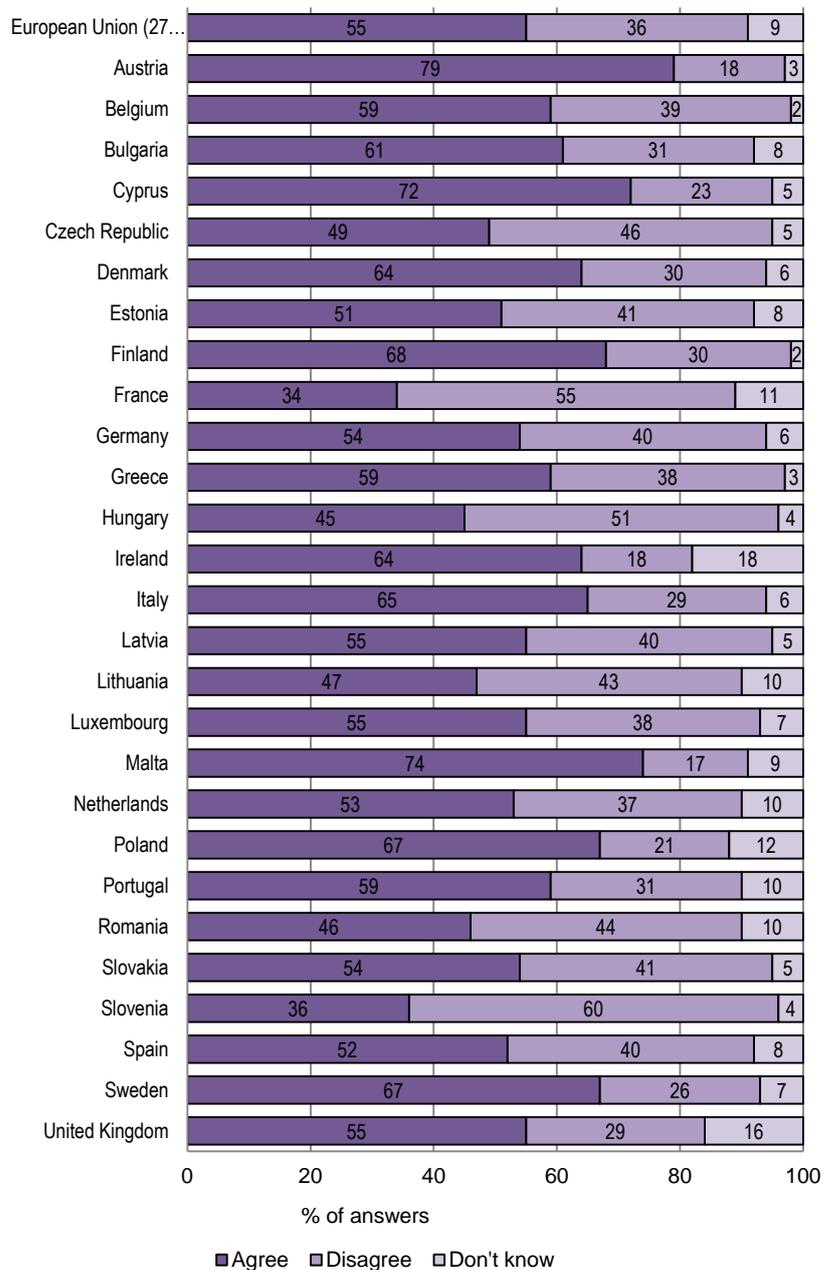
Question: D9a Have you ever participated in an international exchange programme for pupils? Presented answers 1="Yes, at my vocational school" 2="Yes, at my general school"

Students in VET are not very keen to participate in exchange programmes, across all seven countries on average 14 percent of male and 12 percent of female students have been on an exchange, which also means no bigger differences based on gender. The highest rate of students with exchange experiences are seen in Greece and Latvia and the lowest in Austria and the UK. This can also be explained by satisfaction with programmes and employability (see section 5.3.3). In the UK and Austria, students are more satisfied with the situation than in Greece and Latvia and therefore have less of a need to go abroad.

### 5.3.2 Students' perception of VET programmes

In this part, we examine learners' perceptions of their programmes in relation to the labour market, further education, starting one's own business and social status. Over the last few years, the focus has related to the matching between VET education and jobs. Using the Eurobarometer survey, we first looked at the similarities and differences among the countries with regard to how VET programmes lead to well-paid jobs.

Chart 5.21: Percentage of citizens agreeing with the statement “Vocational education and training leads to jobs which are well paid”



Question: QA10.9 Please tell me to what extent you agree or disagree with each of the following statements. Vocational education and training leads to jobs which are well paid.

Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 49

As Chart 5.21 shows, the majority of respondents (55 percent) overall believe that vocational training leads to jobs that are well paid, but the individual country results show significant differences in opinion. Austria, with 79 percent of people thinking VET leads to jobs which are well paid, has the highest percentage in the EU-27. The levels of agreement in Greece (59 percent), the UK, Latvia (both 55 percent) and Germany (54 percent) move around the average and can be included in the same group as Portugal, Belgium (both 59 percent), Luxembourg (55 percent), Slovakia and the Netherlands (both 54 percent). The results for the UK again show a relatively high number of people answering "I do not know" (16 percent). Agreement with the statement that VET leads to well-paid jobs is below-average in Lithuania and is com-

parable to Estonia, Czech Republic or Romania. Slovenia is the exception considering this statement with only 36 percent of people agreeing and 60 percent (the most in the EU-27) of people disagreeing with the statement. Agreement is only lower in France (34 percent), but this is due to people answering "I do not know" (11 percent). and not "I disagree" (55 percent).<sup>193</sup>

In this context, using the results of our survey we looked at how other characteristics vary among the countries. UK, German and Austrian students perceive VET programmes relatively highly, with at least 60 percent of the students agreeing with almost all the statements. While in Greece, Lithuania and Slovenia we can notice a lower validation of VET programmes by students, only 40 percent or below of whom agreed with the statements.

In all seven countries, students most often believe the programme provides useful practical experience for entering the workforce. Most often students from all countries except Greece also agree that the programmes prepare them well for further education. In the UK, Slovenia and Austria, students quite often believe that the programme offers them a broad perspective for a professional career. Latvians and Greeks (nationally looking and compared with other statements) quite often believe that their programme prepares them for a job that is important to society. In the UK, Austria and Germany there is quite often a belief that the programme ensures students' employment in the job market; that the programme has a good reputation within society and that it prepares them for a job important to society. On the contrary, in Greece and Lithuania very few students (24 percent) agreed that the programme ensures them employment in the job market. The least often (below 50 percent) in all countries students agreed with statements that the programme enables them to receive a good starting salary and that the programme prepares them to start their own business, especially in Germany where only 27 percent of students agreed that the programme prepares them to start their own business and in Lithuania where only 20 percent of students agreed that the programme enables them to receive a good starting salary.

*Table 5.18: Students' perceptions of school programmes, by countries (in percent)*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
My programme ensures employment in the job market.	69	<b>60</b>	26	39	22	<b>46</b>	60
My programme enables me to receive a good starting salary/wage when successfully completed.	55	41	30	42	20	32	54
My programme provides useful practical experience for entering the workforce.	<b>72</b>	<b>68</b>	<b>44</b>	<b>61</b>	<b>54</b>	<b>45</b>	<b>70</b>
My programme offers me a broad perspective for a professional career.	<b>70</b>	56	35	50	30	<b>49</b>	<b>63</b>
My programme prepares me well for further education and training.	<b>81</b>	<b>74</b>	<b>37</b>	<b>57</b>	<b>43</b>	<b>45</b>	<b>67</b>
My programme prepares me for starting my own business or becoming self-employed.	51	27	<b>37</b>	42	32	37	30
My programme is recognised within society as having a good reputation.	68	54	<b>37</b>	48	30	32	53
My programme prepares me for a job that is important for society.	65	58	<b>49</b>	<b>56</b>	<b>40</b>	43	56

*Question: B4 Now that you know your programme well, to what extent do you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

Success is associated with positive perceptions of VET programmes. From the shares of student agreeing with statements about their programmes, we can note that in Greece, Lithuania Latvia and Slovenia the perception of programmes is low (agreement with almost all statements is under 50 percent), while in the UK, Germany and Austria the perception is higher with shares around 60 percent. In general, these figures are higher among students with high grades compared to those with low grades.

<sup>193</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 49

Table 5.19: Students' perceptions of school programmes, by country and school success (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Low grades</i>							
My programme ensures employment in the job market.	66	<b>59</b>	25	39	22	<b>44</b>	<b>57</b>
My programme enables me to receive a good starting salary/wage when successfully completed.	59	39	29	43	21	33	47
My programme provides useful practical experience for entering the workforce.	<b>70</b>	<b>62</b>	<b>41</b>	<b>61</b>	<b>53</b>	43	<b>65</b>
My programme offers me a broad perspective for a professional career.	<b>70</b>	53	34	49	29	<b>50</b>	<b>57</b>
My programme prepares me well for further education and training.	<b>78</b>	<b>73</b>	35	<b>57</b>	<b>40</b>	<b>45</b>	<b>60</b>
My programme prepares me for starting my own business or becoming self-employed.	54	24	<b>37</b>	42	31	36	27
My programme is recognised within society as having a good reputation.	69	53	34	47	28	33	48
My programme prepares me for a job that is important for society.	64	55	<b>46</b>	<b>56</b>	<b>39</b>	43	51
<i>High grades</i>							
My programme ensures employment in the job market.	<b>71</b>	<b>62</b>	29	49	22	<b>49</b>	63
My programme enables me to receive a good starting salary/wage when successfully completed.	54	39	35	43	18	30	60
My programme provides useful practical experience for entering the workforce.	<b>73</b>	<b>68</b>	<b>50</b>	<b>68</b>	<b>58</b>	<b>47</b>	<b>74</b>
My programme offers me a broad perspective for a professional career.	70	60	43	<b>61</b>	35	<b>50</b>	<b>69</b>
My programme prepares me well for further education and training.	<b>83</b>	<b>75</b>	<b>45</b>	<b>67</b>	<b>50</b>	<b>47</b>	<b>74</b>
My programme prepares me for starting my own business or becoming self-employed.	50	27	42	38	35	40	34
My programme is recognised within society as having a good reputation.	68	53	43	56	36	31	59
My programme prepares me for a job that is important for society.	66	59	<b>58</b>	58	<b>41</b>	44	61

Question: B4 Now that you know your programme well, to what extent do you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely".

It is interesting to observe that in a number of countries students with higher grades are more likely to believe their programme provides them with useful practical experience for starting work. We find this pattern in Germany (68 percent : 62 percent), Greece (50 percent : 41 percent) and the UK (74 percent : 65 percent). A possible interpretation is that a positive experience of the programme contributes to its perception. However, in the other countries we do not find this difference. More generally, in countries with a bigger focus on practical training, a higher percentage of students, irrespective of their success, believes that the programme provides them with practical experience useful for entering the world of work (Austria, Germany and the UK).

In the UK and Austria, 70 percent of students believe their programme offers them a broad perspective in their professional life; in other countries, only 50 percent or less agreed. In five out of the seven countries (Germany, Greece, Lithuania, Latvia and the UK), students with higher grades believe that the programme offers them a broad perspective for their professional career. This effect is greatest in Latvia and the UK where there is a difference of 12 percent between groups with higher and lower grades. However, in Slovenia and Austria students' success in programmes does not influence their perceptions of the programme as something that will help them in their professional career.

Around 60 percent of students in Germany, Latvia, the UK and Austria believe their programmes prepared them well for further education as against 50 percent or less in Greece, Slovenia and Lithuania. It is reasonable to expect that students with higher grades are more likely to believe they are well prepared for

their further education and training. This was found to be the case in all countries except Slovenia and Germany.

In Austria, the share of students believing that their VET programme is well recognised by society is 70 percent and is not affected by learner success in the programme. In the other six countries, it is always never more than 50 percent. On the other hand, in Slovenia, Lithuania and Greece only 30 percent of students believe their programmes are well recognised, which is in line with some other Eurobarometer results presented earlier in the report. Further, in Greece, Lithuania, Latvia and the UK students with higher grades are more likely to believe that their programme enjoys a good reputation than students with lower grades.

### 5.3.3 Satisfaction with the programme

*Perceptions of the programme are in most countries and aspects determined by school success, in particular in the way they perceive interesting classes and teachers' competencies.*

In this part we first look at learners' views on their programmes. They reported how interesting their classes are, how their teachers are prepared and supportive, how they perceive career counselling and how well-maintained and accessible the school facilities are. We assumed these are also the main direct drivers that determine their overall satisfaction with the programme and their motivation to learn. First, we compared differences and similarities in these issues in relation to school success.

*Table 5.20: Percentage of VET students who highly assess certain aspects of school, by country and school success*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Low grades</i>							
Most of my classes are interesting.	33	29	<b>27</b>	40	26	17	52
Most of my teachers are usually well prepared when teaching their subjects.	44	<b>53</b>	<b>35</b>	<b>58</b>	<b>54</b>	31	<b>74</b>
Most of my teachers are usually interested in helping me learn.	33	41	<b>44</b>	<b>50</b>	43	32	<b>75</b>
Counsellors/careers advisors are usually helpful (not asked in Austria and Germany)	NA	NA	20	48	32	<b>45</b>	40
Information on careers and training is easily accessible at school.	43	34	20	45	37	32	49
School facilities are well maintained.	52	46	21	44	<b>46</b>	34	66
The number of computers available at school is adequate for the needs of pupils.	<b>66</b>	<b>51</b>	25	43	35	36	58
The computers at school are up to date.	<b>58</b>	34	22	45	39	<b>37</b>	65
My school offers enough learning and training material.	<b>57</b>	<b>48</b>	25	<b>51</b>	<b>46</b>	<b>43</b>	<b>68</b>
<i>High grades</i>							
Most of my classes are interesting.	45	<b>50</b>	<b>47</b>	53	35	28	66
Most of my teachers are usually well prepared when teaching their subjects.	<b>57</b>	<b>55</b>	<b>53</b>	<b>67</b>	<b>62</b>	47	<b>80</b>
Most of my teachers are usually interested in helping me learn.	42	45	<b>54</b>	<b>60</b>	<b>52</b>	<b>50</b>	<b>82</b>
Counsellors/careers advisors are usually helpful (not asked in Austria and Germany)	NA	NA	23	<b>61</b>	39	<b>54</b>	50
Information on careers and training is easily accessible at school.	42	37	23	40	51	39	58
School facilities are well maintained.	56	48	27	44	51	36	76
The number of computers available at school is adequate for the needs of pupils.	<b>65</b>	<b>55</b>	22	44	42	38	66
The computers at school are up to date.	53	37	28	43	45	41	76
My school offers enough learning and training material.	<b>58</b>	<b>50</b>	36	45	<b>53</b>	<b>49</b>	<b>77</b>

*Question: B5 This question is about your satisfaction with your school. Please indicate to what extent you agree with the following statements? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

As Table 5.20 shows, generally looking at satisfaction we can note the highest percentages in the UK, Austria, Germany and Lithuania, while the lowest shares are seen in Greece and Slovenia. In all seven countries, we note quite high shares of students agreeing with the statement that their teachers are usually well prepared for teaching. In Greece, Lithuania, Slovenia and the UK, quite high percentages of students believe their teachers are interested in helping them learn, while in Austria, Latvia, Slovenia and the UK students also believe the school offers them enough learning material. Austrian and German students believe they have an adequate number of computers available in school, while in Slovenia and Lithuania students more often agree with the statement that counsellors are usually helpful. In general, when comparing the results based on students' school success we can note an association between their satisfaction and school success, students with high grades more often agree with the statements and are therefore more satisfied with the programme. This is especially evident for these statements: most classes are interesting, most teachers are usually well prepared for teaching, most teachers are usually interested in helping and overall satisfaction with the programme. We now further interpret all of these.

In all countries it is obvious that at least 10 percent more students with higher grades find most of their classes interesting compared to those with low grades. The biggest difference is noted in Greece where 20 percent more students with high grades find their classes interesting. But, on average across the countries, less than every second student agrees that most of their classes are interesting, the highest percentage is seen in the UK with 66 percent of students with high grades and 52 percent of those with low grades.

Similar results are shown for students' evaluation with other aspects of study programmes, such as for example teachers. In all countries, except Germany, students with higher grades are more satisfied with teachers than those with lower grades. The differences are quite high at 10 percent or more in both cases: believing that teachers are prepared for their classes and that they are interested in helping students to learn. For the first statement the greatest differences are noted in Greece (18 percent) and Slovenia (16 percent) and the lowest in the UK (6 percent). For the second statement the biggest difference is calculated in Slovenia (18 percent) and the lowest again in the UK with 6 percent. In general in the UK both groups of students are satisfied with teachers (above 70 percent), while in Slovenia, Greece and Austria they are not so much with around 40 percent on average.

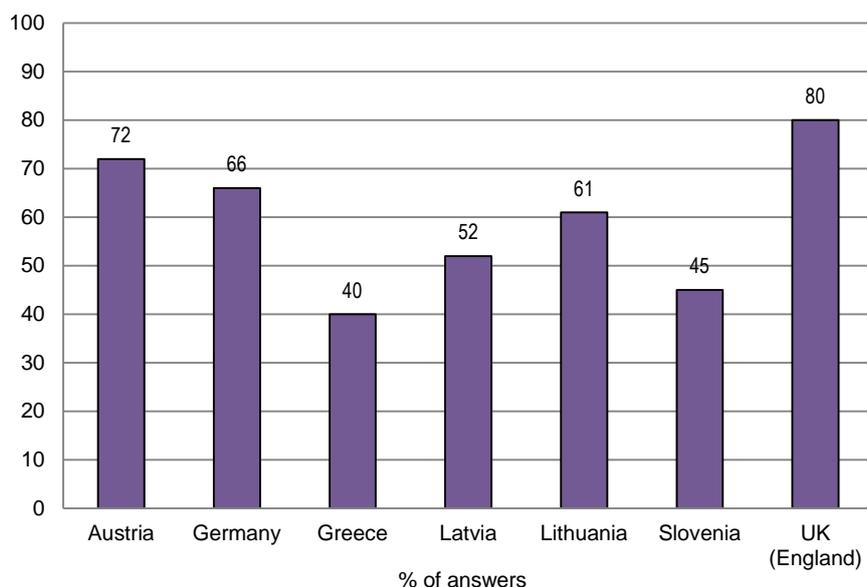
Across the countries (there are no data for Germany and Austria), around 40 percent of students with lower grades and around 50 percent of students with higher grades find career advisors or counsellors helpful. Already from the average the difference between the groups is obvious, however when looking at each country separately the difference is noted in all countries except Greece, where the percentage is almost the same, 20 percent of students with low grades and 23 percent of those with high grades. This also means that most Greek students do not find career advisors helpful. The biggest difference among the groups of students is obvious in Latvia (13 percent) and Slovenia (12 percent).

In all the countries, around 40 percent of all students find information on careers and training easily accessible at their school with the lowest share again in Greece (approximately 20 percent) and the highest in the UK (around 54 percent). Differences between the two groups based on their school success are noted in the UK, Slovenia and Lithuania, where Lithuania has the highest difference of 14 percent.

When talking with students about whether their school provides them with enough learning and training material, approximately every second one thinks they are provided with enough materials. The largest percentage of students agreeing with the statement is noted in the UK (around 70 percent) and Austria (a little below 60 percent), while the lowest result is visible in Greece. In some countries, a difference between students with lower and higher grades can be noted (around 8 percent) such as in Lithuania, Greece, Slovenia and the UK.

In the survey we also looked at overall satisfaction with the study programme. We noted large differences among the countries: in the UK, Austria, Germany and Latvia we see relatively high satisfaction with programmes (all above 60 percent), while in Greece and Slovenia satisfaction is much lower (around 43 percent). In Lithuania, 52 percent of students is overall satisfied with their programme.

*Chart 5.22: Percentage of VET students who highly assess satisfaction with the current programme, by country*



*Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

Across all the countries students with higher grades (74 percent on average) are more satisfied with the programme in general compared to students with lower grades (54 percent on average). The highest satisfaction among both groups is noted in the UK with 74 percent of students with low grades and 87 percent of those with high grades agreeing with the statement. Greece has the lowest satisfaction with only 36 percent of students with low grades and every second of those with high grades testifying that in general they are satisfied with their programme. The difference between the two groups of students is quite high (around 13 percent) but the highest variation is noted in Slovenia with a difference of 18 percent<sup>lxix</sup>.

In the survey we explored what determines students' general satisfaction in more detail. Student satisfaction is according to theory a strong indicator of individual motivation. We assume that, besides psychological characteristics, which were not considered in our survey due to limitations, four groups of factors: a) students' own experiences of the curriculum; b) perception of the programme; c) programme type; and d) school success. Again a regression model was applied also based on socio-demographic characteristics.

Table 5.21: Effects of selected characteristics on overall satisfaction with the programme, by 7EU-VET countries<sup>194</sup>

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Constant (Overall satisfaction with programme) (Beta)	-0.365	0.166	0.121	0.750	0.064	-0.340	0.759
<i>Students' experiences of curriculum and school</i>	Std. Beta						
Interesting classes	0.337***	0.175***	0.150***	0.226***	0.136***	0.239***	0.091**
Well prepared teachers	0.090***	0.133***	0.111**	0.098***	0.081**	0.099**	0.114**
Supportive teachers	0.065**	0.036	0.075*	0.102***	0.077**	0.031	0.184***
Well maintained school facilities	0.072***	0.015	0.061	0.021	0.144***	0.061*	0.136***
Up to date computers	0.006	0.064	0.118***	0.031	0.111***	0.026	0.076**
Good learning and training material	0.160***	0.105**	0.321***	0.207***	0.305***	0.195***	0.201***
<i>Perception of the programme</i>							
Basis for receiving a good salary	0.087***	0.117***	-0.001	0.018	-0.044	0.088**	0.005
Source of useful work experience	0.033	0.087**	-0.010	0.050	0.081***	0.051	0.079**
Broad basis for professional career development	0.113***	0.044	0.063	0.021	0.064*	0.100**	0.135***
Starting point for further education and training	0.070**	0.150***	0.084**	0.127***	0.054*	0.119***	0.047
Having a good reputation in society	0.072**	0.083**	0.043	0.101***	0.020	0.065*	-0.006
<i>School Success</i>							
School Success	0.094***	0.084**	0.020	0.020	-0.022	0.057*	0.015
<i>Was considering alternative programme/s</i>							
Was considering alternative programme/s	-0.037	-0.019	-0.051	-0.087***	-0.019	-0.064**	-0.050*
<i>Socio-demographic Characteristics</i>							
Gender (male)	-0.017	-0.015	-0.002	-0.076***	-0.004	0.015	-0.054*
Parents' primary and lower-secondary education	0.019	0.114***	-0.057	0.021	-0.028	-0.038	NA
Parents' tertiary education	-0.016	0.078*	0.018	0.038	-0.014	-0.006	NA
Mother's full-time employment status	0.001	-0.003	0.067*	0.038	0.009	0.031	-0.013
<b>Adjusted R Square</b>	0.504	0.327	0.481	0.494	0.530	0.515	0.584

\*\*\* = p<0.01; \*\* = p<0.05; \* = p<0.10

Based on regression analyses, we can draw the following main conclusions which apply to all seven countries. The key drivers of students' general programme satisfaction are students' own experiences with the curriculum. High determinants of student satisfaction are also their own beliefs and perception of the programme. Thirdly, socio-demographic characteristics in general have impact on general student only in some countries, and this stands also for school success and programme type.

Further, Table 5.21 allows the following main conclusions which apply to all seven countries. The key drivers of students' general programme satisfaction are students' own experiences with the curriculum. High determinants of student satisfaction are also their own beliefs and perception of the programme. Thirdly, socio-demographic characteristics in general have an impact on students' general programme satisfaction only in some countries, and this also applies to school success and programme type.

When we first considered students' experiences with the curriculum, we found the strongest effect on general satisfaction was exerted by interesting classes, which is the case in Austria, Germany, Latvia and Slovenia. Interestingly, in Greece, Lithuania and the UK the strongest effect on satisfaction, not only within

<sup>194</sup> In the model we also tested the effects of programme type, place of living and socio-economic status of the family. In the case of Lithuania, students in more demanding programme types are more overall satisfied with the programme than those in less demanding programmes. Only in Greece are students from towns or small cities less satisfied with the programme than those from bigger cities.

this cluster but among all variables, is access to an adequate level of learning and training material. As expected, in these countries they also care for computers being up to date. Another important determinant of student satisfaction is well-prepared teachers, and there are only small variations among the countries. In Austria, Latvia, Lithuania and the UK, VET students in particular express how much they are supportive of their learning activities.

Factors indicating students' perceptions of the programme also matter for student satisfaction, however variations among the countries are bigger than in the case of students' experiences with the study curriculum. Austria and Germany are somewhat similar. In both countries, students' perception of receiving a high salary after completing the programme, preparation for further studies, and a high reputation in society impacts on a high level of student satisfaction. In Austria, but not in Germany, the programme's contribution to lifelong learning has an effect on student satisfaction, while in Germany preparation for a short-term career also plays a somewhat important role. A similar pattern was found in Slovenia where preparation for further education appears to be more important than direct training for work. A link to further education and the high status of the programme in society are important motivation drivers in Latvia. Greece and Lithuania are in this respect different from all the other countries. In Greece, the only important characteristic is securing an open path to further education and training, while in Lithuania students particularly favour direct preparation for work, as was the case in Germany. In the UK, we found two important motivation drivers: practical experiences for entering the workforce and providing a broad perspective for a professional career.

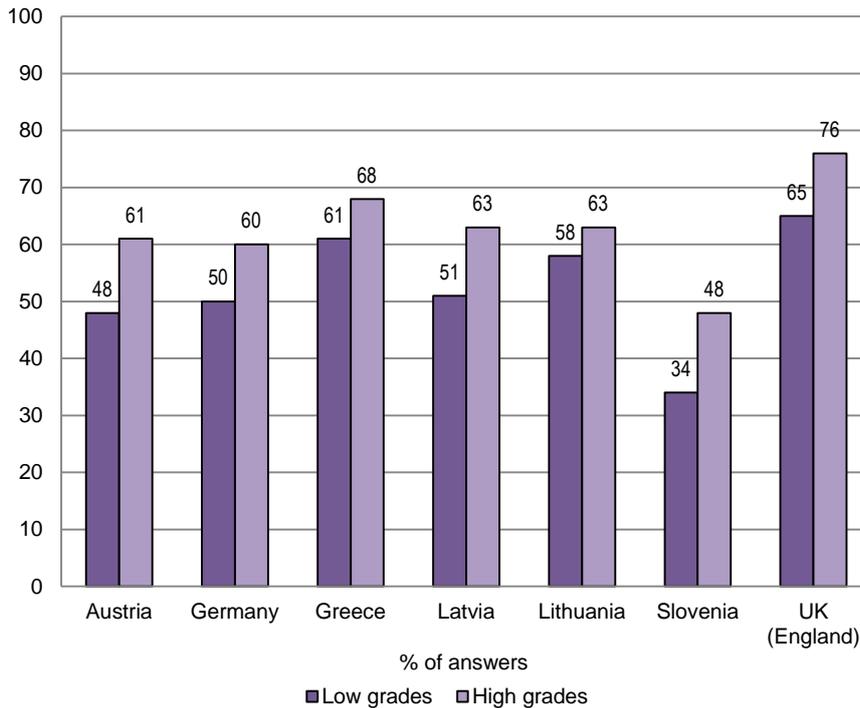
In the model we presumed students with higher grades would be more satisfied with their programme in comparison to students with lower grades. This is the case in Austria, Germany and with a weaker relation in Slovenia. In Greece, Latvia, Lithuania and the UK we found no evidence that grades impact student satisfaction with the programme. Interestingly, in general there are almost no differences in regard to whether students attend more or less demanding programmes. The only exception is Lithuania, where students attending more demanding programmes are more satisfied with their programme in comparison to students attending less demanding programmes.

Lastly, socio-demographic characteristics generally only have a small effect on student satisfaction with the programme. Gender does not affect satisfaction. The exception to this is Latvia, where females are less satisfied with the programme than males. Surprisingly, parents' education has almost no effect, except in Germany, where lower educated parents positively impact motivation in comparison to medium educated parents. Finally, we also assumed considering that a wider choice of alternative VET schooling prior to enrolment in the current programme would reduce satisfaction with the current programme. This was only the case in Latvia and Slovenia.

*Two out of three VET students would choose the same programme again, which depends on school success, and one out of ten is considering leaving the programme.*

The school success factor also influenced the hypothetical decision to choose the programme again, which is another indicator of school satisfaction. All in all, more than every second students would choose the same programme again, except in Slovenia where the percentage is a little lower, at around 41 percent on average. In Austria, Germany, Latvia, Slovenia and the UK, we found statistical significance deriving from the 12 percentage percent points difference, indicating students with higher grades are more likely to choose the same programme again than those with lower grades. In Lithuania and Greece the differences between both groups are smaller.

Chart 5.23: Percentage of students that would likely choose the same programme again, by country and school success



Question: B7 Looking back, if you were to choose again would you choose the same programme?. Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely".

It is very rare that on average less than 10 percent of students would think of leaving the programme across the countries (no data for the UK) and there were mostly no bigger differences between students based on their grades, except in Germany and Austria. In these two countries, students with low grades are more likely to think about leaving the programme (but only 5.5 percent of them)<sup>xxx</sup>.

### 5.3.4 Conclusions

Across the seven studied countries, we found large differences in the time spent in school education, with a very surprising finding relating to the time spent on learning outside school. One out of four VET students do not learn in Greece, Lithuania and the UK. In six of the seven countries, males were twice as likely as females to report they spent no time at all on study outside of school. Study time outside of school is generally strongly associated with school success: students reporting low grades also reported lower study times outside of school across all countries except Germany and the UK. One can assume that in some countries the programmes are designed in such a way that study outside of school does not contribute to achievement, but this is certainly not the case in most of the studied countries.

Interest in practical subjects and understanding of learning material is for VET students the most important learning incentive. Higher achieving students reported higher levels of motivation with respect to almost all of the motivation factors, particularly related to 'striving for highest possible marks', 'a commitment to full understanding' and 'interest in general subjects'. Among socio-demographic factors, socio-economic status was found to be the most important element for study behaviour. There were surprising small differences in relation to programme types, and some learning drivers were more emphasised in programme types that one would not expect.

In five out of the seven countries, VET pupils do work for payment; in general, one out of four students works more than 2 hours per day. Doing paid work unrelated to the study programme is associated with socio-economic status: those with an above-average SES worked fewer hours in all countries. Parents' education has a relatively small impact on learning behaviour as well as students' free-time activities. After school, students spend most of their time with friends, on social networks and watching television. Studying what learners do after school leads to some interesting findings. Spending more time reading books was associated with higher grades in all countries, while spending time on computer games was associated with lower grades.

Further, in the results we found that success is importantly associated with positive perceptions of VET programmes, in particular how they perceive interesting classes and teachers' competencies. In a number of countries, students with higher grades are more likely to believe that their programme provides them with useful practical experience for starting work and a broader perspective in their professional life and other aspects. Two out of three VET students would hypothetically choose the same programme again, which depends on school success, and one out of ten is considering leaving the programme.

Samo Pavlin and  
Božidar Grigić

## 5.4 School Success and Acquired Competencies

In this part we first look at what determines school success in the seven studied countries. Second, we study the learners' level of acquired competencies and which factors impact the level of their development. Last, we consider the relationship between school success and the level of acquired competencies.

### 5.4.1 School Success and its determinants

There are large differences across the countries in the way the systems grade VET students. In Austria, for example, there are more of those with high grades (65 percent), while in five other countries there is a higher percentage of students with low grades with the extreme seen in Latvia where 90 percent of students have low grades.<sup>195</sup> In the UK, there is almost the same percentage of students with high and low grades<sup>lxxi</sup>. When we looked at school achievement by gender, we got the expected results, namely, a higher percentage of female students with high grades in all seven countries, with the largest differences between genders in Slovenia (21 percent) and Lithuania (22 percent)<sup>lxxii</sup>.

The main question in this section is to learn what determines school success. In addition to the socio-demographic characteristics of the students, we predicted that other groups of determinants include study behaviour and the time students spend on learning outside school, and also their plans for continuing education. The results are presented in Table 5.22.

---

<sup>195</sup> In order to harmonise the nationally specific grading schemes, for Germany the national grades were transferred into a comprehensive system using the "modified Bavarian formula". The resulting scheme is based on the German grading system with "1" being the best grade and "4" the lowest grade to pass. To convert grades into this comprehensive scheme, the actual (national) grade is subtracted from the maximum (best) grade divided by the maximum grade minus the lowest passing grade. The result is to be multiplied by 3 subsequently adding +1. For all six countries (in the UK that question was not asked) this created two groups of students with low and students with high grades. See the appendix for the distribution.

Table 5.22: Effects of selected characteristics on students' grades, by 7EU-VET countries<sup>196</sup>

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Constant (Grades) (Beta)	2.315	2.140	2.693	2.464	2.863	2.241	2.375
<i>Learning after school</i>	Std. Beta						
Studying after school (more than 2 hours)	-0.029	-0.009	0.097**	0.150***	0.125***	0.009	0.060
<i>Study Behaviour</i>							
Striving for high grades	0.279***	0.272***	0.275***	0.207***	0.206***	0.334***	0.326***
Striving to understand learning subject	-0.015	-0.101**	0.022	0.098**	0.022	0.114***	0.018
Striving to make a good impression on teachers	-0.117***	-0.087*	-0.022	-0.037	-0.037	-0.102**	-0.007
Striving to make good impression on potential employers	0.077**	0.115**	0.060	-0.065	0.098**	0.024	0.035
Striving to keep up with my fellow pupils	0.008	0.012	-0.123***	-0.092**	-0.029	-0.136***	-0.091*
Enjoying in learning	0.087**	0.130***	0.099*	0.012	-0.003	0.025	0.008
Having an interest in practical subjects	-0.004	-0.006	-0.024	-0.021	-0.001	0.020	-0.016
Having an interest in general subjects	0.091***	0.139***	0.110**	0.024	0.084*	0.089**	0.125***
<i>Plans to continue schooling</i>							
Having plans to continue schooling	0.166***	0.103 ***	0.013	0.140 ***	0.022	0.106 ***	0.020
<i>Socio-demographics</i>							
Gender (male)	-0.084***	-0.066*	-0.122***	-0.176***	-0.159***	-0.129***	0.124***
Parents' primary and lower-secondary education	0.011	-0.041	0.018	-0.013	0.049	0.052	NA
Parents' tertiary education	0.015	-0.016	0.034	0.012	0.116***	0.008	NA
<b>Adjusted R Square</b>	0.251	0.165	0.199	0.214	0.198	0.291	0.186

\*\*\* =  $p < 0.01$ ; \*\* =  $p < 0.05$ ; \* =  $p < 0.10$

When we first initially at study behaviour, we see VET pupils who study more and perform better in school only in Greece, Latvia and Lithuania. One would expect this would also be the case in the other four countries under observation; however, in Austria, Germany, Slovenia and the UK we found no such evidence in this model: yet in section 6.3.1 we have found a positive association between hours of learning and school success also for Austria and Slovenia, which means this relationship calls for further investigation. However, in general we can assume that in some VET segments and countries: (a) it matters more what students do in school than after it; and (b) school systems do not assess in any extensive way study hours after school.

Consistently with the abovementioned results, we found evidence that study behaviour styles matter more than time invested in home work. Striving for the highest possible marks has by far the strongest effect in all countries in comparison to all other determinants. Apparently, pupils develop their own tactics of achieving well which are not so related to learning after school but more with proactive behavioural patterns during study programmes, greater engagement in practical learning and other ways of social learning. This can be partially explained by the result indicating that students who are interested in general, classroom-based subjects have better grades: a positive effect was found in all countries. At the same time, having an interest in practical subjects does not have any effect on school success in any of the surveyed countries.

<sup>196</sup> In the model we also tested the effects of programme type, socio-economic status of the family, place of living, father's and mother's employment status. In the case of Lithuania and Germany, VET pupils in medium and more demanding programme types have lower grades than students in less demanding programme types. In the UK, this is the case only for medium demanding programmes, while in Austria the situation is reversed, with students from medium demanding programmes having better grades than those from less demanding programmes. In Germany, Latvia and Slovenia, students that come from country villages or farms have better grades than those from big cities, which is also the case for German students from towns or small cities. In Austria and Greece students with a below-average socio-economic status have lower grades than those with an average socio-economic status, while in Latvia students with an above-average socio-economic status have higher grades than those with an average one.

However, striving for the highest possible grades might not have much in common with understanding of the learning subject or studying after school. The importance of understanding the learning content only had a positive effect in Slovenia and Latvia, but a negative one in Germany. This finding needs further testing as it provides some indication that German VET students who learn by heart (this is learning without understanding) are better off than students who really try to internalise the study material. We found evidence that students who enjoy learning achieve better grades only in Austria and Germany. As for Germany, this would mean that understanding and enjoying learning are two different dimensions.

Pupils do not have higher grades because they would like to impress their teachers. In fact, striving to impress teachers with good grades has a negative effect in Austria, Germany and Slovenia, which could actually mean that pupils in these countries, and in general, prefer to generate the status of a 'bad pupil'. This is also the case in Greece, Latvia and Slovenia where in the case where students are driven by competing with other students they have less school success than students who have not developed such a pattern. The opposite is seen with making a good impression on employers. We found proof in Austria, Germany and Slovenia that students who would like to make a good impression on employers also have better grades.

It seems likely that some of this effect is due to the fact that graduates continued or resumed working after graduation with an employer they already had during higher education or that they used this contact to gain access to a different employer. It is however plausible that at least some of the effect is due to the general preference of employers – all other things being equal – for graduates with study-related work experience<sup>197</sup>.

We may conclude from our results that plans to continue schooling positively motivate pupils to achieve good grades. This was the case in Austria, Germany, Latvia and Slovenia. In these countries, the preference to continue schooling is a very strong external motivator for achieving school success. As expected, no such effect was found in the UK where VET pupils in general and more than in other countries study for work, which was also the case in Greece and Lithuania.

When we look at the socio-demographic characteristics, several factors have a strong effect on school success in some countries, while surprisingly some others do not. As expected, in all countries being a male has a negative effect on school success. The strongest effect was found in Latvia and Lithuania, and the weakest in Germany. In general, when we consider other socio-demographic determinants of school success we can see large variations across the studied countries. For example, coming from a small settlement only has a positive effect in Germany, while we found no evidence of a settlement effect in any of the other countries.

Surprisingly, with the exception of Lithuania where pupils of more educated parents have higher grades, we found no evidence that parents' education has any impact on school success in any of the studied countries. There are two possible interrelated interpretations. First, parents whose pupils end up in vocational education and not in general education do not worry how well their children are doing in school due to different personal values. Second, parents pay more attention to the job destination of their children, which is apparently more important than school success. However, this finding needs further investigation particularly as such an assumption might be wrong in Austria or Germany where VET programmes have a higher status than in the other countries. In these countries, we found some evidence that children from poorer families perform worse than those with an average socio-economic status, but employment status has no effect on school grades.

---

<sup>197</sup> It is noted that study-related work experience has a stronger effect in southern Europe and the \*\*NCMS\*\* (unexplained acronym, put in long form) than in northern Europe. It may be that northern European graduates have little trouble finding work in any case, with or without work experience, and graduates in southern Europe and some of the NCMS experience more difficulty and therefore need to rely more on study-related experience to prove their worth to potential employers.

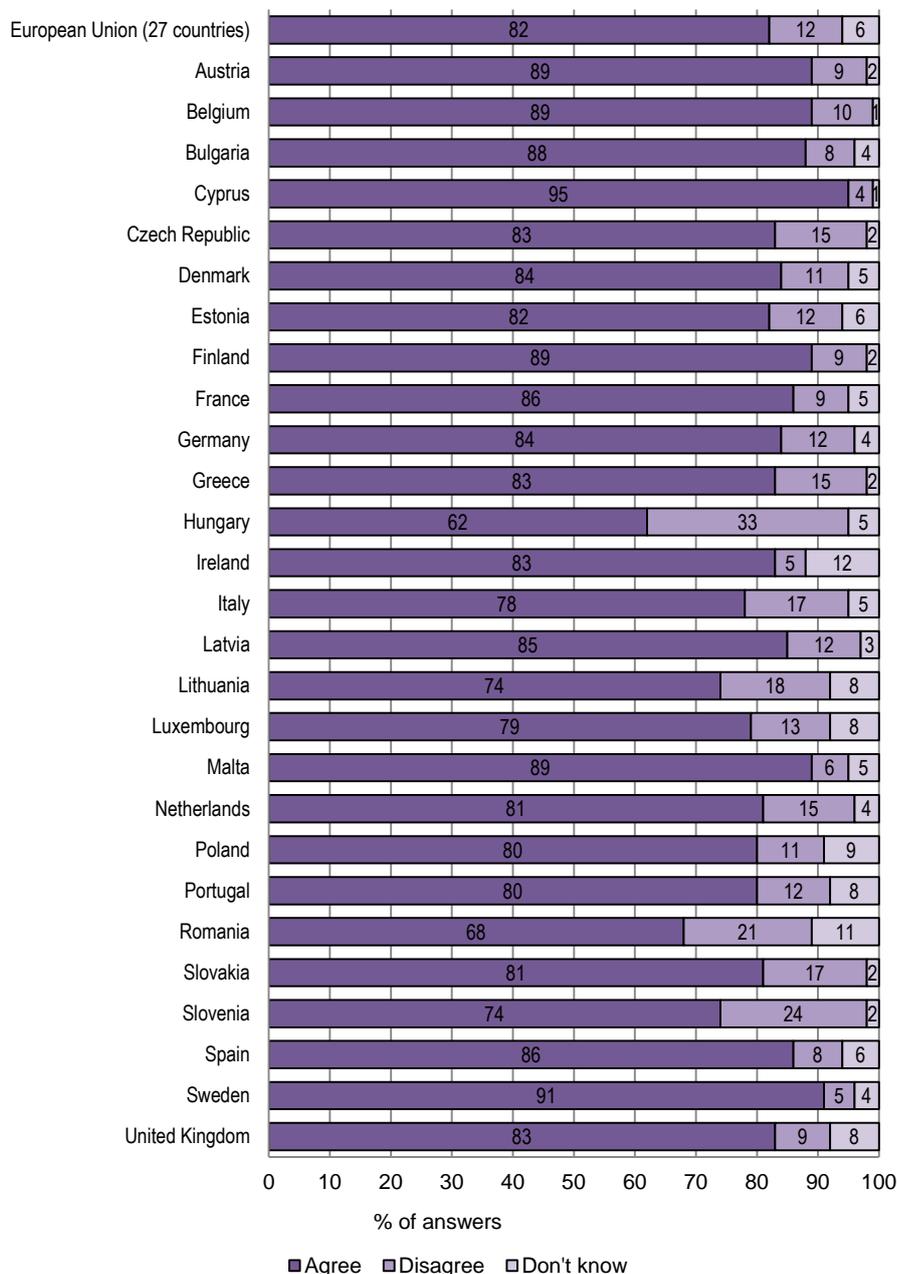
In the next section, we look at the level of acquired competencies across the countries, which determines the level of two acquired competencies, and to what extent school curricula prepare VET students for work.

#### **5.4.2 Acquired Competencies**

The concept of competence development in education has in the last few years been gaining ever more attention. In particular, there is a large debate on the dichotomy and inter-linkage between work-related tacit knowledge and explicit knowledge (Polanyi, 1967; Nonaka and Takeuchi, 1995). The first relates more to the work environment, while the second relates more to formal educational institutions, and well comprehends the notion of occupational or professional knowledge. Tacit knowledge to a large extent resembles the concept of competencies which can be defined as the generators of the potential of an individual's performance, personal characteristics (traits) such as physical characteristics and methods of an individual's response to a situation, self-concept in the sense of habits, values and knowledge in the sense of information that someone has in specific areas (Spencer and Spencer, 1993: 9-10). This definition mostly describes individually acquired competencies, while employers' expectations are labelled as required competencies.

The transition of learners from education to the labour market is often accompanied by the so-called "matching" issue referring to the compatibility between the individual, their education and the professional destination. One can define horizontally mismatched as working in a job matching one's own level but not one's own field of education. Vertically mismatched is related to the condition of working in a job matching one's own field but not one's own level of education. In this context, we first look at how well VET systems prepare learners for work in the 7EU-VET countries.

Chart 5.24: Percentage of citizens agreeing with the statement: “People in vocational education and training learn skills that are needed by employer”

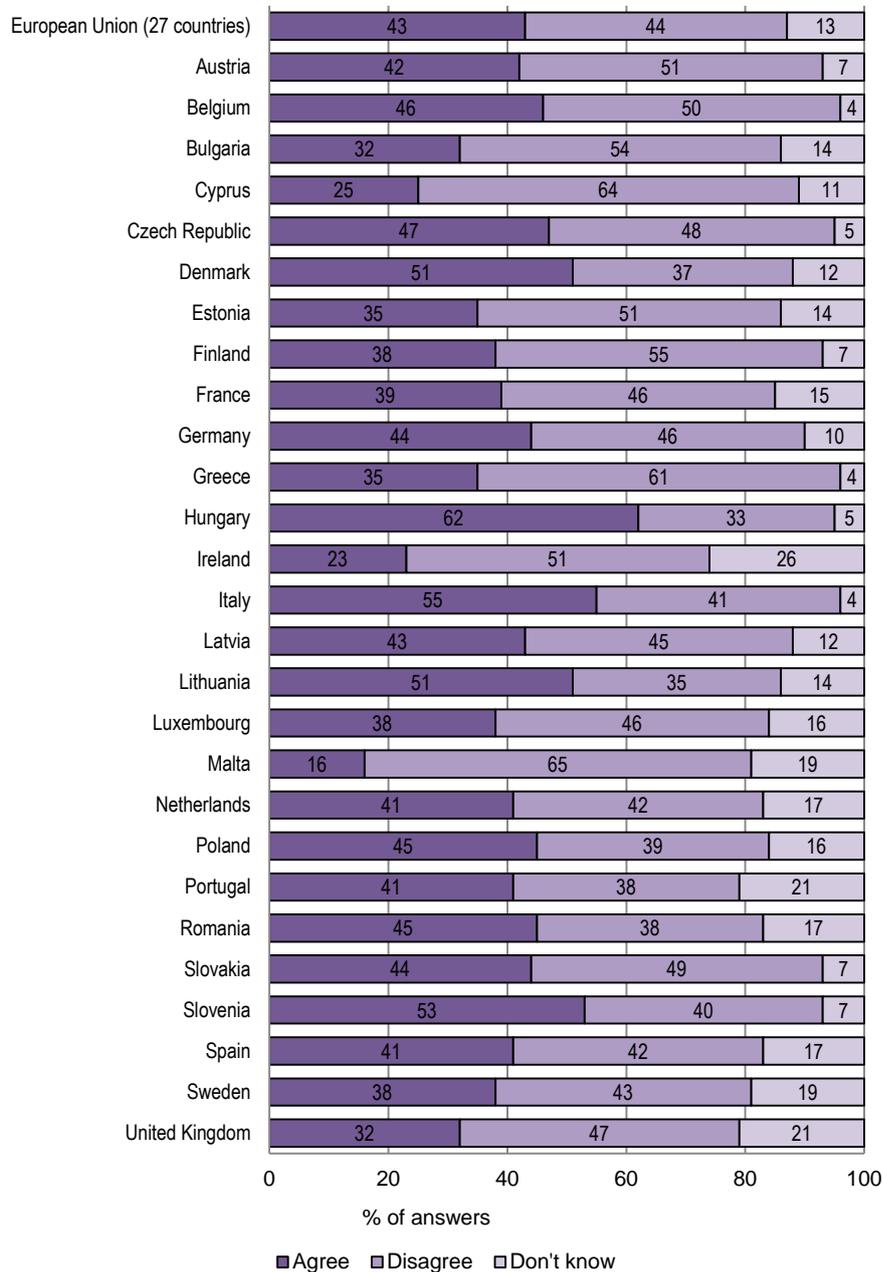


Question: QA10.6 Please tell me to what extent you agree or disagree with each of the following statements. People in vocational education and training learn skills that are needed by employers.  
 Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 25

As Chart 5.24 shows, there is strong agreement across the EU-27 (82 percent) with the statement that people in VET acquire skills that are needed by employers. Most 7EU-VET countries are above-average considering this statement, especially Austria (89 percent) with one of the highest levels of agreement together with Cyprus (95 percent) and Sweden (91 percent). Latvia (85 percent), Germany (84 percent), UK (83 percent) and Greece (83 percent) are very close together and their results can also be compared with Spain (86 percent), Denmark (84 percent), as well as Ireland and the Czech Republic (both 83 percent). The lowest results are seen in Slovenia and Lithuania (74 percent). Together with Hungary (62 percent)

cent) and Romania (68 percent), these are the countries with the lowest levels of agreement.<sup>198</sup> Eurostat data have also explored to what extent VET systems prepare students to set up their own business.

*Chart 5.25: Percentage of citizens agreeing with the statement: “Vocational education and training does not prepare people to set up their own business”*



Question: QA10.7 Please tell me to what extent you agree or disagree with each of the following statements. Vocational education and training does not prepare people to set up their own business.  
 Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 28

<sup>198</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 25

The results shown in Chart 5.25 are different from the results gained earlier. Europeans are divided on the question of whether VET prepares people to set up their own business with 43 percent of them overall agreeing and 44 percent of them disagreeing with this statement. Slovenia (53 percent) and Lithuania (51 percent) are two of five Member States where a majority of respondents agree with the statement, together with Hungary (62 percent), Italy (55 percent), and Denmark (51 percent). Germany (44 percent), Latvia (43 percent) and Austria (42 percent) are all close to the average (43 percent), together with Romania (45 percent), Slovakia (44 percent), as well as Spain, Portugal and the Netherlands (all 41 percent). The level of agreement is, among the 7EU-VET countries, the lowest in Greece (35 percent) and the UK (32 percent). Greece is also the country with the highest disagreement (61 percent compared to e.g. 35 percent in Lithuania). In the UK a large number of respondents answered "I do not know" (21 percent). Greece and the UK can be compared to Estonia (35 percent) as well as Bulgaria (32 percent) and Cyprus (25 percent).<sup>199</sup> On this basis, one can assume that preparing VET students for work is quite a different phenomenon than setting up one's own business, and both goals cannot be achieved at the same time. However, we can speculate that preparation to set up one's own business can be associated more with factors external to the VET curriculum, in particular where self-employment remains the only option for entering the workforce.

In this section we look at the contribution of VET programmes to the development of generic competencies. VET curricula include the development of knowledge and skills corresponding to particular vocations and many include general subject knowledge, such as mathematics and foreign languages. However, it is generally agreed that in addition to vocational and academic knowledge and skills students need to develop autonomy, responsibility, communication, team working and other 'generic' or 'transverse' or 'key' competencies. The particular catalogue of these additional competencies varies between countries as does the manner in which they are articulated in written curricula (Cedefop, 2012). In this survey, an attempt has been made to discover whether and to what degree students believe they are acquiring the following generic competencies: abilities to manage occupational tasks independently, team work, learning abilities, working under pressure, clear communication of one's own ideas, and the ability to approach and engage with others with confidence.

Students were asked to evaluate their own generic competencies. According to the students, the competence that was most highly developed is being able to work as a team member in all countries, except Greece. In Greece, the most highly developed competence is being able to approach and engage with others with confidence; however, working as a team member, quickly familiarising themselves with new tasks and communicating ideas and suggestions to others clearly were very close to the first one. Only half of the students believed they were able to perform well under pressure, which makes it the 'least' acquired generic competence, with especially low percentages in Latvia. The development of generic competencies is relatively strong in Germany, Austria and the UK and somewhat less strong in the other countries. Comparing the countries, we can note the highest percentages of competence acquiring in Germany, Austria and the UK, while Slovenia is somewhere in the middle, and Greece, Latvia and Lithuania have the lowest percentages of students acquiring these competencies. In Austria and Germany, the lowest acquired competence is being able to communicate ideas and suggestions to others clearly, while in Greece the lowest one was being able to manage occupational tasks independently.

---

<sup>199</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 28

**Table 5.23: Percentage of VET students who acquired selected generic competencies to a large extent, by country**

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Being able to manage occupational tasks independently	<b>77</b>	<b>81</b>	45	48	49	54	<b>75</b>
Being able to work as a team member	<b>85</b>	<b>87</b>	52	<b>62</b>	<b>63</b>	<b>70</b>	<b>83</b>
Being able to quickly familiarise myself with new occupational tasks	<b>74</b>	<b>75</b>	<b>53</b>	<b>56</b>	<b>56</b>	<b>60</b>	<b>76</b>
Being able to perform well under pressure	69	69	46	39	44	44	66
Being able to communicate ideas and suggestions to others clearly	69	62	<b>53</b>	51	49	53	71
Being able to approach and engage with others with confidence (e.g. networking)	72	70	<b>55</b>	<b>57</b>	<b>57</b>	<b>58</b>	71

Question: E1a The following question asks for your perception of certain skills and abilities which are listed below. Please assess your current level of these abilities. Presented 4 and 5 answers on a scale from 1="Poor" to 5="Excellent"

Across all countries, females were more likely than males to report a high level of generic competencies, in particular: being able to manage occupational tasks independently, being able to work as a team member, being able to quickly familiarise myself with new occupational tasks, and being able to communicate ideas and suggestions to others clearly. However, there was no difference between the genders in the development of networking skills and performing under pressure. The biggest differences between genders were seen in Lithuania (8 percent difference) and Austria (7 percent difference), where all or almost all skills are more often developed by female students.

**Table 5.24: Percentage of VET students who acquired certain competencies to a large extent, by country and gender**

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Male</b>							
Being able to manage occupational tasks independently	<b>74</b>	<b>78</b>	43	46	45	53	<b>73</b>
Being able to work as a team member	<b>83</b>	<b>86</b>	<b>51</b>	<b>58</b>	<b>59</b>	<b>69</b>	<b>80</b>
Being able to quickly familiarise myself with new occupational tasks	70	<b>72</b>	<b>52</b>	<b>54</b>	<b>54</b>	<b>60</b>	<b>73</b>
Being able to perform well under pressure	67	68	46	39	47	45	67
Being able to communicate ideas and suggestions to others clearly	66	64	<b>51</b>	49	47	54	69
Being able to approach and engage with others with confidence (e.g. networking)	<b>73</b>	<b>72</b>	<b>52</b>	<b>55</b>	<b>54</b>	<b>59</b>	72
<b>Female</b>							
Being able to manage occupational tasks independently	<b>81</b>	<b>83</b>	48	51	56	<b>56</b>	<b>78</b>
Being able to work as a team member	<b>89</b>	<b>88</b>	54	<b>66</b>	<b>69</b>	<b>71</b>	<b>88</b>
Being able to quickly familiarise myself with new occupational tasks	<b>79</b>	<b>78</b>	<b>56</b>	<b>59</b>	<b>60</b>	<b>61</b>	<b>79</b>
Being able to perform well under pressure	73	71	44	40	41	43	66
Being able to communicate ideas and suggestions to others clearly	71	61	<b>57</b>	53	53	52	74
Being able to approach and engage with others with confidence (e.g. networking)	71	68	<b>60</b>	<b>61</b>	<b>61</b>	<b>56</b>	71

Question: E1a The following question asks for your perception of certain skills and abilities which are listed below. Please assess your current level of these abilities. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

When considering the sector of the programme as an influence on the development of students' generic competencies slight differences were noted. Students following programmes related to services were more likely to report good generic competencies of the following kinds: managing occupational tasks independently (service : industry = 64 percent : 56 percent), team work (74 percent : 68 percent) and quick familiarisation with new occupational job tasks (67 percent : 60 percent). In all seven countries, students from service programmes rated as one of the highest acquired competencies being able to quickly famil-

iarise themselves with new occupational tasks, while in all seven countries a commonly highly acquired competence of industry students is being able to work as a team member. The programme sector is only significantly associated with the acquisition of competencies in Latvia and Austria. In Austria, students from service programmes rate the acquisition of the ability to perform under pressure and to be able to quickly familiarise themselves with new occupational tasks higher, while in Latvia that is the case for all competencies.

*Table 5.25: Percentage of VET students who acquired certain competencies to a large extent, by country and sector of the programme*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Industry</i>							
Being able to manage occupational tasks independently	<b>75</b>	<b>79</b>	44	45	48	54	<b>73</b>
Being able to work as a team member	<b>85</b>	<b>87</b>	<b>52</b>	<b>58</b>	<b>63</b>	<b>69</b>	<b>82</b>
Being able to quickly familiarise myself with new occupational tasks	71	<b>73</b>	<b>53</b>	<b>53</b>	<b>55</b>	<b>60</b>	71
Being able to perform well under pressure	66	68	46	37	46	44	62
Being able to communicate ideas and suggestions to others clearly	69	64	51	48	50	55	<b>77</b>
Being able to approach and engage with others with confidence (e.g. networking)	<b>72</b>	71	<b>53</b>	<b>53</b>	<b>56</b>	<b>59</b>	69
<i>Service</i>							
Being able to manage occupational tasks independently	<b>79</b>	<b>81</b>	46	50	51	55	<b>75</b>
Being able to work as a team member	<b>85</b>	<b>87</b>	52	<b>64</b>	<b>63</b>	<b>70</b>	<b>83</b>
Being able to quickly familiarise myself with new occupational tasks	<b>76</b>	<b>76</b>	<b>54</b>	<b>58</b>	<b>58</b>	<b>60</b>	<b>76</b>
Being able to perform well under pressure	72	70	46	41	43	44	66
Being able to communicate ideas and suggestions to others clearly	68	61	<b>56</b>	53	49	52	71
Being able to approach and engage with others with confidence (e.g. networking)	72	69	<b>57</b>	<b>60</b>	<b>57</b>	<b>57</b>	72

*Question: E1a The following question asks for your perception of certain skills and abilities which are listed below. Please assess your current level of these abilities. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"*

In Latvia and Lithuania, students with well-educated parents are more likely to believe they are able to perform well under pressure. Similarly, in Slovenia, Latvia and Lithuania students with highly educated parents are more likely to develop good communication skills. Again, Slovenian and Lithuanian students with poorly educated parents are less likely to develop good networking skills compared to those with well-educated parents<sup>lxxiii</sup>.

In general, across the countries the socio-economic status of the students' families does not seem to be associated with their reported capability in terms of generic competencies. However, some differences among the three groups can be observed. In Lithuania and Latvia, the better the socio-economic status of the students' families, the greater the likelihood that they reported good skills in managing occupational tasks independently and quickly familiarising themselves with new occupational tasks<sup>lxxiv</sup>.

According to our results, the most acquired competence across the 7EU-VET countries is being able to work as a team member, followed by being able to quickly familiarise yourself with new occupational tasks, being able to manage occupational tasks independently and being able to approach and engage with others with confidence. On the other side, students are least comfortable performing well under pressure. We found some association between gender and the percentage of acquired competencies, which showed that usually females have a higher percentage of acquired competencies. A similar association exists with the sector of the programme where students in the service sector are more likely to report the higher acquisition of competencies such as managing occupational tasks independently, team work and

quick familiarisation with new occupational job tasks. How students acquire selected competencies was also associated with the education and socio-economic status of the students' parents, however this was only the case for particular countries, not in general.

In the next section, we examine more closely which factors determine the ability to conduct tasks independently and the ability to work as a team member. The first competency is, according to the European Qualification Framework methodology, the most important indicator of learning outcomes, while the case of team work represents the typical generic ability that is developed in the family, private, work and school environment.

*What impacts the ability to carry out tasks independently and the ability to work as a team member?*

In this section, we look at how study behaviour, school success, computer and Internet skills, professional goals and motives after schooling and socio-demographic characteristics determine two competencies: the ability to carry out tasks independently and the ability to work as a team member. At the end, we also look at the differences and similarities among the countries and study fields which are related to the programme's contribution to developing generic competencies, being aware of all the limitations of this study. First, we consider the determinants of the ability to perform work tasks independently.

*Table 5.26: Effects of selected characteristics on attainment of the competence »being able to manage occupational tasks independently«, by 7EU-VET countries<sup>200</sup>*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Constant (Being able to manage occupational tasks independently) (Beta)	1.853	2.036	0.693	0.570	0.826	0.975	0.765
	Std. Beta						
School success	0.089**	0.006	-0.057	0.060	0.065*	0.048	0.251***
Computer & Internet skills	0.076**	0.085**	0.105**	0.057	0.090***	0.106***	NA
<i>Professional motives after schooling</i>							
Obtaining solid occupational proficiencies	0.211***	0.045	0.251***	0.162***	0.109**	0.141***	0.130**
Receiving a high income	0.055	0.018	0.043	-0.003	0.006	0.025	-0.096*
Gaining job security	-0.042	0.005	-0.043	0.131**	0.004	-0.043	-0.021
Having responsibility at work	0.143***	0.110**	0.134**	-0.103**	0.112**	0.076	0.250***
Having opportunities to learn at work	0.033	0.143***	0.145**	0.048	-0.049	-0.066	-0.004
Undertaking interesting tasks at work	0.015	0.087*	-0.085	0.116**	0.034	0.045	0.048
Having a good relationship with colleagues	0.019	0.083*	0.015	0.017	0.049	0.057	-0.019
Advancing to a high level of status in society	-0.020	-0.163***	-0.024	0.044	0.071*	0.142***	0.126***
<i>Socio-demographics</i>							
Gender (male)	-0.067*	-0.109**	0.002	-0.039	-0.057*	-0.038	0.001
Primary and lower-secondary parents' education	0.015	-0.009	-0.068	0.022	-0.036	-0.061	NA
Tertiary parents' education	-0.003	0.042	0.014	-0.013	0.005	-0.030	NA
<b>Adjusted R Square</b>	0.177	0.144	0.212	0.234	0.271	0.175	0.307

\*\*\* = p<0.01; \*\* = p<0.05; \* = p<0.10

<sup>200</sup> In the model we also tested the effects of programme type, place of living, socio-economic status of the family, father's and mother's employment status. In the case of Germany, VET students in more demanding programme types less often attain the competence than those from less demanding programmes. Only in Greece do students that have an above-average socio-economic status less often obtain the competence than those with an average status.

As can be seen in Table 5.26, the most important determinants of the ability to carry out independent work is school success and professional motives. Those students with better grades and those which are in the longer term driven by the motivation to acquire solid occupation professional skills will, according to our survey data, be able to work more independently. We found proof of this in all the surveyed countries, except Germany. As expected, students who appreciate higher responsibility at work are expected to develop these skills better. However, this is not the case in Slovenia as it seems that in this country the educational mismatch is larger than in the other countries.

Somewhat surprising is the fact that having an opportunity to learn new things impacts the ability for responsible work only in Germany and Greece, which might be an indication that the perception of VET students of performing vocational tasks is not related to the learning environment in schools. Interestingly, in Germany the motivation of advancing to a higher level in society has a negative impact in the perception of being able to carry out work independently.

Another surprising fact is that learning behaviour generally has a smaller lower impact on this competency when compared to individual goals. In particular, it was not possible to identify any general cross-country pattern. In Austria, the key determinant is interest in practical subjects. In Germany, the impact on this competency came from striving for the highest possible mark while none of the other learning styles had any impact. The same result was attained in the UK, hence one might speculate that these two systems better validate and recognise this competency. In Latvia and Lithuania, two other factors appeared to be more important for the development of this competency: enjoyment in learning and interest in practical subjects. In Slovenia, only interest in practical subjects had a link to the ability for independent work. In addition, we found indications that in five out of the seven surveyed countries (data on this issue were not available for the UK) that a higher level of ICT skills predicts the ability to carry out independent work. Only in Latvia did a higher level of ICT skills not have any impact on independent work.

The only factor within the group of socio-demographic characteristics that has some relevance to carrying out independent work is gender. Particularly in Germany, but also in Austria and Lithuania, being female positively contributes to the perception of the level of ability to perform professional work. More surprising is the fact that, according to our data, other socio-demographic characteristics such as parents' education or socio-economic status have almost no impact on this competency.

Our results reveal other predictors in the perception of team work competency in comparison to team work. In most cases, study grades, study behaviour and motives had a smaller impact on team work, although in all countries we found that interest in practical subjects importantly generates this competency. Other factors indicating learning behaviour did not impact team work. ICT skills had some impact in Greece and Lithuania, where one might assume this was particularly because of the centrality of their social networks.

**Table 5.27: Effects of selected characteristics on attainment of the competence »being able to work as a team member«, by 7EU-VET countries<sup>201</sup>**

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Constant (Being able to work as a team member) (Beta)	1.980	2.732	0.842	0.999	1.055	1.534	1.440
	Std. Beta						
School success	0.078**	-0.098**	0.011	0.046	0.060*	0.060	0.154***
Computer & Internet skills	0.065*	0.019	0.108**	0.035	0.097***	0.064	NA
<i>Professional motives after schooling</i>							
Obtaining solid occupational proficiencies	0.030	0.071	0.186***	0.140***	0.065	0.126**	-0.005
Receiving a high income	0.011	-0.043	0.042	-0.026	0.010	0.069	-0.122**
Gaining job security	0.060	0.010	-0.059	0.148**	0.004	0.012	0.045
Having responsibility at work	0.077*	0.047	0.124**	0.003	0.114**	0.106*	0.212***
Having opportunities to learn at work	0.069	-0.015	0.030	0.083*	-0.006	0.035	0.000
Undertaking interesting tasks at work	0.030	0.070	-0.017	-0.040	-0.050	-0.146**	0.013
Having a good relationship with colleagues	0.071*	0.196***	0.038	0.214***	0.194***	0.117**	0.071
Advancing to a high level of status in society	-0.027	-0.100**	0.047	0.032	0.077*	0.098*	0.039
<i>Socio-demographics</i>							
Gender (male)	-0.093**	-0.080*	0.058	-0.031	-0.082**	-0.051	-0.030
Parents' primary and lower-secondary education	0.012	-0.080	-0.071	0.035	0.028	-0.087**	NA
Parents' tertiary education	0.035	-0.085*	-0.005	-0.056	0.034	-0.016	NA
<b>Adjusted R Square</b>	0.078	0.112	0.173	0.232	0.258	0.160	0.246

\*\*\* = p<0.01; \*\* = p<0.05; \* = p<0.10

As for the professional motives after schooling, the picture is very diverse across the studied countries. In Austria, for example, we found some indication that anticipated responsibility at work and good relations with colleagues predict the development of this competency. The most important predictor in Germany relates to the professional motive of having good relationships with colleagues. In Germany, surprisingly we also found that advancing to a high level in society had a negative impact on the perception of own skills. In Greece, the best predictors in the cluster of professional goals are obtaining solid occupational proficiencies and having responsibility at work. In Latvia and Lithuania, the most important predictor relates to having good relationships with colleagues: in Latvia, important predictors are connected to the attainment of solid occupational proficiencies, and in Lithuania having responsible work. Slovenia is similar to these countries, with a surprising indication that doing interesting work had a negative impact on this competency. It is interesting to note that unique attitudes in this country to team work have also been identified in a study of higher education graduates' early careers (see HEGESCO, 2011). Lastly, we note that in the UK the driver of receiving a high salary had a negative impact on this competency and responsible work a positive one.

Among socio-demographic characteristics, there are only a few factors that hold importance for the perception of being able to work well as a team member. The same as in the case of the ability to work independently, we found an indication in Austria, Germany and Lithuania that being female makes a positive contribution to the perception of high team work abilities. Only in Slovenia, the low education of parents has a negative impact on this competency. Similarly as in the case of the perception of carrying out professional work independently, also in this case we found no evidence parents education, employment

<sup>201</sup> In the model we also tested the effects of programme type, place of living, socio-economic status of the family, father's and mother's employment status. In the case of Latvia, students that come from towns or small cities or from country villages or farms more often obtain the competence. In the same country, mother's employment status has a positive effect on attainment of the competence.

status and socio-economic status have any impact on this competence. The only exception to this rule is Lithuania, where mothers' full-time job positively impacts on team work abilities.

### 5.4.3 Relationship between school success and other acquired competencies

In the last section, we presented results showing school success determines the ability to perform occupational tasks independently, and team work. In this part of the report we look at the relationship between the ability to quickly familiarise oneself with new tasks related to occupational tasks, to perform well under pressure, the ability to communicate ideas to others and the ability to approach and engage with others with confidence (e.g. networking), acquired competencies and school success. As expected, there are quite large differences in generic competencies between students with low grades and those with high ones. Across the countries, students with higher grades were more likely (by 10 percent or more) to report they have good generic competencies than those with lower grades.

Table 5.28: Percentage of VET students who acquired certain competencies to a large extent, by country and school success

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Low grades</i>							
Being able to quickly familiarise myself with occupational tasks	69	74	53	56	52	53	65
Being able to perform well under pressure	62	66	45	40	41	39	54
Being able to communicate ideas and suggestions to others clearly	62	62	49	50	46	51	64
Being able to approach and engage with others with confidence (e.g. networking)	70	70	52	57	54	55	61
<i>High grades</i>							
Being able to quickly familiarise myself with new occupational tasks	79	81	60	70	68	71	87
Being able to perform well under pressure	76	77	48	45	52	53	78
Being able to communicate ideas and suggestions to others clearly	73	65	66	66	59	57	79
Being able to approach and engage with others with confidence (e.g. networking)	74	68	65	66	64	62	82

Question: E1a The following question asks for your perception of certain skills and abilities which are listed below. Please assess your current level of these abilities. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

Differences in acquiring the competence of being able to work as a team member between students with high grades and those with low ones were found in Austria, Greece, Slovenia and the UK; with a difference of up to 14 percent. In Austria, Germany, Lithuania, Slovenia and the UK, students with higher grades more often declare they are being able to quickly familiarise themselves with new tasks related to a job occupation compared to students with lower grades. That students with higher grades more often perform well under pressure can be noted in the UK, Slovenia, Austria and Germany. In Greece, Austria, Latvia, Lithuania and the UK, students with higher grades also more often believe they are able to communicate ideas and suggestions to others clearly, while in Slovenia, Greece, Lithuania, Latvia and the UK students with lower grades less often report being able to approach and engage with others with confidences compared to those students with higher grades.

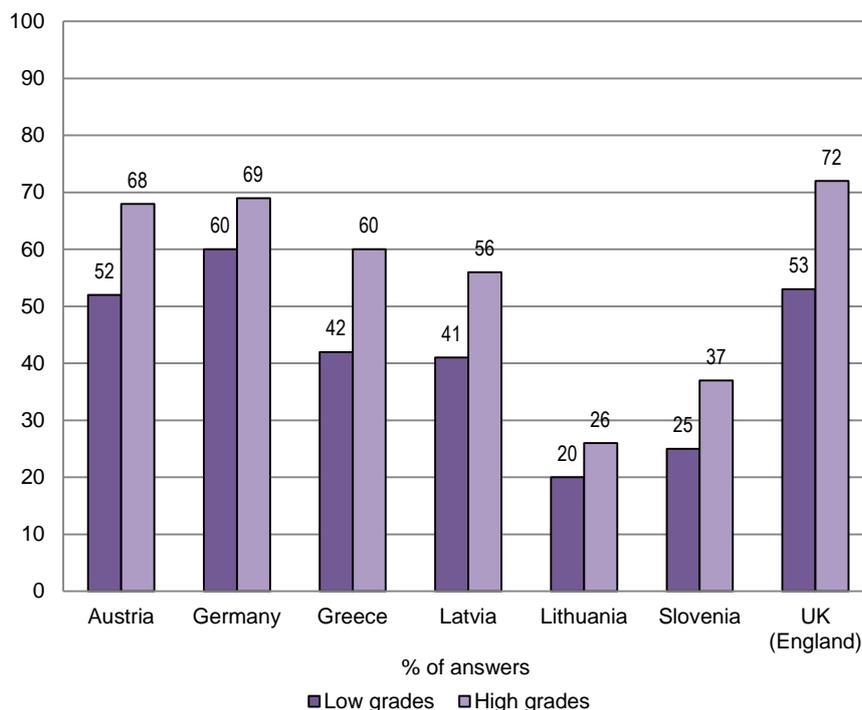
The greatest difference, 19 percent, emerges for autonomy, i.e. being able to manage occupational task independently, which means that students with high grades far more often believe they have acquired the mentioned competence than those with low grades. The biggest differences among students based on their school success are noted in the UK (25 percent).

In all seven countries female students slightly more often believe the programme contributes to developed competencies, although in Greece and Latvia this difference is slightly stronger. Looking overall, approxi-

mately one out of two students in the countries believe their programme prepares them well for these activities, with the highest percentage in the UK, Austria and Germany and the lowest in Slovenia and Lithuania<sup>lxxv</sup>.

Lastly, we also looked at students with low grades, who were less likely to judge that their programmes were equipping them with generic competencies than students with high grades. Across all countries, the difference was 37 percent : 53 percent, but it was particularly high in the UK and Greece (18 percent) and the lowest in Lithuania (6 percent). This makes sense in the UK because of the emphasis there on generic competencies as an essential element of success, which might not be the case in some other countries or VET systems.

*Chart 5.26: Percentage of VET students who acquired competencies overall to a large extent, by country and students' success*



*Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

Students with low grades were less likely to judge that their programmes were equipping them with generic competencies than students with high grades. Across all countries, the difference was 37 percent : 53 percent, but it was particularly high in the UK and Greece (18 percent) and the lowest in Latvia (6 percent) and Germany (9 percent). In Austria, Slovenia, Lithuania, the difference between these two groups of students is around 14 percent, which again confirms the existing association between school success and a student's acquisition of the competence.

In conclusion, we can say that surveying the relationship between school success and acquired competencies raises one of the most vital issues in the international comparison of VET systems. Being aware of the limitations of the self-assessment approach for surveying competencies, we found some associations between both elements. In an earlier section (6.4.2) we speculated that, in the case of the ability to independently perform occupational tasks and team work, school learning and training have a contribution to these competencies, although the model could also be reversed assuming that generic competencies help

to explain the success of learners because they are competencies that are employed in learning as well as in work. Clearly, there is a need to undertake further survey activities in this direction.

In the next section, we focus on the ICT aspects of VET that are becoming increasingly important on the policy agenda and, as indicated in this section, they are also becoming an important driver of other competencies.

#### **5.4.4 Conclusions**

In this section we confirmed that VET pupils who study more achieve better grades. However, we could not find such evidence for Germany and the UK. We assume that in some VET segments and countries it matters more what students do in school than after it, and therefore school systems do not assess in any extensive way study hours after school. We found some evidence that study behaviour patterns importantly determine school success: striving for the highest possible marks has by far the strongest effect in all countries. Interest in practical subjects does not have any effect on school success in any of the surveyed countries. However, striving for the highest possible grades might have not much in common with understanding of the learning subject or studying after school. The importance of understanding the learning content positively affects school success only in Slovenia and Latvia. In most countries, we found that the school success of VET pupils is much more driven by trying to impress employers and that ensures access to further education than by school teachers and peers. With the exception of Lithuania, pupils of more educated parents do not have higher grades. We assume that parents whose pupils end up in vocational education and not in general education do not worry how well their children are doing in school and pay more attention to their children's job destination.

There are large differences in the way VET students assess the level of their acquired competencies. The competence that was according to our results the most highly developed is being able to work as a team member, where on average three out of four students have developed this competence well, while only every second student believed they were able to perform well under pressure. The ability to manage occupational tasks independently was best assessed in Germany, Austria and the UK, while in other countries the share of such learners is significantly lower. In general, across all countries, females and students of service-related programmes were more likely than males to report a high level of generic competencies. Parents' education only had a positive effect on the level of acquired competencies in some countries: in Slovenia, Latvia and Lithuania students with well-educated parents are more likely to believe they are able to perform well under pressure and to have developed good communication skills. In the case of other competencies, the effect of socio-demographic differences is small.

Other important determinants of the ability to carry out independent work are school success and professional motives. Those students with better grades and those who in the longer term are driven by the motivation to acquire solid occupation professional skills will, according to our survey data, be able to work more independently and they have better developed some other competencies. Learning behaviour generally had a smaller impact on the level of acquired competencies than one would expect and each country under observation can be labelled according to their different results.

Overall, one out of two students believes their programme contributes importantly to the development of generic competencies, with the highest percentages seen in the UK, Austria and Germany and the lowest in Slovenia and Lithuania. However, in most countries we found a relationship between school success and the development of generic competencies. Better grades are an important predictor of a higher level of school success.

## 5.5 ICT skills, attitudes and use

New information and communication technologies (ICT) are bringing significant changes to everyday life. As with other spheres of life, ICT is triggering changes in the field of education. The use of ICT in teaching and learning is already one of the key components of educational policies.

Today we talk about lifelong learning, the information society, the knowledge society – all of these terms emphasise the importance of ICT as a vehicle for greater social inclusion, quality of life, competitiveness in the labour market and economic growth.

The Europe 2020 strategy detects the need to fundamentally transform education and training to ensure the new skills and competencies if Europe is to remain competitive, to overcome the current economic crisis and seize new opportunities. The strategic framework for European cooperation in education and training recognises that education and training have a crucial role to play in addressing the socio-economic, demographic, environmental and technological challenges facing Europe and its citizens today and in the future (European Commission 2010).

Digital competence is defined as one of the eight key competencies. "Digital competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet" (EC, 2007).

To successfully enter the job market, students are expected to be skilled in ICT use, and it is also expected that ICT is used in the school environment as well as by students and teachers.

In this section, we focus on VET students' skills in ICT use, the use of ICT for school work and attitudes towards ICT. We also examine the use of ICT by their teachers.

### 5.5.1 ICT skills

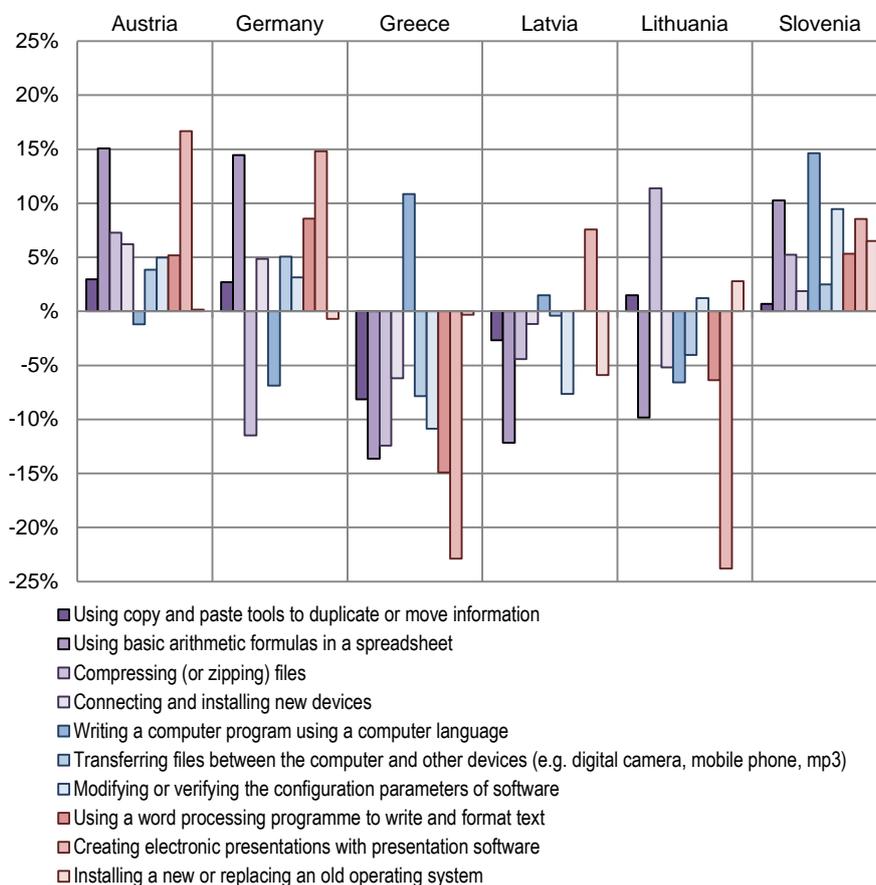
In the first part students' ICT skills are explored. We explore students' skills in working with computers and the Internet. Questions about ICT skills were not presented to UK students and therefore they are not included in the first section of this chapter.

In order to scan the ICT skills of students across the 7 EU countries, a set of questions was presented in the questionnaire. Due to the limited scope of the questionnaire, students were asked if they have carried out several tasks on computers and the Internet, but were not asked how good they are at those tasks. The first set of questions relates to students' skills in working with computers and the second to Internet use. A number of tasks were listed (Using copy/paste tools to duplicate or move information, Using basic arithmetic formulas in a spread sheet, Compressing (or zipping) files, Connecting and installing new devices, Writing a computer programme using a computer language, Transferring files between computers and other devices (e.g. digital camera, mobile phone, mp3), Modifying or verifying the configuration parameters of software, Using a word-processing programme to write and format text, Creating electronic presentations with presentation software, Installing a new or replacing an old operating system). Students marked each of these tasks with yes or no based on whether they had already done them or not.

Summarised data for all countries shows that students are more familiar with basic operations, while less familiar with more complex ones. The largest proportion of students from all participating countries has already used copy/paste tools to duplicate or move information (92.4 percent) or transferred files between a computer and other devices (91.2 percent), and they have also used a word-processing programme to write and format text (87.7 percent). On the other hand, students are the least familiar with writing computer programs using a computer language (39 percent), installing a new or replacing old operating systems (55.2 percent), as well as modifying or verifying the configuration parameter of software (55.4 percent).

Chart 5.27 presents the average (0 percent) and country deviation from the average – as we can observe, students in Slovenia are those who are above-average in all of the mentioned skills, while also predominantly above-average are students from Austria and Germany, while students from Lithuania, Latvia and especially Greece are mostly below-average.

Chart 5.27: Computer skills in individual countries (absolute deviation from average)



Question: F1 Which of the following computer related activities have you already carried out?

As Chart 5.27 shows, Lithuanian students are familiar with compressing and zipping files, but they fall short when it comes to creating electronic presentations with presentation software. Austrians stand out with their knowledge of using basing arithmetic formulas in a spread sheet, as well as creating electronic presentations with presentation software. However, they are a little below the average in writing computer programs. Greece is below-average in all of the listed skills, except for writing computer programs where it takes second place right after Slovenia. Latvian students are above-average in creating electronic presentations; however, they are more deficient in using basic arithmetic formulas in a spread sheet. Slovenians are especially good with the most complex categories, especially writing computer programs, using basic

formulas in spreadsheets, modifying the configuration parameters of software, as well as creating electronic presentations with presentation software. German students stand out in using basic arithmetic formulas in a spread sheet, as well as creating presentations and using word-processing programmes, yet they fall short in compressing files and writing computer programs.

For further analyses a composite variable was computed from all the computer skills with a formula:  $(\text{skill1} + \text{skill2} + \dots + \text{skill10}) / 10$ . The new variable comprises values between 0 and 1 with an average of 0.72 with a standard deviation of 0.22. The variable was used for further analyses.

Are there differences in computer skills according to the complexity of the programme? As seen from the Table 5.29, there is no clear pattern showing that more skilled students are enrolled in one programme or another. As the complexity of the programmes varies from country to country, we have addressed them individually.

Data for Lithuania suggest that students undertaking less demanding programmes have already carried out more of the listed computer-related activities than students undertaking more demanding programmes (0.71 vs. 0.66), although the differences are not statistically significant. Results are (significantly) different for Austria as students undertaking more demanding programmes are familiar with more computer-related tasks (0.83) than those in less demanding programmes (0.73). In the case of Greece, there are no statistically significant differences. In Latvia, the data interestingly show that students undertaking medium demanding programmes (0.61) stand out with less computer knowledge compared to the other two groups (0.71 for less demanding and 0.70 for more demanding programmes). Slovenian students in more demanding programmes (0.80) have on average already performed more computer-related activities than students in less demanding programmes (0.73). The results for Germany show a similar pattern to those in Latvia. Students undertaking medium demanding programmes (0.73) show less computer knowledge compared to students from more (0.78) or less (0.76) demanding programmes.

*Table 5.29: Computer skills according to the complexity of programmes by country*

	Less demanding	Medium demanding	More demanding
Austria	0.73	NA	0.83
Germany	0.76	0.73	0.78
Greece	0.64	NA	0.63
Latvia	0.71	0.61	0.70
Lithuania	0.71	0.68	0.66
Slovenia	0.80	NA	0.73

The second set of questions related to students' skills in using the Internet. A number of skills were listed and students marked each of the skills with yes or no, based on whether they had already carried them out or not.

### 5.5.2 Presentation of data for individual countries

The majority of respondents claimed they have already used a search engine to find information (94.6 percent) and sent an e-mail with attached files (90.6 percent), as well as posted messages in chat rooms, newsgroups or an online discussion (84.6 percent). However, on the other hand, only about half of the students have already created a website (47.6 percent), 56.4 percent of students have used peer-to-peer file sharing for exchanging films, music etc. and 66.5 percent have used the Internet to make telephone calls.

In most of the countries, the share of students who have already used the Internet to search for information is above 94 percent, while only in Greece 84 percent of VET students have already used a search engine to find information. In Greece the share of students is smaller compared to other countries for all activities, with the exception of creating a website – 47 percent of students there have already carried out that activity while for instance in Lithuania only 35 percent of students have done so. Modifying the security settings of Internet browsers is also satisfactory for Greece as 64 percent of students have already carried out that activity (while the international average is 60 percent).

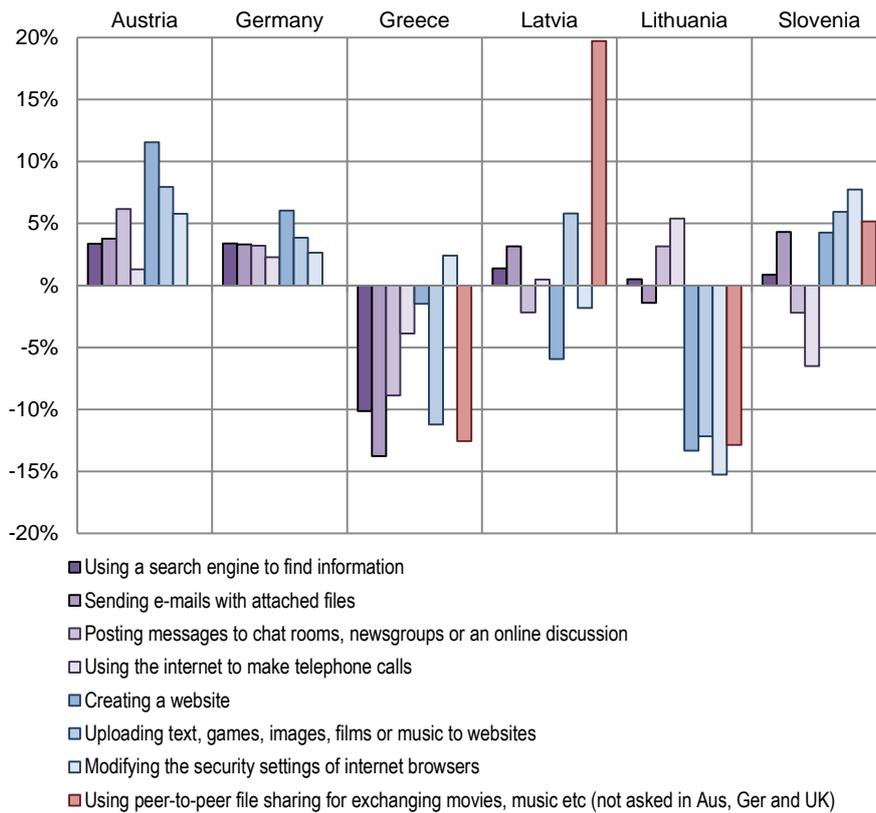
Table 5.30: Internet skills, by country (valid percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
Using a search engine to find information	<u>97</u>	<u>97</u>	<u>84</u>	<u>95</u>	<u>94</u>	<u>95</u>
Sending e-mails with attached files	<u>94</u>	<u>93</u>	<u>76</u>	<u>93</u>	<u>89</u>	<u>94</u>
Posting messages to chat rooms, newsgroups or an online discussion	<u>90</u>	<u>87</u>	<u>75</u>	82	<u>87</u>	82
Using the internet to make telephone calls	67	68	62	66	71	59
Creating a website	60	55	47	43	35	53
Uploading text, games, images, films or music to websites	88	84	69	<u>86</u>	68	<u>86</u>
Modifying the security settings of internet browsers	67	64	64	59	46	69
Using peer-to-peer file sharing for exchanging movies, music etc.	NA	NA	43	76	43	61

Question: F2 Which of the following Internet related activities have you already carried out?

Comparing the data across countries (Chart 5.28) suggests that the results for students from Germany and Austria are above the average, Slovenian students are below the average in posting messages and online discussions, and below the average in making Internet telephone calls. Lithuanian students are below the average in most activities but, contrary to Slovenian students, they are above the average in posting messages, online discussions and making Internet phone calls. In Latvia students are high above-average in using peer-to-peer file sharing, while for other activities they are close to the average.

Chart 5.28: Internet skills in individual countries (absolute deviation from average)



Question: F2 Which of the following Internet related activities have you already carried out?

A composite variable was computed from all the Internet skills with the formula:  $(\text{skill1} + \text{skill2} + \dots + \text{skill7}) / 7$ . The 8th indicator "Using peer-to-peer file sharing for exchanging films, music etc." was excluded since the related question was not asked in Germany and Austria and adding it would lead to a higher level of missing values. The new variable comprises values between 0 and 1 with an average of 0.75 and standard deviation of 0.22.

We compared students' skills across the countries according to the programme affiliation. As there was no clear relationship between programme affiliation and computer skills, we found no clear relationships between Internet use and students' programmes.

Table 5.31: Internet knowledge by complexity of programmes (by country)

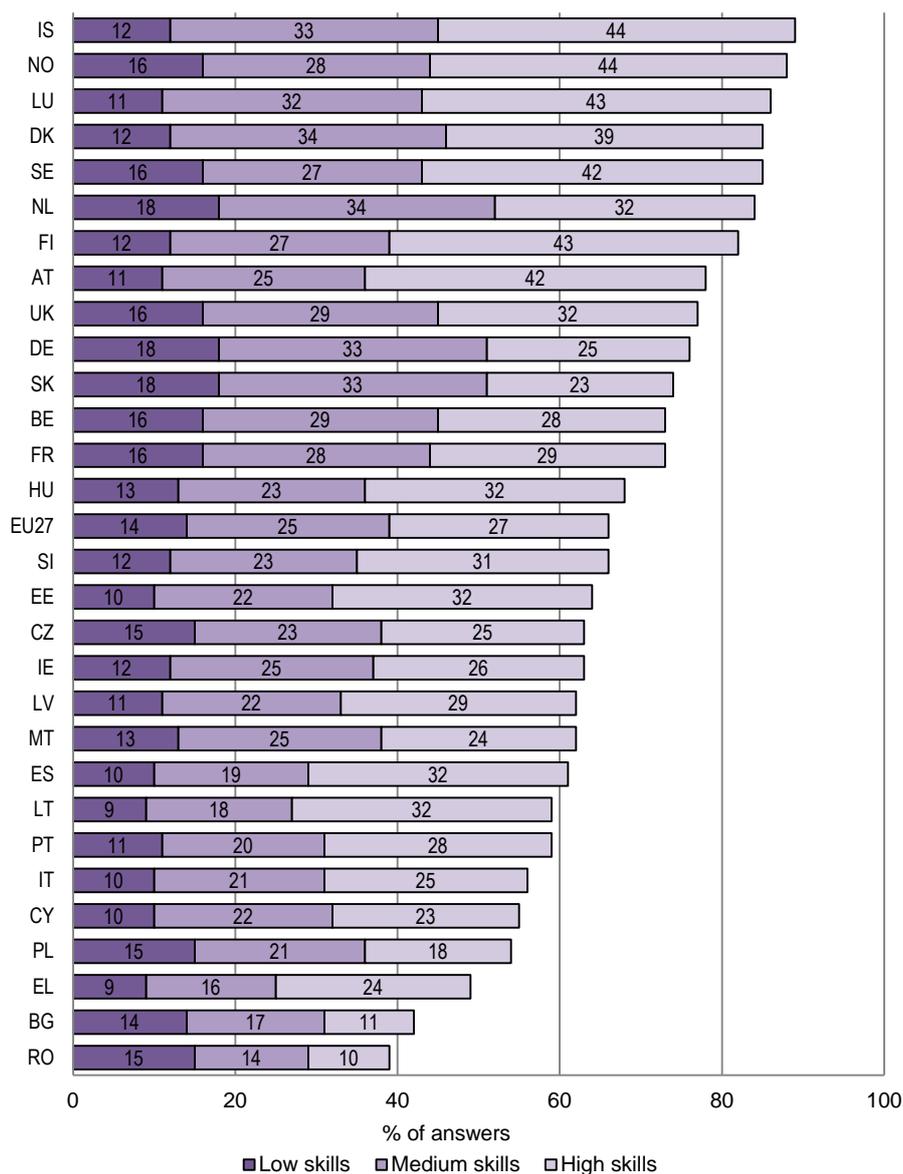
	Less demanding	Medium demanding	More demanding
Austria	0.75	NA	0.85
Germany	0.79	0.76	0.82
Greece	0.65	NA	0.71
Latvia	0.77	0.69	0.75
Lithuania	0.72	0.71	0.67
Slovenia	0.70	NA	0.79

Data for Lithuania suggest that students from less demanding programmes have already carried out a higher number of Internet-related activities (0.72 compared to 0.71 for medium demanding programmes and 0.67 for more demanding programmes), although the differences are not statistically significant. Results are different for Austria compared to Lithuania since students undertaking more demanding programmes are familiar with more Internet-related tasks (0.85) than those in less demanding programmes

(0.75). In case of Greece, the results were not statistically significant for computer-related tasks, yet the data suggest a difference in Internet-related tasks. Students undertaking more demanding programmes (0.71) have on average already performed more of the listed tasks than students in less demanding programmes (0.66). Differences are also significant in Latvia where, similarly to computer-related tasks, the data show that students in medium demanding programmes (0.69) stand out with less Internet knowledge compared to the other two groups (0.77 for less demanding and 0.75 for more demanding programmes). Slovenian students undertaking more demanding programmes (0.79) have on average already performed more computer-related activities than students undertaking less demanding programmes (0.70). The results for Germany show a similar pattern to those for Latvia, where the average is lowest for those undertaking medium demanding programmes (0.76 vs. 0.82 for students undertaking more demanding programmes).

Although the questions used in the questionnaire were not detailed, a similar picture as derived from the Eurostat 2011 survey can be seen when examining ICT competencies (for the general population aged 16-76) – in selected countries we compared the levels of individual computer skills in Austria, the UK and Germany (it did not participate in the first part of the ICT section of the 7EU-VET questionnaire), Slovenia, Latvia, Lithuania and Greece.

Chart 5.29: Individual levels of computer skills across EU countries



Source: data extracted from Eurostat

### 5.5.3 The importance of ICT in everyday life

In today's job market, basic ICT skills are considered essential for people entering the workforce and for those trying to find a better job. Governments consider an ICT-skilled workforce a strategic asset that spurs economic growth, promotes competitiveness, and improves business productivity. A nation's economic well-being depends "on both the effective use of ICT for businesses and industrial processes and on the knowledge, competencies, and skills of current and new employees".<sup>202</sup>

What do students think about the importance of ICT in everyday life and for their future employment? With the following set of questions we measured the importance of ICT in everyday life. Six indicators were developed and students expressed their agreement or disagreement on a scale from 1 to 5, with 1 meaning "I do not agree at all" and 5 meaning "I completely agree".

<sup>202</sup> [http://ec.europa.eu/enterprise/sectors/ict/files/e-skills-forum-2004-09-fsr\\_en.pdf](http://ec.europa.eu/enterprise/sectors/ict/files/e-skills-forum-2004-09-fsr_en.pdf)

As seen from the Table 5.32, the agreement is highest for the statements "In today's world people need to be skilled in information and computer technologies" (4.05) and "I can find more information on the Internet than I can in school books" (3.90). Students least agree with the statement that they can learn more quickly by using electronic materials (3.48), especially in Austria (3.10) and Germany (3.23).

Students from the United Kingdom and Latvia generally expressed more agreement with all indicators than those from other countries and, as Table 5.32 suggests, their level of agreement with the statements are above-average in most cases. The level of agreement with all the statements is below-average in Lithuania and Greece.

Table 5.32: Importance of ICT in everyday life, by country (mean)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
The ability to use a computer is very important for my future employment.	<b>3.77</b>	3.49	3.38	3.76	3.38	<b>3.79</b>	3.83
The Internet makes learning more interesting.	3.54	3.60	3.39	3.85	3.51	<b>3.81</b>	3.84
I can find more information on the Internet than I can in school books.	<b>3.97</b>	<b>3.90</b>	<b>3.81</b>	<b>3.97</b>	<b>3.83</b>	3.78	<b>4.00</b>
I can learn more quickly with the use of electronic materials.	3.10	3.23	3.42	3.85	3.44	3.45	3.87
In today's world people need to be skilled in information and computer technologies.	<b>4.40</b>	<b>4.27</b>	<b>3.69</b>	<b>4.05</b>	<b>3.89</b>	<b>4.04</b>	<b>3.90</b>
The use of computers and other technologies in teaching makes learning easier.	3.56	<b>3.61</b>	<b>3.55</b>	<b>4.00</b>	<b>3.74</b>	3.75	<b>3.97</b>

Question F3: To what extent do you agree with the following statements?

What do students think about the importance of the ability to use a computer for future employment? As seen in Table 5.33, females are the ones who agree more with the statement in all seven countries, while students whose school achievement is above-average also express a higher level of agreement with the statement. The highest rate of agreement is among UK students (with little difference among females and males). The lowest level of agreement with the statement is seen among Lithuanian male students (3.31) and the highest among Austrian and Latvian female students (3.90).

Table 5.33: ICT: The ability to use a computer is very important for my future employment (mean)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Gender</i>							
Male	3.66	3.47	3.37	3.64	3.31	3.71	3.85
Female	3.90	3.51	3.38	3.91	3.47	3.88	3.81
<i>School achievement</i>							
Above average	3.79	3.66	3.55	4.12	3.65	3.92	NA
Average	3.83	3.46	3.40	3.85	3.31	3.74	NA
Below average	3.80	3.27	3.28	3.50	3.05	3.58	NA

Question: F3\_1 To what extent do you agree with the following statements? The ability to use a computer is very important for my future employment.

Table 5.34 presents the data in more detail. Only the answers of students who selected "agree" and "completely agree" (4 and 5) are presented in the table. Among the countries there are more females who agree with the statement, although in the UK there are no differences in agreement according to gender, while differences are also small in Greece and Germany.

In Austria and Slovenia, 69 percent of female students agree that the ability to use a computer is important for future employment, in the UK 65 percent of male and female students agree with the statement and in Latvia 64 percent of female students agree with the statement. In Germany, about half of all students

(male and female) agree with the statement, whereas in Lithuania and in Greece less than half the students think the ability to use a computer is important for future employment.

Regardless of the country involved, it can be observed that students with above-average school grades are generally more in favour of the statement compared to students with lower achievement, although the difference is negligible in Austria where in all groups around 65 percent students agreed with the statement. In Austria there is also no difference between industry and service sector students – in both groups 64 percent of students think the ability to use a computer is important for further employment. But a big difference is observed in Austria according to programme type – 78 percent of students in more demanding programmes agree with the statement while only 46 percent do so in less demanding ones.

According to employment sector, the biggest difference among the groups can be observed in the UK – where 71 percent of students enrolled in an industry-related programme agree that the ability to use a computer is important for their future employment, while 64 percent of such students do so in service-oriented programmes.

In Slovenia (65 percent) there are no differences between the groups according to employment sector (industry or service), although the difference according to how demanding a programme is large – 71 percent of students enrolled in more demanding programmes agree with the statement and 47 percent of students enrolled in less demanding programmes do so.

*Table 5.34: The ability to use a computer is very important for my future employment according to school affiliation and gender (in percent)*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Gender</i>							
Male	60	51	45	55	43	63	65
Female	69	52	44	64	49	69	65
<i>School achievement</i>							
Above average	65	60	49	74	56	71	NA
Average	64	50	47	62	43	64	NA
Below average	65	50	42	47	32	56	NA
<i>Programme-Employment sector</i>							
Industry	64	47	46	52	47	66	71
Service	64	54	43	63	43	65	64
<i>VET programme type</i>							
More demanding	78	47	46	60	37	71	69
Less demanding	46	55	44	54	47	47	58

*Question: F3\_1 To what extent do you agree with the following statements? The ability to use a computer is very important for my future employment. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

#### **5.5.4 ICT use for school work by students and by teachers**

The following set of questions was directed to students' ICT use. Four different ways of using ICT for education (learning) were listed and students responded on a frequency scale, with 1 meaning "I never use it" and 5 meaning "I use it very often".

The data suggest that ICT is used the most in order to find, acquire and use information (3.78) and exchange and transmit information with other students, teachers and others using email and the Internet (3.49). The results suggest that ICT is more often used for producing new materials (3.41) than learning

from existing ones (3.29). All the activities are the least common in Greece and most common in the UK. Using information for educational purposes is also less often undertaken in Germany (2.72).

Table 5.35: ICT use, by country (arithmetic means)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
To find, acquire and use information	<b>3.86</b>	<b>3.66</b>	<b>3.41</b>	<b>3.76</b>	<b>3.82</b>	<b>3.80</b>	<b>4.16</b>
To use information for educational purposes using existing material	3.10	2.72	2.98	<b>3.52</b>	<b>3.40</b>	3.50	3.94
To produce new material	3.69	3.30	<b>2.99</b>	3.44	3.33	3.14	<b>4.00</b>
To exchange and to transmit information with other students, teachers and others using email and the Internet or to join a discussion and chat with others	<b>3.78</b>	<b>3.53</b>	2.97	<b>3.52</b>	3.27	<b>3.55</b>	3.85

Question: F4 For what purpose and to what degree do you use computers and other technologies for schoolwork?

Focusing on those students who answered "never" to individual indicators, we may conclude that ICT use for education is least common in Greece where 9.8 percent of students have never used it to find or use information (average: 3.9 percent), 13.5 percent of students have never produced new materials and every fifth student (18.8 percent) has never used ICT to exchange or transmit information with others (average: 7.6 percent). Three other countries must also be mentioned here. 17 percent of German and 12.4 percent of Austrian students have never used ICT with existing materials (average: 8.3 percent) and 10.3 percent of Slovenians never produced them with ICT.

When exploring the relationship between school achievement and ICT use, we have shown that the purpose of ICT use plays an important role in students' achievement (Brečko 2012). Since employing ICT for finding, acquiring and using information, and using existing material for educational purposes proved to be important, we explore these two variables in more detail.

Table 5.36: Finding, acquiring and using information with ICT according to school affiliation and background information (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Gender</i>							
Male	62	57	53	58	61	62	78
Female	71	60	53	72	72	68	78
<i>School achievement</i>							
Above average	70	65	63	76	73	67	NA
Average	62	61	50	68	64	65	NA
Below average	60	55	48	53	53	55	NA
<i>Programme-Employment sector</i>							
Industry	62	56	54	52	64	63	73
Service	70	60	50	70	67	66	78
<i>VET programme type</i>							
More demanding	77	62	54	66	55	70	85
Less demanding	52	56	53	57	67	49	65

Question: F4\_1 For what purpose and to what degree do you use computers and other technologies for schoolwork? To find, acquire and use information. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very often"

In four countries, females are the ones who use ICT more often for finding, acquiring and using information (Lithuania, Austria, Latvia, Slovenia).

According to students' achievement we can observe a similar pattern in all countries – higher achieving students employ ICT to find, acquire and use information more often. The biggest difference can be observed in Latvia – among the highest achievers there are 76 percent of those who use ICT for that purpose, while among low achieving students there are only 53 percent of such students.

ICT is also more often used for searching, acquiring and using information by students in the service sector, only in Greece do students in the industry (54 percent) sector use ICT for that purpose more often than students in the service sector (50 percent).

Big differences can also be observed according to how demanding a programme is – in all countries, except Lithuania, students in more demanding programmes use ICT more often – in Austria 77 percent of students from more demanding programmes and only 52 percent from less demanding programmes use ICT for searching, acquiring and using information, with a similar pattern seen in Slovenia – 70 percent of students in more demanding programmes often use ICT for that activity, and among students of less demanding programmes there are 49 percent of such students. The difference is also large in the UK (85 percent students from more demanding programmes and 65 percent students from less demanding programmes).

Table 5.37: To use information for educational purposes using existing material according to school affiliation and background information (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Gender</i>							
Male	31	23	31	47	40	49	70
Female	47	26	36	59	56	56	69
<i>School achievement</i>							
Above average	41	24	41	64	60	56	NA
Average	36	24	30	55	42	52	NA
Below average	45	24	26	40	32	43	NA
<i>Programme-Employment sector</i>							
Industry	33	22	33	43	43	52	75
Service	43	26	34	57	50	53	69
<i>VET programme type</i>							
More demanding	52	27	34	53	39	56	82
Less demanding	22	23	33	52	48	43	52

Question: F4\_2 For what purpose and to what degree do you use computers and other technologies for schoolwork? To use information for educational purposes using existing material (e.g. on the Internet – to prepare summaries and abstracts, use accessed information to prepare homework, compare information). Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very often"

Employing ICT to use information for educational purposes is, as mentioned, the highest in the UK. Here we can see there are no differences according to gender, but there are differences concerning whether it is an industry (75 percent) or service (69 percent) oriented programme, and according to how demanding the programme is – 82 percent students in more demanding programmes often employ ICT to use information for educational purposes while 52 percent of students do so in less demanding programmes.

According to programme type, there are also big differences among Austrian students – among students in more demanding programmes 52 percent often use ICT for that purpose and only 22 percent of such students do this in less demanding programmes.

In Germany, very low use of ICT is seen for educational purposes and there are very small differences among the different groups.

### 5.5.5 ICT use by teachers

Implementation of ICT in classroom is a key element of education. Many studies show that ICT is not used to the expected extent in most European countries. Teachers are the key enablers of innovative pedagogies, which also include the use of ICT in lessons.

As described in UNESCO's ICT Competency Standards for Teachers (2008), the teacher is the key individual in helping students to develop ICT competencies. He/she is responsible for establishing the classroom environment and preparing learning opportunities that facilitate students' use of technology to learn and communicate (UNESCO 2008).

Students were asked about the number of teachers using computers and other technologies in their lessons and great differences emerged in this regard among the countries included. As we can see, 75 percent of students from the UK claim that most or all of their teachers use ICT in their lessons, yet the share is much smaller for students in Greece (20 percent) or Germany (22 percent). Almost every fifth Greek

student (19 percent) claims that none of their teachers uses ICT in their lessons, compared to just 2 percent of such students in Austria or Slovenia.

*Table 5.38: Teachers using computers and other technologies in their lessons, by country (in percent)*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Not at all	2	7	19	3	3	2	4
Rarely	32	57	41	44	37	49	13
Sometimes	18	13	20	18	17	20	8
Often	32	18	15	27	30	25	30
Very often	16	5	5	8	13	4	45

*Question: F5a How many of your teachers use computers and other technologies in their lessons?*

*Table 5.39: How often do your teachers use computers and other technologies in their lessons? (in percent)*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
None of my teachers	2	5	17	3	2	1	1
A few of my teachers	13	29	31	22	18	19	5
Around half of my teachers	33	39	27	39	39	37	20
Most of my teachers	34	21	19	29	32	36	37
All of my teachers	18	6	6	7	9	7	38

*Question: F5b How often do your teachers use computers and other technologies in their lessons?*

In the UK 75 percent of students' teachers use ICT in classes often or very often, compared to only one-quarter of Greek students (25 percent), 27 percent of German students and 36 percent of Latvian students. The percentage is also relatively high in Austria (52 percent), Slovenia (43 percent) and Lithuania (41 percent). 17 percent of Greek students claim computers or other technologies are not used at all during classes.

Samo Pavlin and  
Božidar Grigić

## 5.6 Future Career Aspirations and Further Education

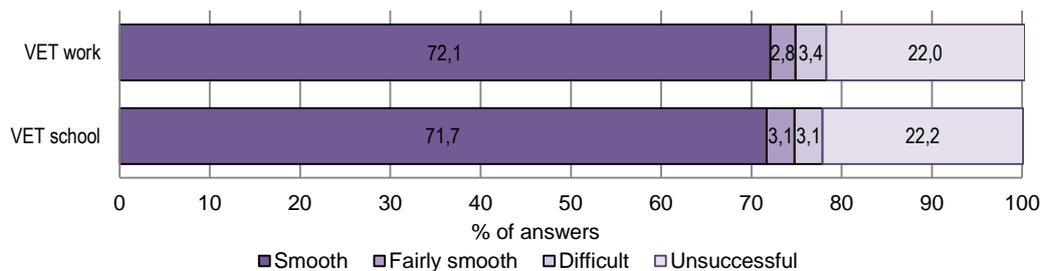
In this section, we explore the key drivers of VET students' professional careers. Second, we look at which employment sectors learners would like to work in. Third, we examine their motives and preferences regarding further education and the key determinants of further learning decisions.

### 5.6.1 The Context

When observing future career planning, it is very important to consider the particularities of VET systems relating to the transition from education to the labour market and further education. Following the Cedefop (2012) report, the transition from formal education to the labour market for medium-level VET graduates suggests that 22 percent of respondents experience an unsuccessful transition regardless of their educational orientation. The transition is, however, smooth or fairly smooth for 75 percent of graduates of work-place-based VET programmes or school-based programmes.

In Europe (EU-27), every second graduate of school-based programmes (aged 25–29) finds a job in the first 6 months after leaving their formal education, while in the work-based programmes three out of four graduates do so. On average, almost every third graduate from school-based VET programmes has to wait for their first job for more than 24 months. For 30- to 34-year-olds, less than one out of two finds a job in the first 6 months after leaving their formal education, while for those in work-based VET programmes the situation is better (68.8 percent).<sup>203</sup>

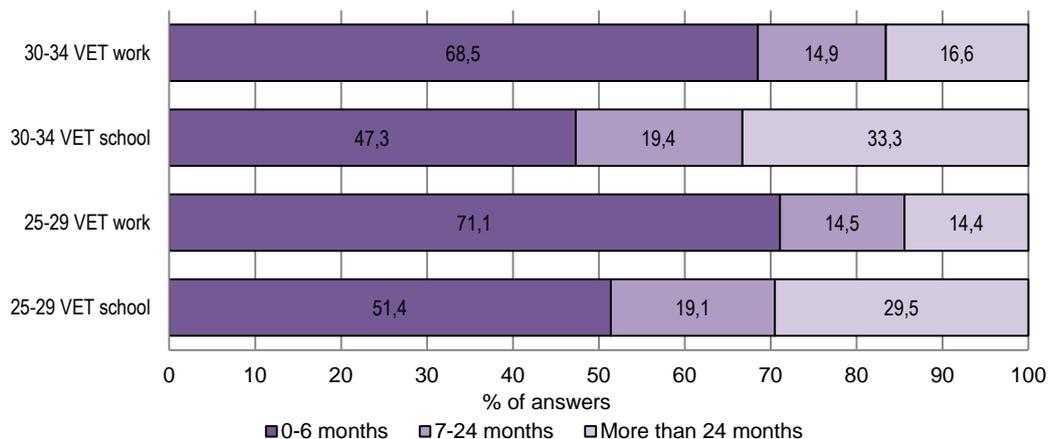
Chart 5.30: Transition from formal education to the labour market for medium-level VET graduates, by type of VET, 20- to 34-year-olds, EU-27+, 2009



It should be noted that Germany, Norway and Switzerland have been excluded from the sample.

Source: CEDEFOP, European Centre for the Development of Vocational Training. 2012. From education to working life. The labour market outcomes of vocational education and training, p. 51

Chart 5.31: Minimum duration of periods without employment after leaving formal education for the last time for medium-level VET graduates, by type of VET and age, EU-27+, 2009



It should be noted that Germany, Norway and Switzerland have been excluded from the sample.

Source: CEDEFOP, European Centre for the Development of Vocational Training. 2012. From education to working life. The labour market outcomes of vocational education and training, p. 51

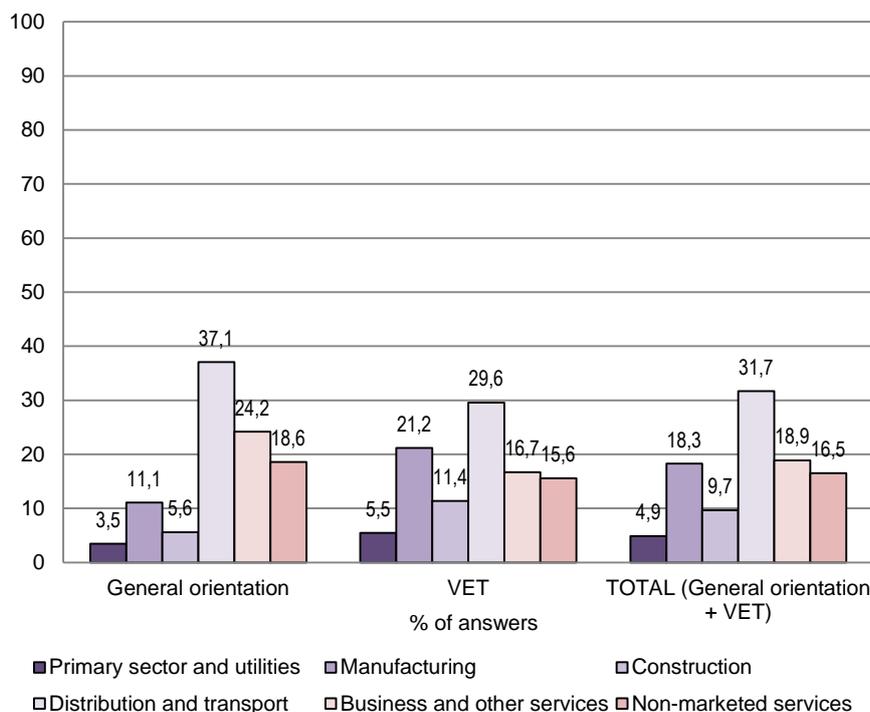
Chart 5.32 presents employed medium-level graduates by orientation and sector of activity. Graduates of general education programmes mainly find jobs in the field of distribution and transport (37.1 percent), followed by business and other services (24.2 percent), as well as non-marketed services (18.6 percent). They less commonly work in fields of manufacturing (11.1 percent), construction (5.6 percent), as well as in the primary sector and utilities (3.5 percent). Graduates from VET programmes, when compared to those in general programmes, more often work in manufacturing (21.2 percent), as well as construction (11.4 percent), although their primary field of work is still distribution and transport (29.6 percent).

<sup>203</sup> CEDEFOP, European Centre for the Development of Vocational Training. 2012. From education to working life. The labour market outcomes of vocational education and training, p. 51

It should be noted that Germany, Norway and Switzerland have been excluded from the sample.

As expected, general education graduates are more likely to work in service sectors than VET graduates, with this pattern holding true for all countries, except Greece. The percentage of those working in the service sector is, for the 7EU-VET countries, highest in Greece and the UK, followed by Germany, Latvia and Austria, which are all above the EU average. The proportion of medium-level graduates working in the service sector is lowest in Slovenia and especially Lithuania.

Chart 5.32: Employed medium-level graduates, by orientation and sector of activity, 15- to 34-year-olds, EU-27+, 2009



Source: CEDEFOP, European Centre for the Development of Vocational Training. 2012. From education to working life. The labour market outcomes of vocational education and training, p 61

The results for Greece and the UK can be compared to countries with the highest proportions, such as Luxembourg, the Netherlands, as well as Malta and Portugal. Germany, Latvia and Austria are comparable to Spain, Denmark, Finland and Belgium. Slovenia is closest to the average, together with Bulgaria and Hungary. Lithuania can be compared to Estonia, Poland and Romania.<sup>204</sup>

Following the Cedefop (2012) report, VET graduates are more likely than general education graduates to work in the primary, manufacturing and construction sectors. This pattern is found in all countries except for Greece and it is most pronounced in Eastern European countries, as well as Ireland and Iceland. As seen in Chart 5.33, the percentage of VET graduates is in the majority of countries much more prominent than the percentage of general education graduates, although the difference is not so significant in Bulgaria, Latvia and, as already mentioned, Greece. Lithuania is one of the countries with the highest percentages of medium-level graduates working in non-service sectors, together with Romania, Poland and Estonia. The figure for Slovenia is closest to the average and is comparable to Ireland, Hungary and Bulgaria. Austria, Latvia and Germany's results are similar. Their results are below-average and comparable to Finland and Spain. The UK and Greece are the two countries with the lowest percentages of medium-level graduates that work in non-service sectors. The shares are only lower in the Netherlands and Luxembourg<sup>lxxvi</sup>.

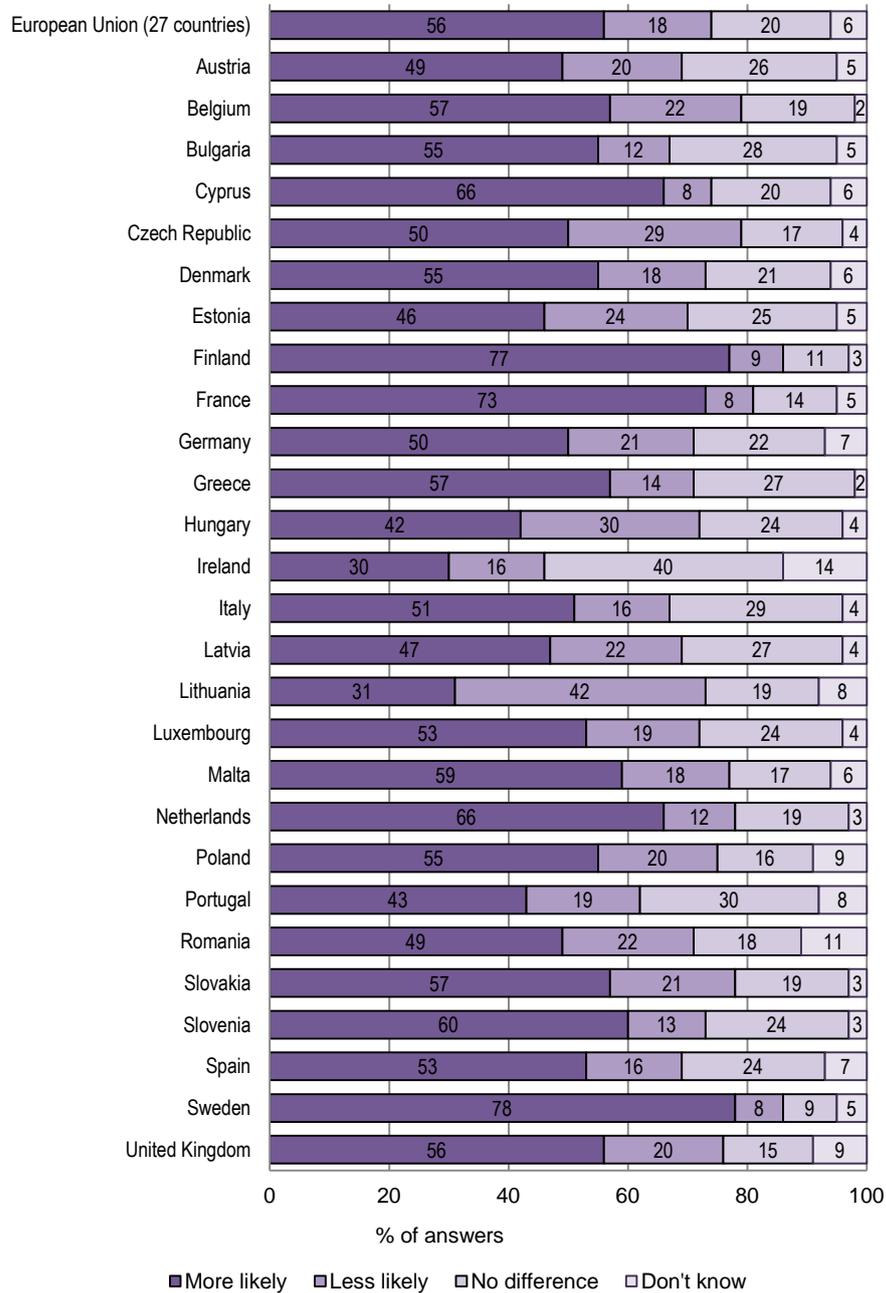
<sup>204</sup> CEDEFOP, European Centre for the Development of Vocational Training. 2012. From education to working life. The labour market outcomes of vocational education and training, p. 61

A more detailed analysis of the manufacturing sector shows the prevalence of VET graduates: 82.8 per cent of 15- to 34-year-old workers with a secondary or upper-secondary diploma are VET graduates; the percentage is greatest for mechanical engineering (87.9 per cent), metals and metal products (87.1 per cent) and wood and paper (85.9 per cent) and the lowest in printing and publishing (73.1 per cent).<sup>205</sup> These data are related to the question of whether VET graduates are more likely believed to be able to find a job after graduation in comparison to graduates of general education. The results are presented in Chart 5.34.

---

<sup>205</sup> CEDEFOP, European Centre for the Development of Vocational Training. 2012. From education to working life. The labour market outcomes of vocational education and training, p. 62

Chart 5.33: Percentage of citizens' beliefs about whether people who have completed vocational education and training are more or less likely to find a job after their studies compared to those who have completed general secondary or higher education



Question: QA12. Do you think that people who have completed their vocational education and training are more likely or less likely to find a job after their studies than people who have completed their general secondary or higher education?

Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 112

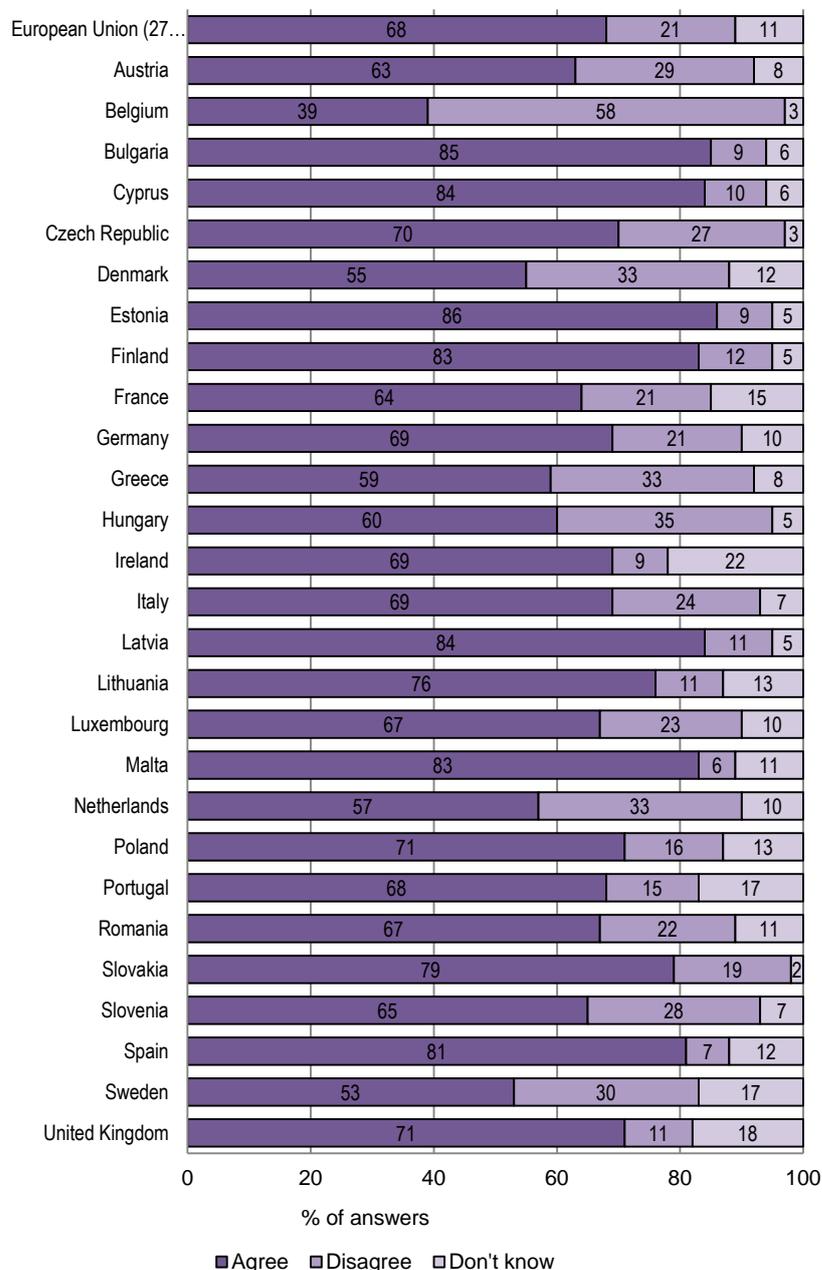
A majority of respondents in the EU-27 believe that completing vocational education and training makes a person more likely to find a job than someone who has completed general secondary or higher education (56 percent), although the differences between countries are significant. Among the 7EU-VET countries, Slovenia (60 percent) and Greece (57 percent) have the highest percentages of those agreeing with the analysed statement and can be compared to Malta as well as Slovakia and Belgium. The UK's result is

average, while the percentages in Germany (50 percent), Austria (49 percent), and Latvia (47 percent) are below-average and comparable to the Czech Republic, Romania and Estonia. Lithuania's result (31 percent) is highly below-average and very exceptional. The share of those that believe completing VET makes a person more likely to find a job than someone who has completed general secondary or higher education is only lower in Ireland (30 percent); however, not on account of those that do not agree with the statement (only 16 percent) but those who believe there is no difference (40 percent). This picture is related to the question of the extent to which VET education enables learners to continue schooling with university.<sup>206</sup>

---

<sup>206</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 112

Chart 5.34: Percentage of citizens agreeing with statement: “Vocational education and training enables people to continue with university studies afterwards”



Question: QA10.4 Please tell me to what extent you agree or disagree with each of the following statements. Vocational education and training enables people to continue with university studies afterwards.  
 Source: Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 42

Over two-thirds (68 percent) of all EU respondents believe that VET enables people to continue with university studies afterwards (25 percent totally agree, 43 percent tend to agree). Latvia is one of the countries with the highest proportions of people agreeing with the statement (84 percent) and can be compared to Estonia, Bulgaria or Cyprus. Percentages in Lithuania (76 percent) and the UK (71 percent) are also above-average. The results are similar for Eastern European countries – Slovakia and Poland. The agreement level in Germany falls around the average (69 percent) together with the Czech Republic, Italy or Ireland. The level of agreement in Slovenia (65 percent) and Austria (63 percent) seems to be a little

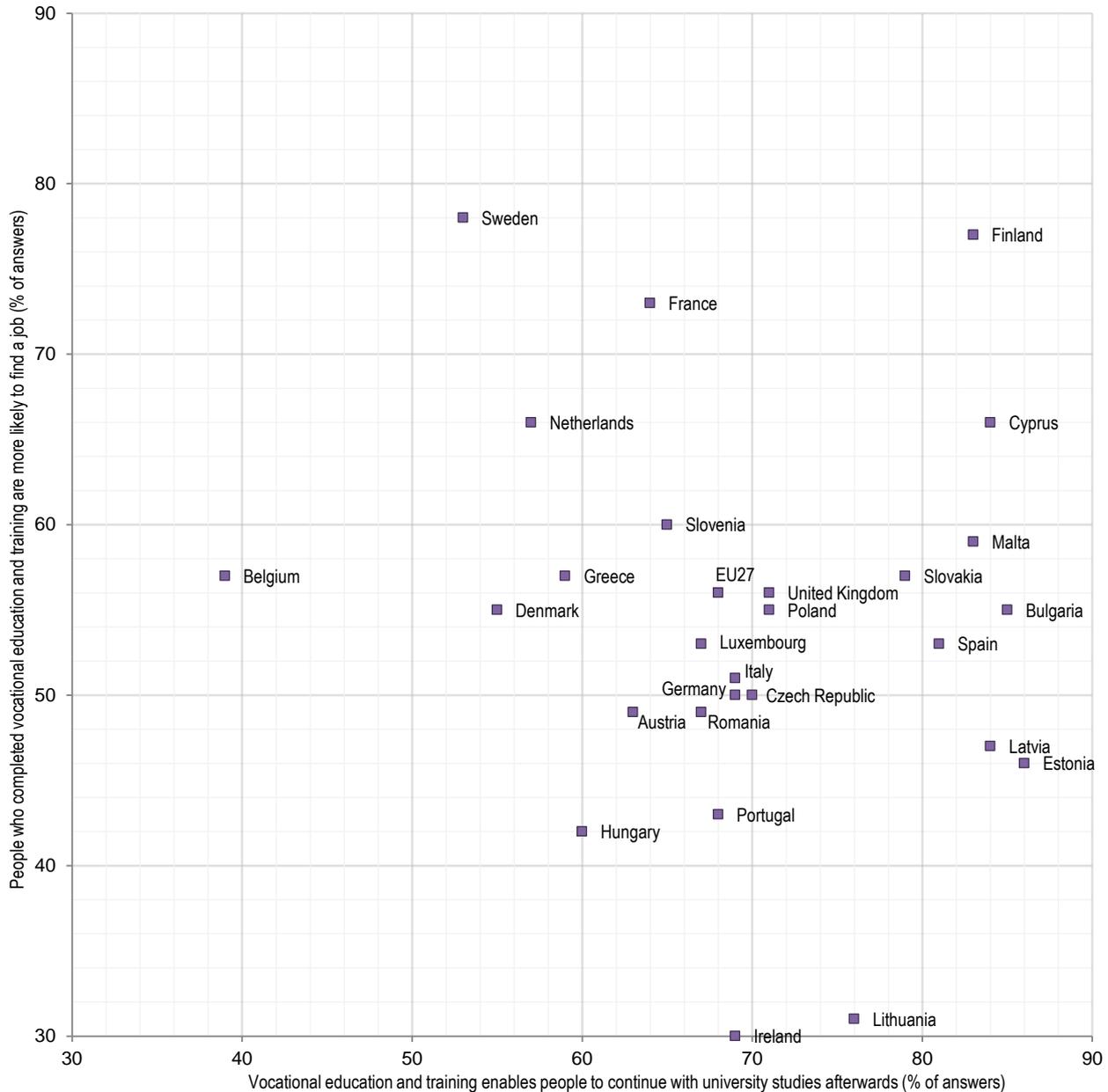
below-average. Greece was the lowest with only 59 percent and falls into the group of countries with the lowest agreement, where the Netherlands, Denmark and Sweden can also be included.<sup>207</sup>

If we look at Chart 5.35, we can note by far the highest percentage (in both over 75 percent) of Finnish people who believe in both spheres of VET that it enables people to continue further education and that VET graduates are more likely to find a job than those who have finished general education. The lowest share of people (39 percent) believing that VET enables people to continue further education can be noted in Belgium with around 58 percent of people there believing that VET graduates have better chances of finding employment. Lithuania and Ireland have the lowest number of people (around 30 percent) who trust that VET provides a qualification that will guarantee the quick finding of a job, but they a high level of belief in VET as preparation for further schooling (around 70 percent). Beside Finland, high percentages of people believing that VET graduates are more likely to find employment than those from general programmes can be noted in Sweden, France, the Netherlands and Cyprus (65 percent and above), while the biggest shares of people trusting in VET's preparation for further education are noticeable in Estonia, Latvia, Bulgaria, Malta, Slovakia and Spain (80 percent and above). Austria and Germany are fairly close to each other with around 50 percent of people judging VET graduates as more likely to find a job and between 60 and 70 percent of people who agree that VET enables people to continue education at university level. In Latvia, there are far more people who trust that VET is an enabler for further education than those (47 percent) who believe VET graduates are more likely to find employment. In Slovenia, Greece and the UK, around 58 percent of people find it more likely that VET graduates will find a job compared to general education graduates. However, when it comes to people agreeing with the statement that VET enables further schooling we can find a slight difference among those three countries with Greece having the lowest percentage (59 percent), followed by Slovenia (65 percent) and the UK with 71 percent. All 7 EU countries except Lithuania have somewhere in between 50 and 60 percent of people that believe VET is more likely to enable a student to find a job compared to general education. In Germany, Slovenia, Greece, Austria and the UK we can note relatively comparable results for both objectives of vocational education, finding a job and enabling further education, while in Latvia and Lithuania the percentages of people trusting in VET as an enabler for further education are higher than those trusting in VET as a better job provider than general education.

---

<sup>207</sup> Special Eurobarometer 369. 2011. Attitudes towards vocational education and training, p. 42

Chart 5.35: Percentage of people agreeing with statement: "Vocational education and training enables people to continue with university studies afterwards" by percentages of people believing VET graduates are more like to find a job compared to graduates of general education



Questions: QA12. Do you think that people who have completed their vocational education and training are more likely or less likely to find a job after their studies than people who have completed their general secondary or higher education? Presented answer "More likely"

QA10.4 Please tell me to what extent you agree or disagree with each of the following statements. Vocational education and training enables people to continue with university studies afterwards. Presented answer "Agree"

Source: Prepared based on data from Special Eurobarometer 369. 2011. Attitudes towards vocational education and training. Pg. 42

In the next section, we look more deeply at the relationship between VET education and further careers, considering only the 7EU-VET countries.

## 5.6.2 What drives VET students towards their professional career?

Based on our survey, we were concerned to investigate learners' aspirations for a future career. First, we looked at which drivers are important for young people across the seven countries and whether a strong aspiration is associated with other important variables.

Learners reported which objectives concerning their future professional careers are the most important for them. These objectives represent the aspirations of learners. We would expect these aspirations to be formed as a consequence of socio-demographic factors, but also as a result of past educational experience.

Table 5.40: Drivers of VET students' professional development, by country (in percent)<sup>208</sup>

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Obtaining solid occupational proficiencies	66	66	49	59	44	57	80
Receiving a high income	82	83	51	66	56	63	86
Gaining job security	<b>91</b>	<b>93</b>	50	<b>67</b>	65	55	84
Having responsibility at work	72	75	48	63	68	54	84
Having opportunities to learn new things at work	79	80	48	63	67	61	<b>87</b>
Undertaking interesting tasks in the workplace	87	85	44	59	56	64	85
Having a job that makes me happy	<b>94</b>	<b>93</b>	<b>56</b>	<b>70</b>	<b>71</b>	75	<b>90</b>
Having a good relationship with colleagues	<b>92</b>	<b>92</b>	<b>60</b>	<b>67</b>	<b>72</b>	<b>81</b>	<b>88</b>
Advancing to a high level of status in society	57	53	48	59	62	71	73
Having enough spare-time to do other things in life	84	77	38	59	59	<b>77</b>	78
Making and maintaining relationships with others (e.g. family and friends)	78	76	<b>62</b>	<b>70</b>	<b>74</b>	<b>79</b>	86

Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

In general, the most important objectives overall, in almost every country, were "having a job that makes me happy" and "having good relationships with colleagues" (average 79 percent). Only slightly less highly rated was "making and maintaining relationships with others (e.g. family and friends)" (average 75 percent). We can conclude that the most important objectives for 17- and 18-year-olds across the seven countries are intrinsic and related to professionalism (Pavlin et al., 2010). However, objectives relating to occupational proficiency, income, job security, learning at work, interesting tasks in the work place, social status and leisure are also very important, although we found some important differences across the countries.

The first thing we can note is that in the UK, Austria and Germany (79 percent or above on average) the shares are relatively bigger than in other countries, where the average is around 63 percent with the lowest in Greece at around 50 percent. Some objectives were particularly important in some countries but not in others. Austria and Germany have very similar results with having a job that makes them happy, having a good relationship with colleagues and gaining job security as the most important drivers, and advancing to a high level of status in society as the least mentioned driver. We can also note some similarities in Greece, Latvia and Lithuania, in all three of these countries the most common drivers are having a job that makes them happy, having a good relationship with colleagues and making and maintaining relationships with others. In Greece, having enough spare time to do other things in life is the driver with the lowest percentage, while in Lithuania that is obtaining solid occupational proficiencies. In Slovenia, the least common driver is having responsibility at work, while the three most often mentioned ones are having a good relationship with colleagues, having enough spare time to do other things in life and maintaining relationships with others, while in the UK students are most often driven when they have opportunities to

<sup>208</sup> Ranks and percentage points are indicated.

learn new things at work, have a job that makes them happy and have good relationships with colleagues. Similarly to Germany and Austria, the driver with the lowest percentage is advancing to a high level of status in society.

Learners' preferences for objectives show the influence of gender, particularly in five countries: Germany, Austria, the UK, Lithuania and Slovenia. In these countries, female students usually rate some drivers such as happiness in their work, job security and good relationships with co-workers higher than male learners. Looking more closely at Austria, female students rate obtaining solid occupational proficiencies, gaining job security, having responsibility at work, undertaking interesting tasks in the workplace, having a job that makes them happy, having good relationships with colleagues and making and maintaining relationships with others a few percent higher than male students, while they rate advancing to a high level of status in society a little lower. German female students also rate obtaining solid occupational proficiencies, gaining job security, having responsibility at work, having opportunities to learn new things at work, having a job that makes them happy, and having good relationships with colleagues higher, while they rate advancing to a high level of status in society and having enough spare time a little lower than male students. In the UK, gaining job security, having responsibility at work, having a job that makes them happy and undertaking interesting tasks in the workplace are rated higher by female students. In Lithuania, this is the case for the following three drivers: obtaining solid occupational proficiencies, having a job that makes them happy and having good relationships with colleagues. Slovenian female students are, compared to male students, more often driven by gaining job security, having responsibility at work, having opportunities to learn new things at work, having a job that makes them happy, and having good relationships with colleagues, advancing to a high level of status in society and having enough spare-time and making and maintaining relationships with others.

Table 5.41: VET students' drivers of professional development, by country and gender (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Male</b>							
Obtaining solid occupational proficiencies	63	70	48	56	40	56	80
Receiving a high income	84	87	51	65	54	61	<b>86</b>
Gaining job security	<b>88</b>	<b>92</b>	47	<b>66</b>	62	51	82
Having responsibility at work	69	74	48	61	62	49	81
Having opportunities to learn new things at work	77	77	47	62	63	58	<b>86</b>
Undertaking interesting tasks in the workplace	85	85	43	58	53	63	83
Having a job that makes me happy	<b>91</b>	<b>91</b>	<b>55</b>	<b>66</b>	<b>66</b>	71	<b>89</b>
Having a good relationship with colleagues	<b>89</b>	<b>90</b>	<b>59</b>	64	<b>67</b>	<b>78</b>	<b>86</b>
Advancing to a high level of status in society	62	57	48	57	57	67	71
Having enough spare-time to do other things in life	82	81	37	59	57	<b>75</b>	78
Making and maintaining relationships with others (e.g. family and friends)	74	75	<b>60</b>	<b>68</b>	<b>68</b>	<b>76</b>	85
<b>Female</b>							
Obtaining solid occupational proficiencies	69	62	49	63	50	58	82
Receiving a high income	80	79	52	66	58	65	86
Gaining job security	<b>94</b>	<b>94</b>	54	<b>68</b>	70	59	87
Having responsibility at work	75	77	50	65	77	61	87
Having opportunities to learn new things at work	80	83	50	65	74	64	<b>89</b>
Undertaking interesting tasks in the workplace	90	85	46	61	62	66	88
Having a job that makes me happy	<b>98</b>	<b>95</b>	<b>59</b>	<b>74</b>	<b>79</b>	<b>80</b>	<b>93</b>
Having a good relationship with colleagues	<b>95</b>	<b>94</b>	<b>62</b>	69	<b>80</b>	<b>84</b>	<b>90</b>
Advancing to a high level of status in society	53	49	48	61	69	76	76
Having enough spare-time to do other things in life	86	73	41	59	62	<b>80</b>	78
Making and maintaining relationships with others (e.g. family and friends)	83	76	<b>64</b>	<b>72</b>	<b>82</b>	<b>83</b>	88

Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

There were some associations between socio-economic status and the commitment of learners to particular objectives. In Austria, Germany, Latvia and the UK, a higher socio-economic status is associated with a stronger commitment to striving for occupational proficiencies. Higher socio-economic status is associated with a stronger commitment to 'having a job that makes me happy' in Austria, Germany, Latvia and the UK. In Austria, students with a lower socio-economic status rank the importance of gaining job security higher than those students with a higher socio-economic status. However, in Greece the situation is reversed since students with an above-average or average socio-economic status value gaining job security more than those with a below-average status. In general, we find that socio-economic status does have some significant associations, but they vary among the countries and there is no clear influence on certain types of objectives<sup>lxvii</sup>.

### 5.6.3 Which employment sectors do learners aspire to work in?

The most popular employment area among students is services (34 percent or above), with the highest rate in Slovenia and Latvia (44–45 percent) and the lowest in Lithuania and Austria (34–35 percent). In Austria, with 26 percent industry and trade areas share second place in popularity among students. In Germany, the second most popular employment area is industry (35 percent), in Lithuania, Latvia, Slovenia and the UK that is trade (32 percent), while for Greece are the other areas (22 percent). The least popular area is non-governmental organisations in all seven countries, with 8 percent or less.

Table 5.42: Students' preferences for working in major employment areas, by country (in percent)<sup>209</sup>

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Industry (e.g. producing industry, steel, motor, oil)	<u>26</u>	<u>35</u>	<u>21</u>	<u>16</u>	<u>29</u>	<u>18</u>	<u>27</u>
Services (e.g. nursing, policing, hairdressing)	<u>35</u>	<u>36</u>	<u>37</u>	<u>44</u>	<u>34</u>	<u>45</u>	<u>41</u>
Trade (e.g. banking, financing, business)	<u>26</u>	<u>20</u>	19	<u>36</u>	<u>32</u>	<u>28</u>	<u>32</u>
Agriculture, forestry and fishery	10	7	8	12	9	10	4
Public administration (e.g. local government, education)	19	19	9	13	12	<u>18</u>	16
Non-governmental organisation (e.g. charities, not-for-profit organisations)	3	4	6	7	5	8	4
Other	17	19	<u>22</u>	15	10	<u>18</u>	6

Question: D5 Which sector would you like to work in the most?

If we compare students' preferences for employment areas by sector of their programme, we can observe some interesting differences. Across all seven countries, students from industry programmes have far stronger preferences than those from service programmes, with the biggest differences in Austria (39 percent) and the UK (33 percent) and the lowest in Germany (22 percent) and Lithuania (20 percent). As expected, we obtained the reverse results for working in services with the highest differences in Greece (33 percent) and the UK (30 percent) and the lowest Austria (16 percent) and Germany (22 percent). In Austria, Germany and Latvia, service students expressed a stronger preference for working in trade than industry students, however in Greece we can notice the opposite situation. Agriculture, forestry and fishery are more popular among industry students in all countries except Germany and the UK, where we see no significant difference. In contrast, work in public administration is more attractive to service students in Austria, Germany, Lithuania, Slovenia and the UK. We observe that the sector of a programme is significantly associated with students' preferences. Students from an industry programme expressed a stronger attraction to industry as well as agriculture, forestry and fishery, while service students were more attracted to services, trade, and public administration.

<sup>209</sup> Ranks and percentage points are indicated

Table 5.43: Students' preferences for working in major employment areas, by country and sector (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Industry</b>							
Industry (e.g. producing industry, steel, motor, oil)	<u>49</u>	<u>57</u>	<u>32</u>	<u>33</u>	<u>38</u>	<u>33</u>	<u>77</u>
Services (e.g. nursing, policing, hairdressing)	<u>25</u>	<u>21</u>	20	<u>28</u>	<u>23</u>	<u>36</u>	<u>12</u>
Trade (e.g. banking, financing, business)	14	12	<u>22</u>	<u>28</u>	<u>31</u>	<u>26</u>	<u>21</u>
Agriculture, forestry and fishery	<u>15</u>	7	10	21	13	16	6
Public administration (e.g. local government, education)	11	14	9	13	11	12	2
Non-governmental organisation (e.g. charities, not-for-profit organisations)	2	3	5	5	4	7	0
Other	14	<u>22</u>	<u>25</u>	16	11	23	4
<b>Service</b>							
Industry (e.g. producing industry, steel, motor, oil)	10	<u>25</u>	8	7	<u>18</u>	7	<u>24</u>
Services (e.g. nursing, policing, hairdressing)	<u>41</u>	<u>43</u>	<u>57</u>	<u>52</u>	<u>47</u>	<u>53</u>	<u>42</u>
Trade (e.g. banking, financing, business)	<u>35</u>	<u>23</u>	<u>15</u>	<u>40</u>	<u>33</u>	<u>30</u>	<u>33</u>
Agriculture, forestry and fishery	7	7	5	7	5	5	4
Public administration (e.g. local government, education)	<u>24</u>	21	9	13	14	<u>22</u>	17
Non-governmental organisation (e.g. charities, not-for-profit organisations)	4	5	7	9	6	8	4
Other	20	18	<u>19</u>	<u>15</u>	9	15	6

Question: D5 Which sector would you like to work in the most?

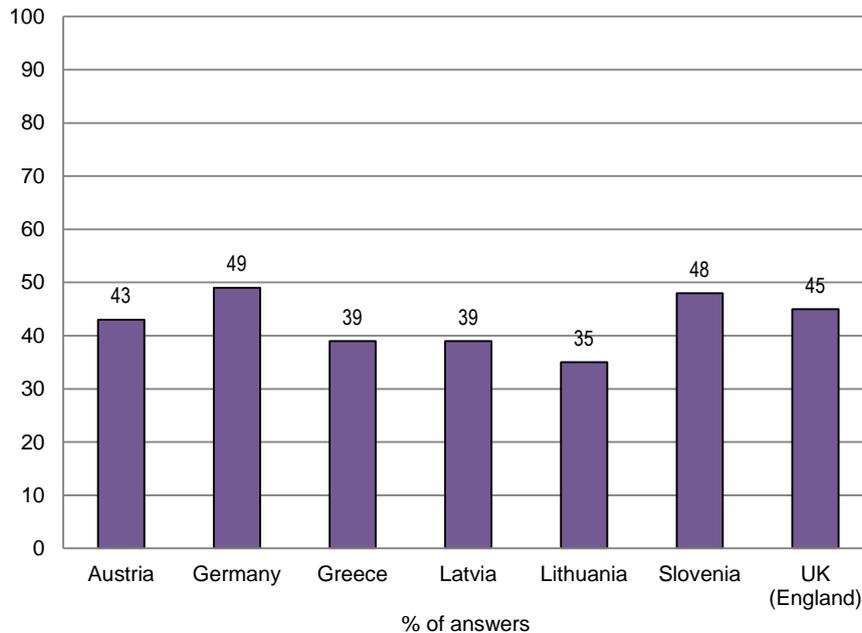
Further, students' aspirations in relation to employment sectors were gendered in all countries: gender was significantly associated with commitments to work in different sectors. Across the countries, 37 percent of males as against 10 percent of females wanted to work in industry, with the highest percentage of male students in Germany (53 percent) and the lowest in Latvia (26 percent). 53 percent of females as against 26 percent of males wanted to work in services, with the highest rates of female students in Greece (65 percent) and Latvia (60 percent) and the lowest in Austria (45 percent) and Germany (48 percent). In Latvia and Austria, female students prefer to work in trade compared to male students, while in Greece the situation is the reverse with 23 percent of male students compared to 12 percent of female students desiring to work in trade. Agriculture, forestry and fishery is more popular among male students in all countries except the UK with the highest differences in Slovenia (14 percent) and Latvia (13 percent). On the other hand, female students more often expressed a preference for working in public administration and non-governmental organisations. The first association can be noted in Austria, Germany, Lithuania and Slovenia with a difference of approximately 10 percent, while the latter is in Austria, Latvia, Lithuania and Slovenia with a difference of 4 percent. We can conclude from the results that working in industry, agriculture, forestry and fishery is more preferable for male students, while working in services, trade, public administration and non-governmental organisations is more strongly desired by female students.<sup>lxxviii</sup>

In the next part, we examine students' drivers for continuing further education.

### 5.6.4 Further education

Vocational programmes can lead to immediate employment or to further education. In this research, we are interested in the intentions of students to continue their education as well as their objectives in relation to work. Deciding to continue education can greatly increase the value of the vocational education for the learner, so it is worthwhile to try to understand which factors influence this choice and whether this choice is associated with other factors.

Chart 5.36: Percentage of VET students considering continuing schooling, by country<sup>210</sup>

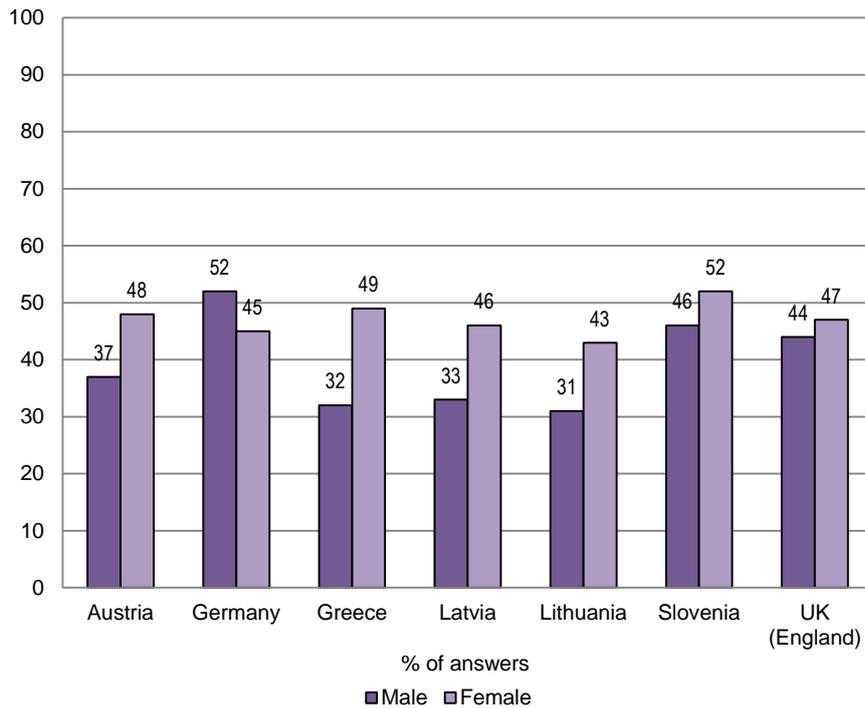


Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

Despite the large differences in VET systems across the countries, including variations in the formal permeability paths, the share of learners who said they were likely to continue in school or further education were not as big as one might assume. Results ranged from a high of 49 percent in Germany down to 35 percent in Lithuania. Females were more likely (by more than 10 percent) to expect to continue in all countries except Germany, where the situation is reversed. However, this association was not significant in Slovenia and the UK.

<sup>210</sup> Ranks and percentage points are indicated

Chart 5.37: Percentage of VET students considering continuing schooling, by country and gender

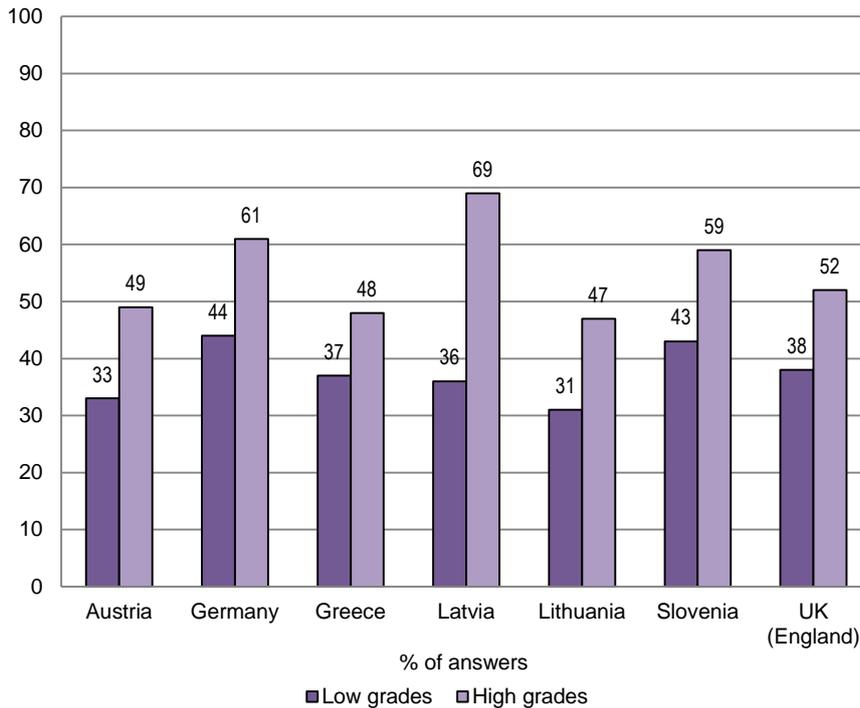


Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

In Austria, Greece, Lithuania and Latvia, students in programmes associated with employment in services were more likely to expect to continue their education than those in programmes associated with employment in industry. This relationship did not hold in the other three countries. Learners taking more challenging programmes were more likely to expect to continue their education than those taking less challenging programmes in Austria, Germany, Slovenia and the UK. It seems possible that the differences among programmes – in terms of level, duration and status – in these countries will hold greater significance for learners than the differences in the other countries.<sup>lxxix</sup>

The relationship between current perceived grades and intentions was more pervasive. At least 11 percent more students with high grades plan to continue education than their peers with low grades. The highest difference is noticed in Latvia (33 percent) and the lowest in Greece (11 percent), with other countries not far away with differences of approximately 16 percent.

Chart 5.38: Percentage of VET students who consider to continue schooling, by country and school success



Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

In every country, except the UK, there was a significant relationship between socio-economic status and the intention to continue education: learners with an above-average socio-economic status were more likely to plan to continue their education than those with a low socio-economic background, where these differences are quite high in Austria (29 percent), Greece (29 percent) and Latvia (26 percent) and a little lower in Germany (17 percent), Slovenia (18 percent) and Lithuania (13 percent).<sup>lxxx</sup>

Our research also sought to understand what 17- and 18-year-olds expect to gain from further education. If we are to understand young people as agents making decisions, it will be helpful to discover which benefits they expect to obtain from their programmes. Students were invited to express their agreement with statements about how they would benefit from further education or training. The most strongly supported statements across the seven countries were that further education or training "enhanced career options" (72 percent), that it "gave me a good education or qualification" (71 percent) and that it enabled "me to earn a high income later in life" (71 percent). However, there were national differences, for example, Greek learners were less likely to agree with all of the statements about how further education would help them. These preferences demonstrate that the majority of learners expect multiple benefits from their vocational programmes: better careers, good education, a long-term payback in terms of income (see Table 5.44 below).

Table 5.44: Students' main drivers for continuing education, by country (in percent)<sup>211</sup>

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Further education enables me to follow my professional interest	70	62	42	51	50	53	80
Further education enables me to gain a good qualification/education	<b>84</b>	<b>83</b>	44	<b>71</b>	61	<b>65</b>	<b>84</b>
Further education enables me to take on leadership role later on in life	70	69	39	64	43	56	69
Further education enables me to earn a high income later in life	<b>82</b>	<b>80</b>	<b>56</b>	<b>69</b>	<b>62</b>	64	<b>85</b>
Further education enables me to become an expert in my field	71	68	<b>60</b>	68	<b>63</b>	<b>66</b>	<b>82</b>
Further education enables me to enhance my career options	<b>81</b>	<b>80</b>	<b>52</b>	<b>74</b>	<b>63</b>	<b>70</b>	<b>82</b>
Further education enables me to postpone starting full-time work	30	26	33	44	32	38	46
Further education enables me to experience a pupil exchange programme	24	19	21	40	31	29	44
Further education enables me to fulfil my parents' expectations	26	28	28	38	35	38	45

Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). To what extent do you agree with the statements below about undertaking further education (or participating in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Following professional interest was as the main driver of further education most often chosen by students from the UK (80 percent) and Austria (70 percent), while it was least often chosen in Greece (42 percent). That further education enables one to gain a good qualification most often is believed by students in the UK, Austria and Germany (84 percent) and again the least often in Greece (44 percent). In Greece, students most often believe that further education enables them to become experts in the field (60 percent), which is still the lowest percentage among the countries. That further education enables a high income and the enhancement of a career is believed in all seven countries (above 50 percent), with the highest results in Austria, Germany and the UK (above 80 percent) and the lowest in Greece. In all seven countries, most students do not decide on further education because they want to postpone starting full-time work, to experience a pupil exchange programme or to fulfil their parents' expectations (all three less than 50 percent).

Gender was also associated with judgements about the benefits of further education. Female students in Austria, Greece, Lithuania, Latvia and the UK were more likely than males to believe that they were enhancing their career options through further education; however, in Germany the association was reversed. Austrian, Latvian, Lithuanian and Slovenian female students also agree to a higher extent than male students with the statement that further education will enable them to follow their personal interest. Female students in Austria, Germany, Greece and both Baltic countries also more often believe that further education will enable them to gain a good qualification. Male students in Austria, Germany, Latvia, Lithuania and Slovenia are also less often than females driven by the assumption that further education will enable them to experience a pupil exchange programme. In general, female students more often agreed with the mentioned drivers of further education.

<sup>211</sup> Ranks and percentage points are indicated

Table 5.45: Students' main drivers of continuing education, by country and gender (in percent)

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Male</b>							
Further education enables me to follow my professional interest	66	61	39	44	49	50	78
Further education enables me to gain a good qualification/education	<b>80</b>	<b>81</b>	40	<b>67</b>	56	64	<b>84</b>
Further education enables me to take on leadership role later on in life	69	70	37	62	41	56	69
Further education enables me to earn a high income later in life	<b>81</b>	<b>82</b>	<b>56</b>	<b>69</b>	<b>61</b>	<b>66</b>	<b>85</b>
Further education enables me to become an expert in my field	73	72	<b>58</b>	66	<b>60</b>	<b>66</b>	<b>83</b>
Further education enables me to enhance my career options	<b>78</b>	<b>82</b>	<b>49</b>	<b>70</b>	<b>61</b>	<b>68</b>	79
Further education enables me to postpone starting full-time work	32	28	32	43	33	41	43
Further education enables me to experience a pupil exchange programme	19	16	22	35	29	27	45
Further education enables me to fulfil my parents' expectations	27	29	30	43	38	40	48
<b>Female</b>							
Further education enables me to follow my professional interest	74	63	45	58	53	56	82
Further education enables me to gain a good qualification/education	<b>88</b>	<b>86</b>	51	<b>75</b>	<b>68</b>	<b>66</b>	<b>87</b>
Further education enables me to take on leadership role later on in life	71	68	42	66	47	56	68
Further education enables me to earn a high income later in life	<b>82</b>	<b>78</b>	<b>56</b>	<b>70</b>	63	61	<b>86</b>
Further education enables me to become an expert in my field	69	64	<b>63</b>	<b>70</b>	<b>67</b>	<b>66</b>	82
Further education enables me to enhance my career options	<b>84</b>	<b>78</b>	<b>57</b>	<b>78</b>	<b>68</b>	<b>73</b>	<b>85</b>
Further education enables me to postpone starting full-time work	28	25	35	44	30	34	50
Further education enables me to experience a pupil exchange programme	30	21	20	44	35	33	43
Further education enables me to fulfil my parents' expectations	26	27	24	32	29	36	42

Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). To what extent do you agree with the statements below about undertaking further education (or participating in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

Students taking a programme related to employment in services were more likely to judge that further education provides a 'good qualification or education' than those taking a programme related to employment in industry. Other statements were similarly influenced in only some countries or not significantly influenced at all by the employment or programme sector<sup>lxxxix</sup>. Further, students that reported high grades (in all countries) were more likely to agree with statements about their benefits from further education than those with low grades.

In particular, high-achieving learners in all countries were more likely to believe that further education would enable them to follow their professional interest, gain a good qualification/education and become an expert. In the UK, Austria, Slovenia, Lithuania and Greece students with high grades rated the motivational driver of further education enabling them to take on a leadership role later on in life higher than those with low grades. Similar is seen with the belief that further education will enable them to earn a high income later in life, which is more often believed by students with high grades in Austria, Greece and Slovenia. Students with high grades in Slovenia, Lithuania, Latvia, Greece and Austria are also more often driven to continue their education because that would enable them to enhance their career options.

It is possible that the valuation of further education contributes to success by raising motivation, but it is also possible that students with good grades are encouraged by those grades to believe that, in the future, further benefits will flow to them.

**Table 5.46: Students' main drivers of continuing education, by country and school success (in percent)**

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Low grades</i>							
Further education enables me to follow my professional interest	63	60	39	48	49	45	76
Further education enables me to gain a good qualification/education	<b>77</b>	<b>84</b>	39	<b>69</b>	58	58	<b>81</b>
Further education enables me to take on leadership role later on in life	66	67	37	64	42	51	64
Further education enables me to earn a high income later in life	<b>78</b>	<b>79</b>	<b>54</b>	<b>71</b>	<b>62</b>	<b>60</b>	<b>84</b>
Further education enables me to become an expert in my field	66	66	<b>56</b>	67	<b>61</b>	<b>61</b>	79
Further education enables me to enhance my career options	<b>74</b>	<b>79</b>	<b>47</b>	<b>74</b>	<b>62</b>	<b>67</b>	<b>80</b>
Further education enables me to postpone starting full-time work	31	26	32	43	32	35	44
Further education enables me to experience a pupil exchange programme	23	19	21	39	29	24	41
Further education enables me to fulfil my parents' expectations	28	28	27	38	35	37	43
<i>High grades</i>							
Further education enables me to follow my professional interest	75	70	50	73	54	65	83
Further education enables me to gain a good qualification/education	<b>89</b>	<b>90</b>	55	<b>85</b>	<b>71</b>	<b>77</b>	<b>88</b>
Further education enables me to take on leadership role later on in life	73	73	45	72	48	65	74
Further education enables me to earn a high income later in life	<b>84</b>	<b>81</b>	<b>63</b>	73	63	70	<b>87</b>
Further education enables me to become an expert in my field	75	75	<b>69</b>	<b>76</b>	<b>69</b>	<b>74</b>	<b>85</b>
Further education enables me to enhance my career options	<b>85</b>	<b>83</b>	<b>61</b>	<b>83</b>	<b>69</b>	<b>77</b>	83
Further education enables me to postpone starting full-time work	29	26	37	50	33	41	48
Further education enables me to experience a pupil exchange programme	25	19	21	41	37	38	47
Further education enables me to fulfil my parents' expectations	25	24	32	36	34	40	48

*Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). To what extent do you agree with the statements below about undertaking further education (or participating in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

Lastly, based on the regression model we looked at the most important drivers of continuing schooling assuming that in most countries formal permeability paths exist, even though there are variations in programme types' access and formal requirements that VET graduates need to meet in order to progress. We assume the key drivers are not only related to motives for further education, but also to professional goals, satisfaction with the programme, paid work and school success.

Table 5.47: Effects of selected characteristics on students' plans to continue schooling, by 7EU-VET countries<sup>212</sup>

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Constant (Plans to continue schooling) (Beta)	0.240	-0.696	1.513	2.356	1.679	0.489	1.660
	Std. Beta						
School success	0.196***	0.122***	0.044	0.177***	0.048	0.160***	0.013
Overall satisfaction with the programme	-0.010	0.068*	0.057	0.029	0.000	-0.043	0.017
Learning after school (more than 2 hours)	0.002	0.004	0.129***	0.038	0.077**	0.049	0.065
Undertaking paid work	0.004	0.056	-0.090**	-0.129***	-0.069**	-0.002	NA
<i>Professional motives</i>							
Receiving a high income	0.004	0.055	0.062	-0.058	0.051	0.160***	-0.031
Undertaking interesting work	0.070*	0.061	0.002	-0.028	0.094**	-0.002	0.025
Having satisfactory job	0.055	0.093**	0.057	0.091*	0.104*	-0.001	0.045
Having a good relationship colleagues	-0.119***	-0.085**	0.010	-0.048	-0.153***	0.011	-0.078
<i>Motives for further education</i>							
Following professional interest	0.192***	0.051	0.145**	0.094*	0.121***	0.040	0.267***
Gaining a good qualification	0.072	0.145***	0.164***	0.090	0.169***	0.106*	0.157**
Taking a leadership role in life	-0.004	0.084*	-0.113**	0.113**	0.047	-0.008	-0.077
Enhancing own career options	0.070*	0.062	0.020	0.049	-0.030	0.137**	-0.032
<i>Socio-demographics</i>							
Gender (male)	-0.022	0.132***	-0.085*	0.024	-0.076**	-0.055	0.041
Parents' primary and lower-secondary education	-0.008	-0.026	-0.071	0.006	-0.015	-0.006	NA
Parents tertiary education	0.110***	0.093**	0.095**	0.029	-0.004	0.023	NA
Living in a town or small city	-0.081*	-0.009	-0.044	-0.124***	0.008	-0.056	-0.018
Living in a country village or a farm	-0.056	0.045	-0.105**	-0.166***	-0.038	-0.112**	-0.020
Below average socio-economic status	-0.051	-0.038	-0.076*	-0.042	0.009	-0.070*	0.032
Above average socio-economic status	0.099***	-0.032	0.092**	0.031	0.123***	0.044	-0.047
<b>Adjusted R Square</b>	0.217	0.193	0.205	0.173	0.155	0.173	0.128

\*\*\* = p<0.01; \*\* = p<0.05; \* = p<0.10

As expected, in general the most important contribution to VET students continuing schooling are individual expectations from further education. In general, VET students who believe further education enables them to follow a professional interest and that it leads to good qualifications are more likely to continue with schooling. We confirmed this in almost all countries, except Slovenia. Moreover, in Austria we found that following a professional interest is more important than gaining good qualifications (e.g. better certificate), but the opposite is true for Germany. In Greece, Lithuania and the UK both dimensions are important.

Further, only in Slovenia are those students whose professional goal is to receive a high income more likely to enrol in further education. In the other countries this extrinsic motive plays no role. In Austria, Germany and Lithuania, those who prioritise good relationships with colleagues are less likely to enrol in further education.

<sup>212</sup> In the model we also tested the effects of programme type, father's and mother's employment status. In the case of Germany, VET students in medium demanding programme types are more likely to have plans to continue schooling than those in less demanding programmes, while in the UK the situation is reversed as students from medium demanding programmes are less likely to continue with education. Only in Slovenia does the father's employment status have a positive effect on students' plans to continue schooling.

We also found that those students with higher school success are more likely to continue schooling, which was found in Austria, Germany, Latvia and Slovenia. As indicated earlier in the chapter, one would expect students' positive experience with schooling to impact on positive attitudes to this type of learning. Surprisingly, as seen in Table 5.44, we found that satisfaction with the current programme has almost no impact on continuing schooling. This can be interpreted in two different ways: first, VET students might have a completely different perception of further schooling and, second, those satisfied with the programme are more likely to start working. However, as expected, doing paid work in Greece, Latvia and Lithuania has a negative impact on personal preferences for continuing schooling. In addition, in the case of Greece and Lithuania we found some evidence that more time spent on learning after school raises the probability of continuing with schooling, which was not the case in the other countries.

We found that socio-demographic characteristics had some relevance to a higher probability of considering schooling, but again as with other characteristics, there are variations from country to country. In most countries, we found some proof that in this age group females develop more positive attitudes to continuing schooling, although in the case of Germany it is the opposite. As anticipated by theory, a higher level of parents' education had a positive impact on students' further schooling in Austria, Germany and Greece and, surprisingly, not in other countries. In some countries this can also be stated for socio-economic status. Parents' employment status has no impact on students' decisions to continue schooling, with the exception of Slovenia where fathers' full-time employment status had a positive effect on students' future enrolment. Lastly, in Austria, Greece, Latvia and Slovenia we found that coming from a less densely populated environment had a negative impact on continuing schooling.

### 5.6.5 Conclusions

In most EU (EU-27) countries, there are only small differences between VET and general education in the way people perceive employment options. In this context, the most important objectives for 17- and 18-year-old VET students across the seven countries are intrinsic, such as finding a job that makes them happy or having good relationships with colleagues. Female students usually rate happiness in their work, job security and good relationships with co-workers more highly than male learners. However, extrinsic objectives such as a high income or job security were also importantly stressed, in particular in Austria, Germany and the UK. In several countries, a higher socio-economic status is associated with a stronger commitment to striving for occupational proficiency, but there are large differences here across the countries.

In general, the most desirable employment area among students is services (e.g. nursing, policing, hair-dressing), however in Austria or Germany industry is in second place and rates similarly as trade or public administration. The least popular area is non-governmental organisations in all seven countries. These preferences are very strongly related to gender and study programme types. In general, 37 percent of males as against 10 percent of females wanted to work in industry, while 53 percent of females as against 26 percent of males wanted to work in services.

Despite the large differences in VET systems across the countries, including variations in the formal permeability paths, the share of learners who said they were likely to continue in school or further education were not as large as one would assume: from 49 percent in Germany down to 35 percent in Lithuania. Important determinants of further learning are gender and school success: at least 11 percent more students with high grades plan to continue education than their peers with low grades.

The majority of learners expect multiple benefits from their vocational programmes: better careers, good education, a long-term payback in terms of income, and here it was not possible to identify any cross-country patterns. Nevertheless, the most important contributions to VET students for continuing schooling

are school success and individual expectations from further education. In general, VET students who believe further education enables them to follow a professional interest and that it leads to good qualifications are more likely to continue schooling. In Austria and the UK, following a professional interest is more important than gaining good qualifications, but the opposite is true in Germany. Only in Slovenia are those students whose professional goal is to receive a high income more likely to enrol in further education. Undertaking paid work in Greece, Latvia and Lithuania has a negative impact on personal preferences for continuing schooling. Lastly, socio-demographic characteristics have a lower impact on preferences to continue schooling, as we would expect. A higher level of parents' education, for example, had a positive impact on students' desire for further schooling in Austria, Germany and Greece and, surprisingly, not in the other countries.

These findings clearly call for further investigation, particularly in relation to the formal permeability paths and types of further education.

## 6 CONCLUSIONS AND IMPLICATIONS FOR THE DEVELOPMENT OF VET POLICIES

Samo Pavlin<sup>213</sup>

### 6.1 General Conclusions

#### Introduction

Vocational education and training (VET) systems in Europe prepare youth in different ways for short- and long-term careers. Variations between the systems importantly encompass several aspects, such as the ratio between the general and practical orientation of curricula, occupational specialisations, the organisation of apprenticeships, duration and programme requirements, tracking, certification and the permeability paths with post-secondary education. At the macro level, the distinctions impact particularly strongly on the VET system's segmentation (programme types), the ratio of young people enrolled in the VET system in comparison to general education and, in particular, the status and perception of systems in relation to the labour market.

On the basis of a large-scale survey among 17,631 17- and 18-year-old VET students, this report looks at differences and similarities in seven EU countries: Austria, Germany, Greece, Latvia, Lithuania, Slovenia and the UK. In times of an economic downturn and the growing flexibilisation of knowledge recognition processes, the conclusions presented in the following sections are for anyone interested in education, the labour market and especially the interrelation of both areas. They touch upon issues of under- and over-qualification, social inclusion, vertical and horizontal skill (mis)matches, various aspects of employability and vocational professionalism and professionalisation emerging from within (VET students) or from above (system requirements).

In the following parts of this report, we mainly focus on an international comparison of the seven surveyed countries. The findings are grouped in six key subject areas: (a) factors related to the transition from earlier education into VET systems; (b) learning, perception and satisfaction with VET programmes; (c) school success and acquired competencies; (d) ICT; and (e) future career expectations and further education. Before this, we look at how VET systems are perceived within each of 27 EU countries<sup>214</sup>, which provides important contextualisation for our findings in the seven EU countries.

*The survey results on perceptions of the VET system in 27 EU countries provide an important reference framework for further exploration of the VET population*

As expected, when looking at how the countries included in the 7EU-VET survey are positioned on the EU-27 scale (Eurobarometer Survey and Eurostat LFS), we encounter large differences among them – particularly in relation to the key national-level findings identified in this report<sup>215</sup>.

#### *Austria*

*The Austrian VET system is characterised by the highest enrolment ratio in comparison to general education, the highest reputation of the system and highly perceived quality learning and teachers' competen-*

---

<sup>213</sup> part for ICT written by Barbara N. Brečko

<sup>214</sup> Source: Eurobarometer Survey, and Eurostat LFS

<sup>215</sup> For more information on the official statistical data, see Chapter 4 of this report, and Refer Net data (link).

cies among the 27 EU countries. As expected, most people in Austria believe (79 percent, the EU-27 average is 55 percent) that vocational training leads to jobs that are well paid and also the ratio of those considering that the VET system equips pupils with skills that are needed by employers is among the highest.

However, when looking at the share of people who believe that completing vocational education and training makes someone more likely to find a job in comparison to general or higher education, the percentage of Austrians (49 percent) is lower than the EU-27 average (55 percent) and this also applies to the share of those believing that VET enables people to continue with university studies afterwards. Among the surveyed countries, Austrian VET students have the highest share of lowly educated parents, but with a high socio-economic background and a full-time job. Here the VET population, more than in the other surveyed countries, comes from the countryside.

The main VET structures the 7EU-VET survey in Austria examined were VET Colleges (*Berufsbildende Höhere Schulen*), VET Schools (*Berufsbildende Mittlere Schulen*) and Dual apprenticeships (*Duale Ausbildung*).

#### Germany

Germany comes close to the EU-27 average proportions of students enrolled in vocational programmes and general programmes. Similar to Austria, in Germany the proportion of VET students with lowly educated parents is the largest, but at the same time they have an above-average socio-economic background and parents with a full-time job.

The reputation of the VET system in Germany is among the highest in the EU-27, and so is the perception of high-quality learning in the VET system which has similarities with Austria but, unlike Austria, the belief that vocational training leads to jobs that are well-paid and also the permeability to tertiary education is around the EU-27 average. Moreover, the perception that VET students acquire skills needed by employers ranks lower than in Austria. The belief that completing vocational education and training makes a person more likely to find a job position is below the EU-27 average in Germany which also has the highest percentage of the population aged 18 to 24 with at most a lower-secondary education without further education or training.

The main VET structures in the 7EU-VET survey in Austria were upper secondary schools with a vocational bias (*Fachgymnasien* or *Berufliche Gymnasien*), full-time vocational schools (*Berufsfachschulen*) and part-time vocational schools (*Berufsschulen*).

#### Greece

In Greece the proportion of students enrolled in vocational programmes at the upper secondary level of education in comparison to general education is (30.7 percent) significantly lower than the EU-27 average (50 percent). Among the 7EU-VET countries, Greece has the highest share of male students (64 percent), and the share of those enrolled in less demanding programmes (*Epangelmatiki scholi*, EPAS) is, unlike most of the 7EU-VET countries, higher than in more demanding programmes (*Epangelmatiko lykeio*, EPAL). In the 7EU-VET survey we found indications that programmes here are more related to industry than services compared with the other countries.

The reputation of VET programmes is above-average in Greece (75 percent) and is comparable with Ireland (76 percent) or Denmark (74 percent); however, there is less agreement that VET programmes deliver high-quality learning in Greece than in the other countries. Surprisingly, also above the EU-27 average is the share of Greek people who believe the vocational training leads to jobs that are well-paid, while matching the EU-27 average are the perceptions that: (a) VET students acquire skills needed by employers; (b) completing VET makes a person more likely to find a job than someone who has completed gen-

eral secondary or almost completed higher education and (c) VET enables people to continue with university studies afterwards.

The employment status of Greek VET students' parents ranks the country among the least prosperous: around 20 percent of the students' fathers have part-time or temporary employment and one out of four mothers are unemployed: only 37 percent of them have a full-time job.

#### Latvia

Latvia falls into the group of countries with the smallest enrolment proportion (36%) of VET students in comparison to general education (the EU-27 average is 49.9% versus 50.1%). The reputation of the VET system is 10 percentage points below the EU-27 average: also lower than the average is the perception that the VET system delivers high-quality learning and that completing vocational education and training makes a person more likely to find a job than someone who has completed general secondary or higher education. The share of respondents who believe that vocational training leads to jobs that are well-paid and delivers skills needed by employers matches the EU-27 average.

Latvia is one of the countries with the highest proportion of people agreeing that VET enables people to continue with university studies afterwards and can in this regard be compared to Estonia, Bulgaria or Cyprus. The VET structures considered in the 7EU-VET survey were three types of vocational schools: *arodvidusskola*, *arodskoarodskola* (vocational school) and *profesionala vidusskola* (vocational upper secondary school).

#### Lithuania

With six different types of VET schools<sup>216</sup>, along with Hungary and Cyprus Lithuania falls into the group of countries with the lowest VET enrolment rates (27.7%) in the EU-27. According to the 7EU-VET data, the system is characterised by a male population which is oriented more towards industry than services. The reputation of VET programmes, and the belief that VET education delivers high-quality learning and equips students with skills needed by employers are lower in Lithuania than in the other EU-27 countries (64%).

While the share of respondents in the EU-27 believing that completing VET makes a person more likely to find a job than someone who has completed general education is around 56%, the results for Lithuania are well below-average (31%) and only comparable with Ireland (30%). As expected, the share of people believing VET leads to jobs that are well-paid is also below the EU-27 average. However, based on the 7EU VET survey the proportion of those who believe that VET enables people to continue with university studies afterwards is above the EU-27 average in Lithuania.

In Lithuania, the share of parents with a high level of education is larger than in other countries. However, the 7EU VET survey results show this country is characterised by a surprisingly high share of unemployed fathers (19%). Similar to some other countries, around 20% of the students' fathers have part-time or temporary employment with a significant share of unemployed mothers (20%).

#### Slovenia

Even though enrolment figures for the VET system are decreasing in Slovenia, the proportion between VET education and general education is still above the EU-27 average, indicating that more young people are enrolling in the VET system or vocationally-oriented general education. A significantly higher propor-

---

<sup>216</sup> Aukštesniojo ir aukštojo išsilavinimo nesuteikiantis povidurinis mokymas; Pirminio profesinio mokymo programos, skirtos asmenims, turintiems vidurinį išsilavinimą; Pirminio profesinio mokymo programos, turintiems pagrindinį išsilavinimą; Pirminio profesinio mokymo programos, turintiems pagrindinį išsilavinimą, ir suteikiančios galimybę įgyti vidurinį išsilavinimą; Pirminio profesinio mokymo programos, neturintiems pagrindinio išsilavinimo and Pirminio profesinio mokymo programos, neturintiems pagrindinio išsilavinimo, bet suteikiančios galimybę jį įgyti.

tion (2:1) is enrolled in four-year Technical Upper Secondary Education and Training (*Srednje poklicno-tehniško izobraževanje*) than three-year Vocational Upper Secondary Education and Training (*Srednje poklicno izobraževanje*). From the international comparative perspective, the Slovenian VET system is characterised by the lowest reputation among all EU-27 countries: in this country only every second person believes VET has a negative image (the average is 71%). As expected, also low is the share of people who believe that VET provides high-quality learning (64%), compared to the EU-27 average (75%).

Slovenia is the exception when we consider the belief that vocational training leads to jobs that are well-paid with only 36% of people agreeing and 60% (the most in the EU-27) of people disagreeing with that statement. A similar rank is also attained for the belief that VET provides students with skills that are needed by employers. Therefore, there is a surprising above-average share of people (60%) believing that completing vocational education and training makes a person more likely to find a job than someone who has completed general secondary or higher education. The level of agreement in Slovenia (65%) about VET enabling people to continue with university studies afterwards is below the EU-27 average.

#### *The UK (England)*

The VET system in the UK is very oriented to the labour market; however, there are large differences among the four programme types considered in the 7EU VET survey: “Level 3 programmes”, two-year programmes give access to HE, a professional chef diploma and Level 1 or 2 programmes (English QCF). The UK is among the countries that experience one of the lowest proportions (32.1%) of VET enrolments (with more than 89% coming from cities, which is the highest share among the 7EU VET countries).

The reputation of VET programmes in the UK is close to the EU-27 average and so is the belief that the system offers high-quality learning, whereas “VET students acquire skills needed by employers” and “VET leads to jobs which are well-paid” were marked by a large number of people answering “I do not know”. Also at the average EU-27 level is the perception that completing vocational education and training makes a person more likely to find a job. Less than three out of four people believe that VET enables people to continue with university studies afterwards.

As can be seen from the data presented above, there are significant differences across the VET systems in terms of how they prepare their students for their careers. In the following sections we look more closely at the cross-country differences and similarities.

### **Transition From Earlier Education to VET**

*The key factors affecting the transition to VET are the same in all of the surveyed countries – they are all are closely linked to the perceived belief of career development*

From the viewpoint of VET students, three key factors affect the transition to VET from earlier education. These are: (a) an appealing occupational programme; (b) good job prospects; and (c) established bases for further education. The least important factors are the support and advice of former teachers, and low grades. In the survey we found some evidence that the higher socio-economic status of a student’s family positively affects occupational choice based on own interest. In Austria and Germany, students with lower grades are more likely to believe they were influenced by a friend’s programme, while the importance of peers in Latvia and Greece is influenced by socio-economic status. Parents’ education did not account for any difference with regard to perceived decision-making factors.

When making a decision on the transition to VET, the most important information source for learners in all the countries was parents and family members. Also highly assessed in all countries was online information, while in Austria, Latvia and Slovenia informative days were also highly assessed. Teachers were considered an important information source only in the UK, while information sources were not perceived

to be important in any of the studied countries. These results indicate *there is a need to increase the centrality of objective information sources related to enrolment in VET, which includes training teachers in this direction and presenting the possible effects of considering other information sources. Career guidance activities have significant room for improvement in most of the countries.*

*Across the countries VET students consider surprisingly limited options regarding the choice of a further occupational path*

The majority of VET students, in general three out of four, did not consider any alternative in their decision related to enrolling in a VET programme. In the survey we found some evidence that parents' education affects the breadth of choice but there are large differences among the countries: in Slovenia a lower level of parents' education has a positive effect of a wider choice which means VET students are freer in their decisions, while the situation in Lithuania is the reverse. In some countries, VET students with a lower socio-economic status considered fewer alternatives when selecting their education. *In most countries and on the EU level, there is a need to assess the appropriateness of presenting a broader range of different programme options while paying particular attention to students with a weaker social background. We can say that in the transition into VET pupils should be alert to alternative options, particularly in the event they have a dream vocational path.*

### **Insights From VET Student Learning**

*There is a need to pay great attention to out-of-school activities; in some countries, one out of four VET students does not learn after school at all*

There are large differences among the countries in the time spent in school for education, e.g. 22 hours in the UK compared to 36 hours in Austria where boys spend more hours (37) than females, who only spend 33 hours in school, which is related to study programme particularities. From our survey we can see that vocational learners spend very little time studying outside of school. In Slovenia, Germany and Greece, over 80% of students studied out of school less than four hours per week and in general approximately one out of four VET students do not learn at all in Greece, Lithuania and the UK. The share of such students is much lower in Austria. In six out of the seven countries, males were twice as likely as girls to report that they spent no time at all on study outside of school. Students reporting low grades also reported lower study times outside of school across all the countries except in Germany and England. In Austria, Germany, Slovenia and England learners in more demanding programmes spent more time on study outside of school than learners on less demanding programmes. In the other countries there were no significant associations.

*Aptitudes for classical learning are very low in most countries: the most important learning drivers are interest in practical subjects, understanding of the learning subject and interest in the practical subject*

Very few VET students reported that they enjoy learning, with the lowest share seen in Austria, Germany and Slovenia (9%), while the biggest share of such students was reported in the UK (68%). In most countries, enjoying learning was significantly associated with school success and socio-economic status (in Germany, England and Lithuania). Other socio-demographic factors such as parents' education or place of living did not indicate many important differences. Our results show that there is not much activity based on striving for the highest possible grades or trying to impress teachers. *These results clearly reveal the need to give more credits for general subjects to thereby make learning in this way more attractive.*

*In most countries the majority of VET students spend most of their free time with friends, on social networks and watching television...*

... but time spent reading books received little attention: on average, slightly more than one out of ten students spent one hour or more on this activity. Reading is significantly associated with higher grades in most countries, while spending time playing computer games is significantly associated with lower grades. Approximately less than every second VET student exercises for at least one hour per day, while a higher

proportion spends the same amount of time commuting from school to work: from 19% in Greece to 42% in Austria and Germany. More than every second VET student spends at least one hour on the Internet and differences across the countries here are very small. *In this context, the question arises as to what extent schools and teachers should promote these activities, and what position they should take towards them.*

*VET students undertake paid work more than one would expect: on average, around one out of five learners worked for money for at least two hours per day and this work was unrelated to their programmes*

Regular work was reported in most countries, with the highest percentages in England (31%), Greece (30%) and Germany (26%). The average weekly hours of students who worked regularly ranged from 20 in Greece to 16 in Austria – the weekly working hours during holidays were usually shorter. In most countries, employment was associated with gender – males were more likely to have paid employment and, in particular, more likely to work regularly. In general, doing paid work that is unrelated to the study programme is associated with one's socio-economic status (SES): those with a below-average SES worked more hours in most countries. *Since the respondents are aged 17 and 18 years, such strong employment engagement in all the countries raises concerns that VET students lack time for learning and exploring other areas of interest: firstly, because this work is not related to their educational programme and, secondly, because there is an indication that they do this for a living.*

## **Students' Perceptions of the VET Programmes**

*School success importantly impacts programme perceptions*

In all seven countries, VET students believe their programme provides useful practical experience for entering the workforce and a basis for further education. Particularly high assessments of the programme as a basis for entering the workforce were found in Austria and the UK, and the lowest in Lithuania and Greece. However, there are large differences in the way students assess interesting classes: the best assessment was given by UK students (66%), and the lowest by Slovenian students (28%). In general, more than every second pupil believes most teachers are well-prepared, with the highest share in the UK (80%) and the lowest in Slovenia (47%). In all the countries it is obvious that for at least 10% or more students with higher grades find most of their classes interesting compared to those with low grades. *Hence, we should stress that VET teachers should pay more attention to students with lower grades, in particular since learners appreciate and are very sensitive to teachers' efforts.*

*General satisfaction with the programme depends considerably on the extent to which classes are interesting and how well teachers are prepared*

There are big differences among the countries in how learners are satisfied with their programme – which is a strong indicator of motivation. In the UK, Austria, Germany and Latvia we can note relatively high satisfaction with the programmes (all above 60%), while in Greece and Slovenia satisfaction is much lower (around 43%). Across all the countries students with higher grades (74% on average) are more satisfied with the programme in general compared to students with lower grades (54% on average).

The strongest effect on general satisfaction was exerted by interesting classes, which is the case in Austria, Germany, Latvia and Slovenia. Interestingly, in Greece, Lithuania and the UK the strongest effect on satisfaction, not only within this cluster but among all the predictors, is created by access to an adequate level of learning and training material. Another important determinant of student satisfaction is well-prepared teachers, and there are only small variations among the countries here. Surprisingly, parents' education has almost no effect, except in Germany. In general, there are almost no differences in satisfaction with regard to whether students attend more or less demanding programmes. Two out of three VET students would choose the same programme again, which depends on school success, and one out of ten

is considering leaving the programme. *In a nutshell, we can say that making classes interesting is an important challenge when making any improvements to VET curricula and their attractiveness.*

## **School Success**

*Study behaviour tactics matter more than the time invested in home work – practical learning is not well-recognised in most countries*

The relationship between learning hours and school success is only indicated in some countries and VET segments. In general, we assume that in some VET segments and countries it matters more what students do in school than after it, and school systems do not assess study hours after school in any significant way. The survey findings indicate that study behaviour styles matter more than the time invested in home work. Striving for the highest possible marks has by far the strongest effect on school success in comparison to all other determinants in all the countries.

VET students develop their own tactics for achieving good grades which are not so related to learning after school but more with proactive behavioural patterns during study programmes, higher engagements in practical learning and other ways of social learning. Students who are interested in general, classroom-based subjects, have better grades: a positive effect was found in all the countries. At the same time, interest in practical subjects does not have any effect on school success in any of the surveyed countries. We found that learners do not acquire higher grades because they would like to impress their teachers. In fact, striving to impress teachers with good grades has a negative effect in Austria, Germany and Slovenia, which could actually mean that learners in these countries, and in general, prefer to generate the status of a 'bad pupil'.

However, in Austria, Germany and Slovenia students who would like to make a good impression on an employer also have better grades. An important driver of good grades in Austria, Germany, Latvia and Slovenia is related to plans to continue schooling. Surprisingly, with the exception of Lithuania where pupils of more educated parents have higher grades, we found no evidence that parents' education has any impact on school success in any of the studied countries. One of the impressions we gained from our results is that in some countries, such as Germany, VET students learn general subjects for grades more than for their own interest and understanding. This clearly indicates that this area needs to be improved.

## **Acquired Competencies**

*VET students generally perceived teamwork and the ability to familiarise themselves with new tasks related to occupations as the most developed competencies of VET learners*

Our results reveal large differences across the countries in the way learners assess their own level of acquired competencies. The development of generic competencies was relatively strong in Germany, Austria and the UK. One of the least developed competencies is the ability to perform well under pressure.

Across all the countries, girls were more likely than boys to report a high level of generic competencies, in particular: being able to manage occupational tasks independently, being able to work as a team member, being able to quickly familiarise myself with new tasks related to job occupations, and being able to communicate ideas and suggestions to others clearly. In addition, learners following programmes related to services were generally more likely to report good generic competencies of the following kind: managing occupational tasks independently. In general, across the countries the socio-economic status of the students' families does not seem to be associated with their reported capability in terms of generic competencies.

*The most important determinant of the ability to conduct independent work is school success and professional motives*

In most countries, learners with better grades and those who in the longer term are driven by inspiration to acquire solid occupation professional skills will, according to the data of our survey, be able to work more independently. The opportunity to learn new things impacts the ability for responsible work only in Germany and Greece. One can speculate that the perception of VET students of performing vocational tasks is related to the learning environment in schools only to a limited extent.

*As expected, across the countries students with higher grades were more likely to report they had good generic competencies than those with lower grades*

However, there are some interesting differences among the countries. In Austria, students with higher grades have, according to the self-assessment approach, better developed all of the surveyed competencies (managing occupational tasks independently, team work, learning competencies, performing under pressure), except communication skills. In Germany, differences among learners with good and bad grades were only found between managing occupational tasks independently and working under pressure. With minor variations, in Greece, Latvia and Lithuania differences were only found between independent occupational performance, learning abilities and communication. In Slovenia, differences were found in all the surveyed competencies except communication skills, while in the UK a relationship between school success and acquired competencies was found in the case of all learning competencies. Surveying the relationship between school success and acquired competencies raises one of the most important issues of the development of VET systems. *The countries should establish a clear understanding of which competencies are reflected in assessment procedures and which are not. However, the relationship considered could also be reversed, assuming that generic competencies help to explain the success of learners because they are competencies that are employed in learning as well as in work.*

#### *Information and Communication Technology<sup>217</sup>*

Digital competence is one of 8 key competencies and for successful entering the work market students are expected to be skilled in ICT use. Survey showed and confirmed (e.g. Eurostat) differences among seven countries in the level of ICT skills as well as in its use for school purposes. On general, students from all countries are skilled in general tasks when using a computer for writing, transferring files and copying and pasting to manage information. They are less familiar with writing computer programs and installing operating systems. As regards using Internet, most of them is familiar with managing information (searching) but the least familiar with more complex tasks as creating web pages. Their attitude towards ICT in everyday is positive. They believe, in today's world people need to be skilled in ICT. They believe they can find more information on Internet than in school books, although they less agree that learning using electronic material is quicker. Although teachers are key enablers of innovative pedagogies and key individuals in helping students to develop ICT competencies the use of ICT in classroom varies to a great extent in different countries. While in UK there are 75% of students claiming that majority or all of their teachers use ICT when teaching, there are only 30% of such students in Greece and 31% in Slovenia.

Today use of ICT is crucial, it is crucial as means of communication, as learning and teaching tool, as a tool that enables life long learning, if we mention just some, directly related to education. To encourage teachers to use new technology and empower their and students ICT competencies the education of teachers is crucial. Teachers need to be systematically trained to use new technology, just providing them with the technology is not enough. That was also showed by the TALIS (OECD 2009) study, where the need for development ICT skills was the second most needed expressed by teachers.

---

<sup>217</sup> Written by Barbara N. Brečko

## Future Career Aspirations

*Personal motives are more important for VET learners in their future careers than salary, job security or reputation*

The employment sectors where learners most aspired to work are services. Industry, trade and other sectors attracted less interest with some noticeable difference across the countries. The most important driver of a professional career for VET students is finding a job that makes them happy and having a good relationship with one's colleagues. In Austria and Germany another particular motive was job security, and in Slovenia "having enough spare time to do other things in life". In the UK, learning opportunities and a high income were seen as particularly important. *VET systems should make learners aware of employment and employability possibilities.*

*For some VET learners the next step in their career is to enrol in further education*

Despite the large differences in the VET systems' permeability paths, the share of learners who said they were likely to continue in school or further education were not as large as one might assume: the results ranged from 49% in Germany to 35% in Lithuania. Females (by more than 10%) were more likely to expect to continue in all countries except Germany, where the situation is reversed. The most strongly supported statements across the seven countries were related to the enhancement of career options, attaining a good education or qualification and possibility earning a higher income. Learners with an above-average socio-economic background, those who are on services-related paths and those with better grades were more likely to plan the continuation of their education. The relationship between parents' education and plans for continuing learning were, surprisingly, only found in some countries.

*Towards the Development of Policy Principles and Tools*

Even though we should stress the need for highly diversified policy recommendations and national adaptations, we can arrive at some universal conclusions by stating there is a need to gain a deeper understanding of the link between curricular processes and acquired competencies. Even though we found evidence that VET students do not like learning, they do like to be in education and appreciate the efforts of teachers. They should support students in their careers, particularly because in most cases parents do not play a strong role in this respect – which can be assumed based on the surprisingly weak effect of the level of their education.

The complexity and multiplicity of the learner perceptions suggests there will always be many factors that impact on both student behaviour and the outcomes of study. These factors often work in a reflexive (reciprocal) manner. This suggests that any reform will need to address a wide range of players and factors and will be concerned with the way learners understand and act upon learning. The variety of the relationships suggests that reforms and policy developments in VET need to be well-tailored, monitored and evidence-based.

At present, modernisation of the VET system is understood in many countries as programme modularisation and implementation of the learning outcome approach. However, in many cases this is accompanied by the question of whether systems are based on the proper number of programmes, and on what bases specialisations depend. The question of VET's fusion with general education and permeability between VET schools and higher education is particularly sensitive. There is a lot of discussion in the EU about how VET can raise its status and reputation, which in many countries is based on one side on the problem of the falling enrolments in VET institutions and at the same time on the increasing need for ready-made skills.

The key EU tools currently on the agenda in the EU are the European qualification framework (EQF), the European credit system for VET (ECVET), the European quality assurance framework for VET (EQAVET),

and Europass. As part of policy developments it would be vital to forge a strong link between these tools and the findings and questions generated in this report.

Julian Stanley and Andrew McCoshan

## 6.2 Interpretation of the survey findings in a policy context

In Chapter 2 we set out an analysis of the main policy goals and tools being implemented by the EU and within individual Member States. The design of the survey tool means it is possible to use some of the questions as indicators in relation to these policies, to establish whether we can relate differences in survey responses between countries to the patterns we noted in the policy issues being addressed. In this section, we focus on three policy areas where the data enable us to be confident in drawing conclusions: quality and attractiveness; labour market relevance; and pathways and progression.

### Quality and attractiveness

*Learners expressed higher levels of satisfaction in those countries which have more developed policy and practice in relation to quality assurance for VET.*

In Chapter 2 we saw that as a policy issue quality and attractiveness was more significant in some countries than others. Major reform agendas have been developed in Greece, Lithuania, Latvia and Slovenia, whilst in Austria, Germany and the UK quality measures are comparatively well-established, although low status of vocational training is still an issue in the UK. We might anticipate that this would be reflected in the survey data related to quality, with respondents in Austria and Germany perhaps being the most positive about provision.

In relation to questions about reputation, Austria and Germany do indeed emerge as having positive students. Asked if programme reputation had attracted them to vocational training, 48 percent of Austrian respondents and 41 percent of Germans responded affirmatively, whilst Greece, Latvia, Lithuania and Slovenia all have figures between 25 and 32 percent. Most strikingly, UK students were the most positive of all (59 percent), which runs somewhat counter to the notion of vocational training having a low status.

Interestingly, there is some adjustment in figures and relative positions when students are asked whether their programme is recognised *within society* as having a good reputation. Austria and Germany, as expected from the Chapter 2 analysis, top the list (68 percent and 54 percent, respectively) followed by the UK (53 percent). The remaining countries have figures varying from 30 to 48 percent. The other point worth noting is that in every country except the UK more students believed their programmes had a good reputation in society than referred to their programmes' reputation as a factor in their decision to take the programme. This suggests that in the UK students are aware that society might not value their programmes but that to some extent this is misplaced and not well-informed. It should also be noted that Slovenia and Lithuania both fared badly in terms of reputation with less than one-third of respondents being positive about these measures.

The comparative analysis in 6.1 suggests that learner satisfaction is associated with how interesting students find their studies and with perceptions of how helpful and well-prepared teachers are and how adequate their learning materials. Further, more successful students are, in general, more satisfied. Success, in turn, is associated strongly with motivation (although other factors such as socio-economic status are important in some countries) which points again to student engagement and commitment as key factors in determining the achieved quality of VET.

However, this was not reflected with variance at a country level. Across the different satisfaction variables, for example, Austrian and German students are no more or less positive than others. The one notable feature is that Greek students have a tendency to be the most negative consistently. When we consider the single variable of overall satisfaction, however, the countries become much more spread out, from the UK with 80 percent satisfied to some degree to Greece with only 40 percent. Less than half of Slovenian students (45 percent) are also satisfied. In other countries, more than half the students are satisfied, with Austria and Germany being the most satisfied (72 and 66 percent) after the UK.

This analysis reinforces the overall positive messages about the Austrian, German and UK systems. In terms of students' perceptions, there must be concerns about the figures for Slovenia and especially Greece, and also Lithuania with regard to reputation. Greece's failure to implement reforms, noted in Chapter 2, appears even more concerning in this light. Evidently, the data suggest that Slovenia and Lithuania need to press on with their reforms, and in Slovenia's case ensure their effectiveness. Latvia's budget difficulties and the concerns voiced by the European Commission about certain measures suggest that progress is needed just to maintain levels of satisfaction in this country, let alone improve them.

However, the survey also reveals differences in the levels of satisfaction/attractiveness associated with different types of vocational programme and/or institution within countries. Research involving the expert informants and secondary literature provide evidence that the attractiveness and quality of particular types of programme (or vocational pathways) is affected by their position in relation to other types of programme, for example, how they compete for students.

*Policy recommendations:*

Student surveys should be used as a tool to measure progress in implementing quality assurance and quality development in VET.

Student surveys should be used as tools to measure the effectiveness of different strategies for improving quality in VET, for example, centralisation versus decentralisation.

Quality improvement should be particularly targeted at engaging the interest of VET students in learning, ensuring appropriate teaching and learning materials, ensuring that teachers are helpful and well-prepared and deploy effective pedagogies and ensuring that students are successful.

Policy to improve particular programme types or vocational institutions should take into account potential secondary impacts upon other programme types and/or institutions since it is possible that there may be unintended negative consequences.

Policy which is seeking to address issues of disadvantage and equity should consider how the selection process in relation to different vocational pathways may disadvantage some learners and raise issues of equity.

### **Labour market relevance**

*Students' perceptions of quality and attractiveness of VET are closely associated with how relevant VET is believed to be in the labour market.*

Labour market relevance is strongly related to the quality and attractiveness of vocational education and training. As Chapter 2 showed, in Austria and Germany strong connections to the labour market are intrinsic components; elsewhere, labour market relevance is in need of development. This dichotomy is reflected strongly in the survey findings, with the exception that the UK clearly sits alongside Austria and Germany. On the evidence here, the UK – for this group of survey respondents at least – is clearly making relevant labour market provision despite the absence of the type of structural social dialogue mechanisms

found in the other countries – either in existence or in development. On this basis, the more free-market approach in the UK, with comparatively little state intervention to manage relationships between the social partners, appears to offer a viable alternative to the Austrian and German approaches.

This broad pattern of Austria, Germany and the UK in one group and the other four countries in another group is evident across a range of survey questions. Asked whether the fact that programmes offered good job prospects was a factor in deciding to enrol in vocational education and training, 78 percent of Austrian, 70 percent of UK and 63 percent of German respondents responded positively. For the remaining countries, the range was between 32 percent (Greece) and 53 percent (Latvia). Similarly, when asked if the fact that occupations related to the programmes had appealed to them in making a decision, 72 percent of German respondents, and 71 percent of both Austrian and UK respondents said yes, whilst the range for the other countries was between 32 percent (Greece) and 57 percent (Slovenia). This cannot be attributed solely to the strengths of the dual system because a large proportion of learners in full-time vocational schools, in Germany, Austria and the UK, also identified good job prospects as important.

The survey also sheds light on student perceptions of the benefits of practical experience in the curriculum, and on this measure the divide between Austria, Germany and the UK and the rest narrows. Asked if their programme provides useful practical experience for entering the workforce, Austria, the UK and Germany had 72 percent, 70 percent and 68 percent of responses, respectively, followed by Latvia (61 percent) and Lithuania (54 percent). Slovenia and Greece were the least positive (45 percent and 44 percent). However, when asked about aspects of their programmes in relation to the labour market, the dichotomy reappears. Responding to the statement “my programme ensures employment in the job market”, Austria (69 percent), Germany and the UK (60 percent each) are significantly above the rest (from 46 percent in Slovenia down to a very low 26 percent in Greece and 22 percent in Lithuania). For “my programme enables me to receive a good starting salary”, the figures for Austria, the UK and Germany are less high (55 percent, 54 percent and 41 percent) but we might anticipate this, especially in the current economic climate. But the gap remains with the other four countries (from Latvia at 42 percent to Lithuania at 20 percent).

These differences also manifest themselves to some degree in students' perceptions of their own competencies. If we look at one of the competencies, “able to manage occupational tasks independently”, which has a strong labour market connection, German, Austrian and UK students are especially positive (81 percent, 77 percent, and 75 percent), although scores for the other countries are not as low as in other questions (from Slovenia 54 percent, to Greece 45 percent).

Taking these indications as a whole, it appears that, whilst the Austrian, German and UK systems are significantly ahead of the other countries in terms of labour market relevance, the other countries are, firstly, seen by a significant minority, and sometimes a narrow majority, of students as providing sound practical experiences and, secondly, equipping them with competencies that are relevant to the labour market. Where these latter systems fall down, in the view of students, is in their actual articulation with genuine employment opportunities. This suggests that there are some foundations to build on and highlights the fact that the fundamental difficulty is on the side of employers just as much, if not more so, than on the side of the education system itself.

The research also reviewed how national VET systems are developing and responding to these needs. The research suggests that, for Greece, Latvia, Lithuania and Slovenia there are two potential strategies they could follow in respect of getting more employers to participate: the ‘dual corporatist’ route based on trying to entrench strong social dialogue mechanisms and strong work-based provision; and a more school-based approach which involves developing high quality technical or vocational schools or training

centres which are 'owned' or work closely with employers. Some countries, such as the UK and Slovenia are seeking to combine these strategies.

#### *Policy Recommendations*

Student surveys should be used as a tool to measure labour market relevance – but the value of such surveys could be enhanced, for example, by implementing a tracer study.

Policy selection should be informed by evaluation of packages of measures which could serve to enhance labour market relevance, for example, updating teachers' professional skills, renewed infrastructure, outcomes-orientated curricula, specialised vocational schools, enhanced work experience.

Policy in relation to VET should be coordinated with policy in relation to employment to consider how employment opportunities can be developed to take advantage of the competencies that learners bring from VET.

### **Pathways and progression**

*Those vocational pathways that are perceived as supporting further education are also perceived as relatively attractive.*

The issue of improving pathways and progression opportunities is a common policy goal in all the studied countries. We might, therefore, expect to find fewer differences between the countries. In fact, this is not the case and, once again, Austria, Germany and the UK appear together in a group where students' views on progression opportunities are generally markedly more positive than other countries' students. For example, asked if the fact that a programme provides a good foundation for further education or qualifications was instrumental in deciding to take their current course, 83 percent of Austrian, 79 percent of German and 70 percent of UK students said it was, compared to 48 percent–56 percent in other countries. The same gap is evident when students were asked to indicate if their programme was preparing them well for further education and training. An interesting point to note here is that students from Greece, Lithuania and Slovenia were noticeably less positive about their programmes in respect of progression once they were taking them compared to beforehand. This suggests that the reality does not always match the expectation in these countries regarding opportunities to progress to further education and training.

We can also look at why students might consider continuing education. Significantly, when asked whether further education would enable them to get a good qualification/education, the majority of students in all countries except Greece said it would, with the range being from 61 percent (Lithuania) to 84 percent (Austria and the UK), with Greece registering a low 44 percent. When asked if further education would enable them to follow their professional interests the figures for all countries fall. This suggests that for some students further education will lead to a good qualification but not necessarily one related to employment. In light of the conclusions from the preceding section on labour market relevance, we might conclude that for Greece, Latvia, Lithuania and Slovenia the potential to progress in further education is seen as some form of compensation for the deficiencies of vocational education and training in providing access to the labour market. In this regard, we should note that further education was also seen as enabling students to "enhance their career options" by a majority of respondents in every country, the range being from 52 percent (Greece) 82 percent (the UK).

Asked whether they actually intended to continue schooling or further education after the end of their current programme, in every country less than 50 percent of respondents said they were. For Austria, Germany and the UK we might conclude that students' perceptions of the strong labour market relevance of their programmes would account for this. However, in the other countries there is clearly a tension between students' positive views of further education, and their assessment of the extent to which their current programmes actually equip them to progress in to further education. Supply and demand for further

education in these countries is evidently unbalanced. We should also draw attention to Greece where students were clearly pessimistic (at times very pessimistic) about how well they were being prepared for further education and also about further education itself. This highlights the serious challenges that exist for policy in Greece.

An important policy tool in this area is careers counselling and guidance. The survey findings provide clear evidence that there is much scope to improve the availability of both information on careers/further education and advice through counsellors and advisers. Asked about the information sources they had used to enrol in their programmes, only minorities of students had used school counsellors or career advisers, the range being from 7 percent (Lithuania) to 22 percent (UK) – figures are not available for Austria and Germany. More important sources of information were family and friends, open days and online media. Asked whether information on careers and training is easily accessible at school on their current programmes, in most cases less than 50 percent of students said it was, being less than a quarter in Greece. Asked whether counsellors/careers advisers were usually helpful, in three countries (UK, Greece and Latvia) only around one-fifth to one-half replied positively, whilst in Lithuania and Slovenia narrow majorities were positive (data not available for Austria and Germany). These are poor figures and suggest that across all countries in the sample there is substantial work to be done to improve the availability of good quality information and face-to-face advice.

#### *Policy recommendations*

In countries where VET is highly valued it is regarded as a strong foundation for further education so permeability should continue to be an objective for VET at the country level. Further, within countries, those vocational pathways that are highly valued are believed to provide strong foundations for further study which suggests that progression affects the attractiveness of all pathways and that all vocational pathways should support further education and lifelong learning.

Different strategies should be explored to support continued and further learning in relation to vocational programmes and pathways, for example, higher level apprenticeships, short cycle 'dual-system' higher education, sub-bachelor Level 4/5 programmes, 'dual' qualification and 'hybrid' qualification, stronger provision of generic and key competencies.

Careers counselling and guidance should be improved so that they are rated more highly by users. There is scope to consider and evaluate a wide range of practices and, in particular, to take advantage of new communication technologies as part of careers education, information and guidance.

Marek Fuchs

## **6.3 Methodological Reflections and Conclusions**

### **Successful Cross-Country VET Student Survey**

The survey conducted as part of this project represents one of the key accomplishments of the whole project. It provides a comparative database on individual VET students across the seven participating countries and thus is one of the first studies that allow cross-national comparisons of VET students. We aimed for the highest methodological standards in order to demonstrate that it is possible to obtain high quality, international comparable micro data on VET students. The survey employed a set of core methods in all countries while national adaptations were implemented to achieve comparable data. Thus, we chose a

wise compromise of international standardisation and country-specific adaptive solutions that served the overall purpose of collecting comparable data.

Constant key components of the study were self-administered surveys in all countries using identical questionnaires in national languages based on an international master questionnaire. Also, we applied a random selection of students based on cluster samples stratified by region and type of school in all countries (except the UK/England). At the same time, the sample design differed across countries according to the structure of VET systems. Further, we accommodated national modules in the questionnaire in order to provide room for country-specific research questions and policy issues.

After extensive field work, we collected data from roughly 17,600 VET students in the seven participating countries with a minimal sample size in each country of about 1,000 VET students. We reached overall response rates (considering school level, class level, and student level) within the range of 55 percent to 70 percent in most countries.

Taken together, the survey has been a great success. This is foremost due to the fact that we could in fact administer the survey according to high methodological standards in the seven participating countries. The study provided key findings for VET students in the seven EU countries using a most similar methodology. We provided an extensive methodological insight and expertise to solve such problems in future studies. The detailed methodological experiences gained during the field work of this project puts researchers in the position to conduct such comparative surveys even on a larger scale across more/all European countries.

The students' views are an important contribution when assessing and comparing national VET systems. The fact that we were able to collect information about the attitudes, views and further plans related to VET education and occupation of more than 17,600 students across seven European countries is the most valuable contribution of this study to the scholarly and political discussion of VET. Accordingly, based on preliminary results of the project the many VET stakeholders participating in the expert interviews unanimously emphasised the impact of VET students' views and concerns expressed in the survey on future national and European VET policy.

## **Lessons Learned and Potential Improvements**

Throughout the implementation and administration of the survey the research team experienced some issues which need to be carefully addressed in future cross-national surveys among VET students.

### *Increasing response rates*

First and foremost, we put great emphasis on methods that help tackle country-specific non-response rates. While in Latvia, Lithuania, Greece, Germany, and in Slovenia we had no problems achieving overall acceptable high response rates of roughly 50 percent or more, other countries fell behind due to legal or cultural constraints. Even though we have only limited evidence that the low response rates actually harmed the accuracy of results in our survey (non-response bias), low response rates are costly and still have the potential to introduce systematic biases to the results. Looking at non-response rates on the school level, class level, and pupil level (as documented in the methodological report), it is easy to detect that the overall response rate is particularly harmed by the low response rate on the school level. Here, the huge country differences contribute to the differences between the overall response rates. Future research should therefore engage in a more intensive communication with headmasters and principals in order to attain their cooperation. In addition to the consent process, future research projects should also consider a longer field period in order to accommodate schools and principals who might be reluctant to participate in the survey due to the tight schedule of the planned fieldwork procedures.

In addition, the pupil level response rate was considerably lower than expected. Overall, values range from roughly 73 percent to about 80 percent. Here, too, future surveys should engage in ensuring the corporation of pupils/parents by emphasising on explaining the purpose of the survey. Also, a longer field period might increase the response rate on pupil level since numerous pupils were either ill, away on a fieldtrip or working in their training company. Compared to similar surveys in the general education system, surveys in the web system should anticipate more obstacles during fieldwork due to the fact that many students are engaged in both, their school and their training company, where they do practical phases or apprenticeships.

#### *Legal requirements for permissions and parental consent*

In some countries, national or regional authorities required the research team to obtain written consent from parents that their under-aged students were allowed to participate in the survey, regulations in other countries were less strict. Future studies should therefore explore carefully the requirements in each participating country and put extra emphasis on the fulfilment of formal prerequisites.

#### *School-based student research in a heterogenic environment*

A third key issue that should be enhanced in future studies in the sample design and field work in countries where school-based surveys of students are less prevalent and accepted (in our case the UK/England). In particular, future research should explore opportunities to enhance headmasters/principals motivation to participate in the study. This could either be achieved by means of incentives, reports with school-specific results and the like. This may require a more intense fieldwork and might include personal visits in some schools as well as more extended information brochures and written information packages. Also, due to the heterogenic structure of the VET system in the UK/England we had problems to obtain a sample of the similar high quality achieved in the other six countries. This was due to the fact that the UK/English VET system is more scattered and less hierarchically organised as compared to the other countries. Also, the fact that some VET students obtain their VET qualifications in schools that are considered general education institutions contributes to the problems. This refers to the more general problem of defining the target population of a cross-national survey among VET students (see the next section).

#### *Strengthen definitions at the beginning*

The research teams involved in the survey struggled with the country-specific definition of VET. While some countries have a clear consecutive educational system where students choose VET at a certain point in their educational career, other countries exhibit more permeable educational systems where students enter VET using various pathways and at multiple points in their educational career. Comparing such incomparable entities poses a challenge that cannot easily be overcome with standardisation. When designing this survey we aimed to find a suitable compromise with respect to the target population. This project defined the target population as the group of 17- and 18-year-old VET students. For most countries, the majority of VET students was covered by this target population. However, for some countries this age range excluded considerable portions of the overall VET population and therefore limited the generalisability of the results.

The clear advantage of the rigid definition of the target population is the fact that other factors that might interfere with the students' perception of their VET programme and future plans can be held constant. However, comparing VET systems is not fully achieved with a fully standardised target population since VET systems differ across countries due to the varying intake of students, their prior educational degrees and also the differing structures of VET across countries. Future surveys should therefore carefully design a joined target population (probably not only by age but by progress in the VET programme and other characteristics), that allows comparisons of identical groups across countries. Results based on compara-

ble groups provide valuable evidence concerning different views, behaviour and plans of students that share the same age, VET programme, work experience and the like. This, of course, does represent a comparison of VET systems as a whole since systems may differ in terms of programmes that are considered VET, the composition of their student body, prior education, pathways and so forth. Thus, national samples should also be considerably inclusive with respect to all important groups in each country to also facilitate cross-national comparability of entire VET systems – in addition to the comparison of identical groups across countries. A comprehensive comparison of VET systems asks for both types of comparisons.

This should not be seen as a limitation of the current project but rather as an encouragement for future surveys to design the target population in a way that allows for cross-national comparisons on various levels: It might well be necessary to compare countries based on most similar sub-populations in terms of age or vocational programmes. But at the same time cross-national comparisons should also involve the VET systems as a whole.

#### *Transition system*

In addition to the schools and programmes considered, some participating countries offer a transition system for students who have problems getting access to the core portion of VET (drop out from general education, regionally and social disadvantaged students, students with immigrant background). This so-called transition system was included in some countries while others do not have such programmes as part of their VET systems or chose not to include them in the survey. In the countries where this transition system was surveyed using the same methodology as for the students of the core VET system, the results were not very encouraging (e.g., low response rates, less than optimal data quality). Future studies should cover these transition systems since the economic downswing in many countries will probably increase the number of students enrolled in such programmes. It is important, however, to mention that surveys in the transition systems need a modified questionnaire and adaptive field work procedures including incentives, personal visits in the schools or even face-to-face data collection.

#### *School-specific results*

The dataset available for the seven participating countries can be used to prepare reports summarising school-specific results. This has been done in some participating countries, but not on a systematic basis in all countries. The school-specific results are the key incentive for headmasters and principals to provide consent and cooperation for the survey and thus should be used on a regular basis during fieldwork. In addition to the motivating effect of such school-specific results, one could also use the school-specific results in terms of a benchmarking of schools. Even though this is a sensitive policy issue, the dataset at least provides the opportunity to build rankings of schools in terms of key-dependent variables. In its current state, the international and the national datasets are anonymous and not connected to the individual names of schools. However, if national or international stakeholders are interested in such rankings, this feature could be added to future studies.

#### *Design effect and effective sample size*

At the beginning of the project, we estimated various key properties of the vocational educational system in order to design sample-plans for the participating countries. One of the key requirements was a proper estimate of the design effect due to the clustered sample design. Based on some existing datasets, we came up with an estimated design effect of 2.5 for all countries. The analysis of the variance components based on the collected data revealed, however, that the design effect might be even higher for those variables that are closely related to the particularities of participating schools. For example, the assessment of ICT equipment or the maintenance of the school buildings yield far higher design effects compared, for example, to individual plans to engage in further VET education once the initial VET education has been completed. The larger than expected design effects affect the statistical properties of the samples. In par-

ticular the effective sample sizes are reduced and consequently, the dataset lacks power for some of the planned analyses. Thus, future studies should plan for even larger samples as compared to the current survey. In combination with the limited response rates discussed earlier, this also demands more resources devoted for cross-national VET student surveys.

*Following up on VET graduates: labour market, future education and regional/international mobility*

When presenting results of our survey to stakeholders in the participating countries, most of them were very impressed by the wealth and richness of the results since this is one of the first surveys to provide cross-national comparative data. Nevertheless, several stakeholders asked to extend the current design of the study in order to trace students after they have completed their initial VET education. Since many policy issues concerning VET are focused on the transition from VET education into the labour market, a longitudinal study that follows up on students from the end of their VET education to their initial employment position after VET education is of particular importance. While the survey conducted in the current project yielded valuable results concerning the VET students' perceptions of their current VET programme and their plans and likely pathways for the time after graduation from their current VET programme, little is known about their transition to the labour market. However, many stakeholders explicitly mentioned the need to better understand whether and how VET graduates find their way to proper employment positions, whether and to what extent they can make use of the competencies/qualifications obtained throughout their VET programme and whether or not they stay in the region for which the schools assume to provide graduates for.

VET schools are increasingly challenged to provide competencies/qualifications that fit the labour market and that enable graduates to find a suitable job. Unfortunately, schools have very limited systematic knowledge concerning their graduates' transition to the labour market.

Based on this feedback from stakeholders, we propose a tracer survey which has the potential to follow a sample of VET students from VET graduation into the labour market. For this study students should be recruited close to the end of their VET education i.e. in the last year of their programme and should complete a base-line questionnaire covering parts of the questions that have been used in this study plus additional questions that came up throughout dissemination activities of the project. At the end of this base-line survey, students should be asked to provide consent to further participation in a longitudinal survey. Researchers would then collect personal contact information and prepare at least two follow-up waves. The first follow-up wave should be administered roughly one year after graduation and a second follow-up study could be administered another one or two years after graduation. This, in fact, would provide extensive information concerning phases of unemployment after VET graduation as well as on various problems during the transition period from VET education into the labour market. Also, the fact that a considerable portion of the VET students engage in a second vocational educational programme after VET graduation could be documented by way of the described tracer study. Interestingly, some stakeholders also raised the question to what extent VET graduates actually engage in higher education once they have completed their initial VET education. In some countries VET education provides higher education entrance qualifications, while in others many VET students have obtained higher education entrance qualifications prior to entering VET. Thus, a considerable portion of students might in fact choose not to enter the labour market but to continue education either in the high education or in the VET system instead. Also, regional and in particular international mobility could be documented based on such a tracer study. Since the current survey revealed considerable discrepancies in the extent to which students are willing to move to other European countries in order to obtain a suitable position in the labour market, this might be of particular importance for future studies.

In the current study, in some countries we had to employ paper-and-pencil questionnaires in addition to the proposed online survey methodology. This had to do with the fact that some schools were unable to

provide suitable ICT infrastructure for the administration of the survey in a classroom setting. Also, some schools asked for a paper-and-pencil questionnaire in order to be more flexible when it comes to the administration of the survey. Thus, we propose to provide paper-and-pencil as well as web survey methodology for the base-line study. For the follow-up waves, however, it is safe to assume that most students have access to the Internet at home and are capable of completing a web survey using their own ICT infrastructure. Thus, it is safe to assume that the two follow-up waves do not need to be administered using paper-and-pencil questionnaires. However, in order to keep track of the students it is important to not only collect e-mail addresses but also, for example, parent addresses or other postal information that might be suitable in tracing students for the first and second follow-up waves.

If results and findings from the first two follow-up waves are promising, one could then use the contact data to follow-up on these VET students even further, for example, five years after graduation, in order to develop a better understanding of their pathways and their labour market careers.

## REFERENCES

- 7EU-VET. *Detailed Methodological Approach to Understanding the VET Education*. Available at <http://www.7eu-vet.org/>
- 7EU-VET. *Research objectives*. Available at [http://www.7eu-vet.org/c/1028/Research\\_objectives/?preid=1029](http://www.7eu-vet.org/c/1028/Research_objectives/?preid=1029)
- 7EU-VET. *Scientific and research activities*. Available at [http://www.7eu-vet.org/c/1029/Scientific\\_and\\_research\\_activities/?preid=1028](http://www.7eu-vet.org/c/1029/Scientific_and_research_activities/?preid=1028)
- AIKOS, Data provided by Ministry of Education and Science, Department of Statistics and Lithuanian Labor Market. Available at [www.aikos.smm.lt](http://www.aikos.smm.lt)
- Arbeitsmarktservice Österreich. (2012). *Lehrlinge und FacharbeiterInnen am Arbeitsmarkt - Prognosen bis zum Jahr 2015/2017*. Wien.
- Baethge, Martin. (2010). *Neue soziale Segmentationsmuster in der beruflichen Bildung*. In H.-H. Krüger, U. Rabe-Kleberg, R.-T. Kramer & J. Budde (Eds.), *Bildungsungleichheit revisited - Bildung und soziale Ungleichheit vom Kindergarten bis zur Hochschule Wiesbaden: VS Verlag für Sozialwissenschaften*.
- Baker, David Jan & Letendre, Gerald K. (2005) *National differences, global similarities: world culture and the future of schooling*, Stanford, Calif., Stanford Social Sciences.
- Baker, David, Köhler, Helmut & Stock, Manfred (2007) *Socialist Ideology and the Contraction of Higher Education: Institutional Consequences of State Manpower and Education Planning in the Former East Germany*. *Comparative Education Review*, 51, 353-377.
- Becker, M., Luomi-Messerer, K., Markowitsch, J. & Spöttl. (2008). *Putting Dreyfus into Action: the European Credit Transfer System*. *Journal of European Industrial Training*, 32 (2/3). 171-186. Emerald Group Publishing Limited.
- Béduwé, C., Germe, JF., Leney, T., Planas, J., Poumay, M., & Armstrong, R. (2010): *New and Emerging Issues in Vocational Education and Training Research Beyond 2010*. In
- Benavot, Aaron (1983) *The Rise and Decline of Vocational Education*. *Sociology of Education*, 56, 63-76.
- Benavot, Aaron, Braslavsky, Cecilia & Truong, Nhung (Eds.) *School Knowledge in Comparative and Historical Perspective*. Springer Netherlands, 135-154.
- Berka, Walter. (2008). *Lehrbuch Verfassungsrecht - Grundzüge des österreichischen Verfassungsrechts für das juristische Studium*. Wien: Springer.
- BMASK, Bundesministerium für Arbeit, Soziales und Konsumentenschutz (2012). *Jugend und Arbeit in Österreich - Berichtsjahr 2011/2012*. Wien.
- Bradley, Karen (2006) *Cultural Coexistence: Gender egalitarianism and difference in higher education*. in Baker, David Jan & Wiseman, Alexander W. (Eds.) *The impact of comparative education research on institutional theory*. Amsterdam; Oxford, Elsevier JAI, 75-94.
- Brint, Steven, & Karabel, Jerome. (1989). *The diverted dream : community colleges and the promise of educational opportunity in America, 1900-1985*. New York ; Oxford: Oxford University Press.
- British Chambers of Commerce. Available at <http://www.britishchambers.org.uk/zones/skills/find-a-course.html>
- Brooks-Gunn, J., Fauth, C. R. & Liver, R. M. (2007). *Children's Competence and Socioeconomic Status in the Family and Neighbourhood*. In Elliot, J. A. & Dweck, S. C., *Handbook of Competence and Motivation*. The Guilford Press, New York, London.
- CEDEFOP (2009). *Modernising Vocational Education and Training: Fourth Report on Vocational Education and Training Research in Europe: Background Report*. Cedefop Reference series (69-I), Volume 1. Luxembourg: Publications Office of the European Union.
- CEDEFOP (2010a). *Changing Qualifications: A Review of Qualifications Policies and Practices*. Cedefop Reference series (84). Luxembourg: Publications Office of the European Union.

- CEDEFOP (2010b). *A Bridge to the Future: European Policy for Vocational Education and Training 2002-10*. Cedefop Reference series. Luxembourg: Publications Office of the European Union.
- CEDEFOP, European Centre for the Development of Vocational Training. 2012. *From education to working life. The labour market outcomes of vocational education and training*.
- CEDEFOP, Modernising Vocational Education and Training: Fourth Report on Vocational Training Research in Europe: Background Report. Cedefop Reference series (70), Volume 2: 17-72. Luxembourg: Publications Office of the European Union.
- Cedefop. 2009. *Lithuania - VET in Europe - Country Report*.
- Cedefop. 2010. *Germany – VET in Europe – Country Report*. Thessaloniki: Cedefop.
- Cedefop. 2010. *Latvia - VET in Europe - Country Report*. Available at [http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010\\_CR\\_LV.pdf](http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010_CR_LV.pdf)
- Charles, Maria , & Bradley, Karen. (2002). Equal but Separate? A Cross-National Study of Sex Segregation in Higher Education. *American Sociological Review*, 67(4), 573-599.
- Chiu, C. Y. & Hong, Y. Y. (2007). Cultural Competence: Dynamic Processes. In Elliot, J. A. & Dweck, S. C., *Handbook of Competence and Motivation*. The Guilford Press, New York, London.
- Crocitto, M. & Sullivan, E. S. (2007). The Developmental Theories: A Critical Examination of Their Continuing Impact on Careers Research. In Gunz, H. & Peiperl, M., *Handbook of Career Studies*. SAGE Publications, Los Angeles, London, New Delhi, Singapore.
- Department for Business innovation & Skills. 2012. *National Careers Service: The Right Advice at the Right Time – New Challenger, New Chances: Further Education and Skills System Reform Plan*. Available at <http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/n/12-677-national-careers-service-right-advice-right-time.pdf>
- Department for Business innovation & Skills. <http://www.bis.gov.uk/policies/further-education-skills/engaging-employers/skills-pledge>
- Department for Education & National Statistics. 2010. *Youth Cohort Study and Longitudinal Study of Young People in England -2009*.
- Department for Education and Skills. 2003. *Careers Education and Guidance in England: a National Framework 11–19: Guidance on Curriculum, Examinations and Assessment*. London: DfES. Department of Children.
- Department for Education. 2011. *The Wolf Report*.
- Dornmayr, Helmut , Wieser, Regine , & Mayerl, Martin (2012). Bericht zur Situation der Jugendbeschäftigung und Lehrlingsausbildung in Österreich 2010 – 2011. Wien.
- Driessen, G., Slegers, P., & Smit, F. (2008). The Transition from Primary to Secondary Education: Meritocracy and Ethnicity. *European Social Review*, 24 (4). 527-542. Oxford University Press.
- Durik, M. A., Hyde, S. J. (2007). Gender, Competence, and Motivation. In Elliot, J. A. & Dweck, S. C., *Handbook of Competence and Motivation*. The Guilford Press, New York, London.
- Ebner, Christian, & Nikolai, Rita (2010). Duale oder schulische Berufsausbildung? Entwicklungen und Weichenstellungen in Deutschland, Österreich und der Schweiz. *Swiss Political Science Review*, 16(4), 617-648.
- Eder, Ferdinand (2009) Die Schule der 10- bis 14-Jährigen als Angelpunkt der Diskussion um Struktur und Qualität des Schulsystems. in Specht, Werner (Ed.) *Nationaler Bildungsbericht Österreich 2009 - Band 2 - Fokussierte Analysen bildungspolitischer Schwerpunktthemen*. Graz, Leykam, 33-53.
- Edition. Brussels: European Commission. Available at: [http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/structures/041\\_AT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/structures/041_AT_EN.pdf)
- Education and Skills Act 2008
- Engelbrecht, Helmut (1988) *Geschichte des österreichischen Bildungswesens - Erziehung und Unterricht auf dem Boden Österreichs: Band 5 - Von 1918 bis zur Gegenwart*, Wien, Österreichischer Bundesverlag.

- Ericsson, K. Anders, Krampe, Ralf Th., & Tesch-Römer, Clemens. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- EUCEN EQF PRO Lithuania. 2008.
- EURES. *The European Job Mobility Portal*. Available at <http://ec.europa.eu/eures>
- Eurobarometer (TNS Opinion & Social) (2011). Eurobarometer: Attitudes towards vocational education and training - Special Eurobarometer 369.
- Euroguidance Lithuania. Available at [www.euroguidance.lt/en](http://www.euroguidance.lt/en)
- European Commission. 2004. *E-skills for Europe: Towards 2010 and Beyond*. Available at [http://ec.europa.eu/enterprise/sectors/ict/files/e-skills-forum-2004-09-fsr\\_en.pdf](http://ec.europa.eu/enterprise/sectors/ict/files/e-skills-forum-2004-09-fsr_en.pdf)
- European Commission. 2010. *A new impetus for European cooperation in Vocational Education and Training to support the Europe 2020 strategy, Communication from the Commission to the Europe in Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*. Brussels, 9.6.2010, CRM (2010) 296 final.
- European Commission. 2012. *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Rethinking Education: investing in skills for better socio-economic outcomes*. Strasbourg, 20.11.2012, SM (2012) 669 final.
- European communities. 2007. *The Key Competences for Lifelong Learning – A European Framework*. Available at [http://ec.europa.eu/dgs/education\\_culture/publ/pdf/ll-learning/keycomp\\_en.pdf](http://ec.europa.eu/dgs/education_culture/publ/pdf/ll-learning/keycomp_en.pdf)
- European Council and Commission. 2010. *2010 Joint progress report of the Council and Commission on the implementation of the “Education and Training 2010 work programme”*. 2010/C 117/01
- Eurostat database. 2011. Available at [www.epp.eurostat.ec.europa.eu](http://www.epp.eurostat.ec.europa.eu)
- Eurostat. 2012. *Adult participation in Lifelong Learning*.
- Eurostat. 2012. *Early leavers from education and training*.
- Eurostat. 2012. *Participation in general and vocational education*.
- Eurostat. 2012. *Upper secondary education - level 3 - vocational programmes (ISCED 1997)*.
- Eurostat. 2012. *Youth education attainment level by gender; Youth attainment level - percentage of the population aged 20 - 24 having completed at least upper secondary education*.
- Eurydice (2009): *The Education System in Austria 2008/09*. Brussels: Eurydice. Available at: [http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase\\_full\\_reports/AT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase_full_reports/AT_EN.pdf)
- Eurydice (2010a): *Structures of Education and Training Systems in Europe. Austria 2009/10*
- Eurydice (2010b): *National system overviews on education systems in Europe and ongoing reforms*. Austrian Eurydice Unit. Federal Ministry of Education, the Arts and Culture: Vienna. Available at: [http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_)
- Eurydice. 2010. *National system overviews on education systems in Europe and ongoing reforms*.
- Eurydice. 2010a. *Organisation of the education system in Germany 2009/1010. National system overviews on education systems in Europe and ongoing reforms*. Brussels: Eurydice.
- Eurydice. 2010b. *Structures of Education and Training Systems in Europe. Germany 2009/10 Edition*. Brussels: Eurydice.
- Eurydice. 2011. *National system overviews on education systems in Europe and ongoing reforms*. Available at [http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_LV\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_LV_EN.pdf)
- Eurydice. *Organisation of the education system in Latvia 2009/2010*. Available at [http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase\\_full\\_reports/LV\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase_full_reports/LV_EN.pdf)
- Eurydice. *Organisation of the education system in Slovenia (2008/2009)*. Available at [www.eurydice.org](http://www.eurydice.org)

- Eurydice. *Structures of Education and Training Systems in Europe - Latvia*. Available at [http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/structures/041\\_LV\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/structures/041_LV_EN.pdf)
- Faschingbauer, Renate, Gaisbacher, Johann, Krausneker, Gundula, & Pongratz, Hanns Jörg. (2011). *Innovative Konzepte an Berufsbildenden Mittleren Schulen in der Steiermark 2007 - 2010*. Graz: Pädagogische Hochschule Steiermark - Institut für Forschung, Wissenstransfer & Innovation.
- Felstead et al. 2007. *Skills at Work 1986-2006*. SKOPE.
- Gerber, Theodore P. & Cheung, Sin Yi (2008) Horizontal Stratification in Postsecondary Education: Forms, Explanations, and Implications. *The Annual Review of Sociology*, 34, 299–318.
- Gouvernement du Québec; Republic of Lithuania. 2010. *Roles, Responsibilities and Partnerships in the Management of Educational Institutions Offering Vocational and Technical Training in Quebec and Lithuania*.
- Graf, Lukas, Lassnigg, Lorenz & Powell, Justin J. W. (2012) Austrian Corporatism and Institutional Change in the Relationship between Apprenticeship Training and School-Based VET. in Busemeyer, Marius R. & Trampusch, Christine (Eds.) *The Political Economy of Collective Skill Formation*. Oxford, Oxford University Press, 150-178.
- Graham, S. & Hudley, C. (2007). Race and Ethnicity in the Study of Motivation and Competence. In Elliot, J. A. & Dweck, S. C., *Handbook of Competence and Motivation*. The Guilford Press, New York, London.
- Gregoritsch, Petra , Kernbeiß, Günter, Lehner, Ursula , Timar, Paul , & Wagner-Pinter, Michael (2011). *Lehrlingsausbildung: Angebot und Nachfrage Entwicklung und Prognosen 2010 bis 2015 - Studie im Auftrag des Arbeitsmarktservice Österreich*. Wien: Synthesis Forschung^
- Grolnick, S. W., Pomerantz, M. E. & Price, E. C. (2007). The Role of Parents in How Children Approach Achievement: A Dynamic Process Perspective. In Elliot, J. A. & Dweck, S. C., *Handbook of Competence and Motivation*. The Guilford Press, New York, London.
- Heffeter, Brigitte (2008). *Arbeitsmarktrelevanz der Ausbildung an österreichischen Handelsschulen - Im Auftrag des Bildungsministeriums für Unterricht, Kunst und Kultur*. St Gilgen.
- Hefler, Günter & Fleischer, Viktor (2012) Permeability between VET and HE – The Case of Austria. Presentation given at the DEHEMS conference, 27<sup>th</sup> of September 2012.
- Hefler, Günter & Zimmer, Silvia (forthcoming). *World divided - Worlds Divided– Horizontal stratification, opportunity structures and institutional expectations in Austrian IVET – Working Paper within the 7EU-VET Project*. Vienna: 3s research laboratory
- Hefler, Günter (2012) *Austrian report on IVET expert interviews, work package 8, 7EU-VET project*. 3s research laboratory. Vienna
- Hefler, Günter and Silvia Zimmer (2012): *Report on the second round of focus groups in Austria*. Wp 8 within the 7EU-VET Project. Vienna: 3s research laboratory.
- Hefler, Günter, & Krivanec, Eva. (2005). *Chiffren der Gegenwart - Die Arbeitsmarktstatistik in der medialen Berichterstattung*. Kurswechsel(4), 80-96.
- Hefler, Günter, & Markowitsch, Jörg. (2012). Bridging Institutional Divides: Linking education, careers and work in 'organizational space' and 'skill space' dominated employment systems. In R. Brooks, A. Fuller & J. Waters (Eds.), *Changing Spaces of Education - New Perspectives on the Nature of Learning* (pp. 160-181). London: Routledge.
- Hefler, Günter. (2012, forthcoming). *Taking steps - Formal adult education in private and organisational life: A comparative view*. Wien: LIT-Verlag.
- Heinz, Walter R. (1999). Job-Entry Patterns in a Life-Course Perspective. In W. R. Heinz (Ed.), *From Education to Work - Cross-National Perspectives* (pp. 214-231). Cambridge: Cambridge University Press.
- Hillmer, S. & Jacob, M. (2002). Social Inequality in Higher Education: Is Vocational Training a Pathway Leading to or Away from University? *European Sociological Review*, 19 (3). 319-334. Oxford University Press.

- Hippach-Schneider, U.; Krause, M. and Woll, C. 2007. *Vocational education and training in Germany. Short description*. Luxembourg: Cedefop.
- Iannelli, C. & Raffe, D. (2007). Vocational Upper-Secondary Education and the Transition from School. *European Sociological Review*, 23 (1). 49-63. Oxford University Press.
- ITB Working Group (2008). Vocational Education and Training in Europe: An Alternative to the European Qualifications Framework?. *Journal of European Industrial Training*, 32 (2/3). 221-234. Emerald Group Publishing Limited.
- Kamens, David H. & Benavot, Aaron (2007) World Models of Secondary Education 1960-2000. in
- Karabel, Jerome (2005) *The chosen: the hidden history of admission and exclusion at Harvard, Yale, and Princeton*, Boston, Mass. [u.a.], Houghton Mifflin.
- Kauppinen, M. T. (2008). School as Mediators of Neighbourhood Effects on Choice Between Vocational and Academic Tracks of Secondary Education in Helsinki. *European Sociological Review*, 24 (3). 379-391. Oxford University Press.
- Keep, E. 2006. State Control of the English VET System – Playing with the Biggest Trainset in the World. *Journal of Vocational Education and Training* 58 (1): 47-64.
- Kogan, I. & Unt, M. (2008). The Role of Vocational Specificity of Educational Credentials for Labour Market Entry in Estonia and Slovenia. *International Sociology*, 23 (3). 389-416. International Sociological Association. SAGE.
- Kohn, Melvin L. (1959) Social Class and Parental Values. *The American Journal of Sociology*, 64, 337-351.
- Kohn, Melvin L. (1963) Social Class and Parent-Child Relationships: An Interpretation. *The American Journal of Sociology*, 68, 471-480.
- Komljenovič, Janja. 2011. Posnetek stanja visokošolskega sistema v Republiki Sloveniji. In *Nacionalni program visokega šolstva 2011–2020 ter Raziskovalna in inovacijska strategija Slovenije 2011–2020*, ed. Jana Kolar and Janja Komljenovič. Available at <http://www.drznaslovenija.mvzt.gov.si/ch03.html>
- Lasonen, J., & Gordon, J. (2009). Improving the Attractiveness and Image of VET. In CEDEFOP, *Modernising Vocational Education and Training: Fourth Report on Vocational Training Research in Europe: Background Report*. Cedefop Reference series (71), Volume 3: 15-88. Luxembourg: Publications Office of the European Union.
- Lassnigg, Lorenz (2006). Forschungsfragen zur Zukunft der dualen Ausbildung in Österreich. Paper presented at the Zukunft der dualen Ausbildung - Fachtagung der Wirtschaftskammer Österreich (8. Juni 2006), Wien.
- Lavendels, J.; Sitikovs, V. and Uhanova M. 2012. Drivers of Attractiveness and Success of Initial Vocational Education and Training: Latvian Case. In *Proceedings of INTED2012 Conference, 5th-7th March 2012, Valencia, Spain, International Association of Technology, Education and Development (IATED)*, pp. 1604-1607.
- Lavendels, J.; Sitikovs, V. and Uhanova M. 2012. Influence of Socio-Demographic Characteristics to Attractiveness and Success of Initial Vocational Education and Training in Latvia. In *Proceedings of International Conference on New Horizons in Education -INTE2012*, 3rd-7th June 2012, Prague, Czech Republic. *Procedia - Social and Behavioral Sciences* (55), ed. Prof. Dr. Aytakin Isamn, Elsevier: 756-765.
- Levinson, Daniel J. (1980). Toward a Conception of the Adult Life course. In N. J. Smelser & E. H. Erikson (Eds.), *Themes of work and love in adulthood* (pp. 265-290). Cambridge, Mass.: Harvard University Press.
- Lietuvos Respublikos Švietimo Ir Mokslo Ministro. 2008. *Programme for the Development of Practical Vocational Education and Training Resources* (“Dél Praktinio profesinio mokymo išteklių plėtros programos patvirtinimo”). Available at [http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_l?p\\_id=334382&p\\_query=&p\\_tr2=](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=334382&p_query=&p_tr2=)
- Markowitsch, Jörg, Hefler, Günter, Rammel, Stephanie, & Ringler, Paul. (2012 forthcoming). Nobody's darling - Dynamics and inertia of formal adult education in Austria. In E. Saar, O. B. Ure &

- T. Roosalu (Eds.), *Lifelong Learning in Europe: National Patterns and Challenges*. Cheltenham: Edward Elgar.
- McCoshan, A., et al. 2008. *Beyond the Maastricht Communiqué: Final Report to the EC*.
  - Meyer, Heinz-Dieter (2011) Path Dependence in German and American Public Education: The Persistence of Institutional Difference in a Globalizing World. in Mitchell, Douglas E., Crowson, Robert L. & Shipps, Dorothy (Eds.) *Shaping Education Policy - Power and Process*. London, Routledge, 189-211.
  - Meyer, John W. (1970). The Charter: Conditions of Diffuse Socialization in Schools. In W. R. Scott (Ed.), *Social processes and social structures: an introduction to sociology* (pp. 564-578). New York, London: Holt, Rinehart and Winston.
  - Meyer, John W. (2006) Forward. in Baker, David Jan & Wiseman, Alexander W. (Eds.) *The impact of comparative education research on institutional theory*. Amsterdam, Oxford, Elsevier JAI, xi-xvi.
  - Meyer, John W., & Rowan, Brian. (1978). The Structure of Educational Organizations. In M. W. Meyer (Ed.), *Environments and organizations* (pp. 78-109). San Francisco Jossey-Bass.
  - Ministrstvo za šolstvo in šport RS. 2007. *Slovenski šolski sistem v številkah*. Available at [http://portal.mss.edus.si/pls/portal/docs/PAGE/PORTAL\\_SOLSTVO\\_MSS/MSS\\_STRANI/MSS\\_DOKUMENTI\\_ZA\\_SPLET/SLOVENSKI\\_SOLSKI\\_SISTEM\\_V\\_STEVILKAH.PDF](http://portal.mss.edus.si/pls/portal/docs/PAGE/PORTAL_SOLSTVO_MSS/MSS_STRANI/MSS_DOKUMENTI_ZA_SPLET/SLOVENSKI_SOLSKI_SISTEM_V_STEVILKAH.PDF)
  - Morris, M. 2011. Careers education, advice and guidance. In *Work-related Teaching and Learning*, ed. Huddleston, P and Stanley, J. David Fulton.
  - Moser, Winfried, & Bilgili, Marcel (2010). *Berufswechsel nach der Lehre - Das Phänomen des Berufswechsels in den ersten Berufsjahren nach der Lehrausbildung am österreichischen Arbeitsmarkt - Studie im Auftrag des Bundesministerium für Arbeit, Soziales und Konsumentenschutz*. Wien.
  - OECD (2007). *Qualifications Systems: Bridges to Lifelong learning*. Education and Training Policy. OECD Publishing.
  - OECD 2009. *Creating Effective Teaching and Learning Environments: First Results from TALIS*. Available at: <http://www.oecd.org/edu/preschoolandschool/creatingeffectiveteachingandlearningenvironmentsfirresultsfromtalिस.htm>
  - Pahl, J.-P. 2007. *Berufsbildende Schule. Bestandsaufnahme und Persepektiven*. Bielefeld: Bertelsmann.
  - Parsons, J. D., Hughes, J., Allison, C., & Walsh, K. (2009): *The Training and Development of VET Teachers and Trainers in Europe*. In CEDEFOP, *Modernising Vocational Education and Training: Fourth Report on Vocational Training Research in Europe: Background Report*. Cedefop Reference series (70), Volume 2: 73-156. Luxemburg: Publications Office of the European Union.
  - PLOTEUS (Portal on Learning Opportunities throughout the European Space). Available at <http://ec.europa.eu/ploteus/>
  - Ringer, Fritz K. (1979). *Education and society in modern Europe*. Bloomington ; London: Indiana University Press.
  - Rubenson, Kjell , & Desjardins, Richard. (2009). *The Impact of Welfare State Regimes on Barriers to Participation in Adult Education: A Bounded Agency Model*. *Adult Education Quarterly*, 59, 187-207.
  - Saar, Ellu, & Unt, Marge. (2012). *Education and Labor Market Entry in Estonia - Closing Doors for Those Without Tertiary Education*. In I. Kogan, C. Noelke & M. Gebel (Eds.), *Making the transition - Education and Labor Market Entry in Central and Eastern Europe* (pp. 240-268). Standford: Standford University Press.
  - Savickas, L. M. (2007). *Occupational Choice*. In Gunz, H. & Peiperl, M., *Handbook of Career Studies*. SAGE Publications, Los Angeles, London, New Delhi, Singapore.
  - Schlögl, Peter (2011). *Bildungspartizipation - Bildungswege und Bildungswahl*. In F. u. J. Bundesministerium für Wirtschaft (Ed.), *6. Bericht zur Lage der Jugend in Österreich Jugend aus Sicht der - Wissenschaft (Teil A) - Jugendarbeit (Teil B)* (pp. 97-119). Wien.

- Schlögl, Peter, Beham, Martina, & Bacher, Johann. (2008) (Eds.), *Geschlechterunterschiede in der Bildungswahl* (pp. 149-155): VS Verlag für Sozialwissenschaften.
- Schofer, Evan & Meyer, John W. (2005) *The Worldwide Expansion of Higher Education in the Twentieth Century*. *American Sociological Review*, 70, 898-920.
- Schools and Families. 2009. *Statutory Guidance: Impartial Careers Education*.
- SFA. 2009. *Participation of 16-18 year olds in full-time education by highest qualification aim and work-based learning, England*.
- SFR, Statistical First Release. 2011. *Participation in Education, Training and Employment by 16-18 Year Olds in England, DfE*. Available at <http://www.education.gov.uk/rsgateway/DB/SFR/s001072/index.shtml>
- Shavit, Yossi & Müller, Walter (2000) *Vocational secondary education - Where diversion and where safety net?* *European Societies*, 2, 29-50.
- Shavit, Yossi, Arum, Richard, & Gamoran, Adam (Eds.). (2007). *Stratification in higher education: a comparative study*. Stanford, CA: stanford University Press. [sheets/047\\_AT\\_EN.pdf](http://www.stanford.edu/~shavit/sheets/047_AT_EN.pdf)
- Sitikovs, V.; Lavendels, J. and Uhanova, M. 2012. Influence of Socio-Demographic Characteristics to Perceptions, Assessments and Aspirations of IVET Pupils in Latvia. In *Proceedings of International Academic Conference*, 9<sup>th</sup> – 12<sup>th</sup> September 2012, Lisbon, Portugal: 661-692. IISES.
- Specht, Werner (Ed.) (2009a) *Nationaler Bildungsbericht Österreich 2009 - Band 1 - Das Schulsystem im Spiegel von Daten und Indikatoren*, Graz Leykam.
- Specht, Werner (Ed.) (2009b) *Nationaler Bildungsbericht Österreich 2009 - Band 2 - Fokussierte Analysen bildungspolitischer Schwerpunktthemen*, Graz Leykam.
- Special Eurobarometer 369. 2011. *Attitudes towards vocational education and training*.
- Statistics Lithuania. 2009. *Demographic Year book*.
- Statistics Lithuania. 2009. *Demographic Year book*.
- Statistics Lithuania. *Database of Indicators of Statistics Lithuania*. Available at <http://db1.stat.gov.lt/statbank/default.asp>
- Svetlik, Ivan. 2004. Adjusting to the falling interest in VET in Slovenia. *Vocational training* 33: 40-48.
- Tritscher-Archan, Sabine (ed.) (2009): *VET in Europe. Country Report Austria*. Report within the Framework of ReferNet Austria. Vienna. Available at: <http://www.refernet.at/index.php/publikationen/laenderberichte>
- Tritscher-Archan, Sabine (ed.) (2010): *A bridge to the future: European VET policy 2002-12. National policy report – Austria*. Wien. Available at: <http://www.refernet.at/index.php/publikationen/policy-dokumente>
- Tritscher-Archan, Sabine, Mayr Thomas (ed.) 2008: *Berufsbildungspolitik in Österreich, Fortschrittsbericht 2006-2008*. Available at: <http://www.refernet.at/index.php/publikationen/policy-dokumente>
- Trow, Martin (1973). *Problems in the Transition from Elite to Mass Higher Education* (pp. 57). Berkely: Carnegie Commission on Higher Education.
- Turner, C. J. & Urda, T. (2007). *Competence Motivation in the Classroom*. In Elliot, J. A. & Dweck, S. C., *Handbook of Competence and Motivation*. The Guilford Press, New York, London.
- Turner, Ralph H. (1960). *Sponsored and contest mobility and the school system*. *American Sociological Review*, 25(6), 855-867.
- UNESCO Institute for Statistics. 2009.
- UNESCO. 2008a. *UNESCO'S ICT Competency Standards for Teachers: Towards ICT skills for teachers*. Available at <http://cst.unesco-ci.org/sites/projects/default.aspx>
- Wagner, A. L. & Wigfield, A. (2007). *Competence, Motivation, and Identity Development during Adolescence*. In Elliot, J. A. & Dweck, S. C., *Handbook of Competence and Motivation*. The Guilford Press, New York, London.

- Walther, Andreas. (2006). Regimes of youth transitions: Choice, flexibility and security in young people's experiences across different European contexts. *Young*, 14(May), 119-139.
- Wentzel, R. K. (2007). Peer Relationship, Motivation, and Academic Performance at School. In Elliot, J. A. & Dweck, S. C., *Handbook of Competence and Motivation*. The Guilford Press, New York, London.
- Wolf. 2011. *Review of Vocational Education – The Wolf Report*. London: Department for Education.

## ENDNOTES

### <sup>i</sup> Factors influencing students' programme choice, by programme type and gender in percent

	ISCED 2	ISCED 3	ISCED 4
<b>Male</b>			
The programme offered good job prospects	29	33	27
My previous examination grades prevented me from enrolling in more preferable programmes	(10)	10	10
My parents suggested I enrol in this programme	(18)	14	17
The occupation(s) related to the programme appealed to me	46	47	46
The programme provides a good foundation for further qualifications / education	45	50	41
My friends have chosen to take the same programme	32	18	18
The reputation of the programme was attractive to me	31	27	26
Former teachers encouraged me to enrol in this programme	((10))	5	9
This programme was the most appropriate within a reasonable distance from my home	(17)	17	30
<b>Female</b>			
The programme offered good job prospects	(22)	36	30
My previous examination grades prevented me from enrolling in more preferable programmes	(11)	8	((4))
My parents suggested I enrol in this programme	((3))	14	(8)
The occupation(s) related to the programme appealed to me	29	39	39
The programme provides a good foundation for further qualifications / education	41	56	47
My friends have chosen to take the same programme	(20)	13	(11)
The reputation of the programme was attractive to me	24	31	30
Former teachers encouraged me to enrol in this programme	((0))	4	((5))
This programme was the most appropriate within a reasonable distance from my home	(17)	18	(11)

Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

() n is less than 10, (( )) n is less than 5

ii *Factors influencing students' programme choice, by programme type in percent*

	ISCED 2	ISCED 3	ISCED 4
<i>Industry</i>			
The programme offered good job prospects	(18)	31	31
My previous examination grades prevented me from enrolling in more preferable programmes	(12)	10	13
My parents suggested I enrol in this programme	(13)	13	11
The occupation(s) related to the programme appealed to me	36	47	50
The programme provides a good foundation for further qualifications / education	49	52	42
My friends have chosen to take the same programme	(21)	18	15
The reputation of the programme was attractive to me	23	28	25
Former teachers encouraged me to enrol in this programme	((4))	5	6
This programme was the most appropriate within a reasonable distance from my home	((5))	18	28
<i>Service</i>			
The programme offered good job prospects	28	33	24
My previous examination grades prevented me from enrolling in more preferable programmes	(9)	8	12
My parents suggested I enrol in this programme	(10)	13	16
The occupation(s) related to the programme appealed to me	40	39	36
The programme provides a good foundation for further qualifications / education	37	51	44
My friends have chosen to take the same programme	23	14	14
The reputation of the programme was attractive to me	31	29	26
Former teachers encouraged me to enrol in this programme	((5))	5	(5)
This programme was the most appropriate within a reasonable distance from my home	27	19	17

Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

( ) n is less than 10, (( )) n is less than 5

iii *Factors influencing students' programme choice, by VET structures & parents' employment status in percent*

	ISCED 2	ISCED 3	ISCED 4
<i>Mother: Part-time/temporarily/not employed</i>			
The programme offered good job prospects	27	31	30
My previous examination grades prevented me from enrolling in more preferable programmes	((3))	10	14
My parents suggested I enrol in this programme	((6))	14	13
The occupation(s) related to the programme appealed to me	41	45	49
The programme provides a good foundation for further qualifications / education	32	50	49
My friends have chosen to take the same programme	28	16	13
The reputation of the programme was attractive to me	31	27	27
Former teachers encouraged me to enrol in this programme	((2))	5	(7)
This programme was the most appropriate within a reasonable distance from my home	23	16	27
<i>Mother: Full-time</i>			
The programme offered good job prospects	(23)	36	28
My previous examination grades prevented me from enrolling in more preferable programmes	(16)	9	11
My parents suggested I enrol in this programme	(17)	14	12
The occupation(s) related to the programme appealed to me	39	44	41
The programme provides a good foundation for further qualifications / education	55	54	39
My friends have chosen to take the same programme	(21)	18	15
The reputation of the programme was attractive to me	29	33	25
Former teachers encouraged me to enrol in this programme	((8))	5	(4)
This programme was the most appropriate within a reasonable distance from my home	(24)	19	23

*Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

*( ) n is less than 10, (( )) n is less than 5*

iv *Factors influencing students' programme choice, by VET structures & parents' education in percent*

	ISCED 2	ISCED 3	ISCED 4
<i>Primary and lower secondary education</i>			
The programme offered good job prospects	((35))	(19)	((18))
My previous examination grades prevented me from enrolling in more preferable programmes	((0))	((7))	((19))
My parents suggested I enrol in this programme	((0))	((8))	((0))
The occupation(s) related to the programme appealed to me	((26))	47	((20))
The programme provides a good foundation for further qualifications / education	((26))	42	((37))
My friends have chosen to take the same programme	((40))	((8))	((39))
The reputation of the programme was attractive to me	((40))	23	((37))
Former teachers encouraged me to enrol in this programme	((0))	((7))	((0))
This programme was the most appropriate within a reasonable distance from my home	((0))	(19)	((0))
<i>Upper-secondary and non-tertiary education</i>			
The programme offered good job prospects	(26)	33	38
My previous examination grades prevented me from enrolling in more preferable programmes	((8))	8	14
My parents suggested I enrol in this programme	((10))	12	11
The occupation(s) related to the programme appealed to me	39	43	49
The programme provides a good foundation for further qualifications / education	53	50	47
My friends have chosen to take the same programme	((12))	16	13
The reputation of the programme was attractive to me	(23)	28	31
Former teachers encouraged me to enrol in this programme	((3))	4	(7)
This programme was the most appropriate within a reasonable distance from my home	((10))	19	26
<i>Tertiary education</i>			
The programme offered good job prospects	(17)	36	24
My previous examination grades prevented me from enrolling in more preferable programmes	((11))	10	(9)
My parents suggested I enrol in this programme	(13)	17	14
The occupation(s) related to the programme appealed to me	44	47	44
The programme provides a good foundation for further qualifications / education	33	57	42
My friends have chosen to take the same programme	30	18	16
The reputation of the programme was attractive to me	26	32	25
Former teachers encouraged me to enrol in this programme	((8))	6	((5))
This programme was the most appropriate within a reasonable distance from my home	(18)	17	25

Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"  
( ) n is less than 10, (( )) n is less than 5

v *Students considering one or more alternative programmes, when deciding about current programme, by VET structures in percent*

ISCED 2	ISCED 3	ISCED 4
58	69	62

Question: A6 Did you consider any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't consider any alternative programme", 2="I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"

<sup>vi</sup> *Students considering one or more alternative programmes, when deciding about current programme, by VET structures & parents' employment status in percent*

	ISCED 2	ISCED 3	ISCED 4
Father: Part-time/temporarily/not employed	42	71	64
Father: Full-time	65	69	65

Question: A6 Did you consider any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't consider any alternative programme", 2=" I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"

<sup>vii</sup> *Students considering one or more alternative programmes, when deciding about current programme, by VET structures & parents' education status in percent*

	ISCED 2	ISCED 3	ISCED 4
Primary and lower secondary education	((65))	65	((75))
Upper-secondary and non-tertiary education	64	72	72
Tertiary education	55	67	61

Question: A6 Did you consider any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't consider any alternative programme", 2=" I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"

( ) n is less than 10, (( )) n is less than 5

<sup>viii</sup> *Students spending time (in hours) at school, by VET structures & gender*

	ISCED 2	ISCED 3	ISCED 4
Male	28.8	30.9	29.8
Female	27.3	29.3	29.4

Question: B3 How many school hours per week do you spend at school?

<sup>ix</sup> *Students spending time (in hours) at school, by VET structures & programme orientation*

	ISCED 2	ISCED 3	ISCED 4
Industry	29.0	30.8	30.4
Service	27.3	29.6	28.5

Question: B3 How many school hours per week do you spend at school?

<sup>x</sup> *Students' learning incentives towards learning, by VET structures & programme sector in percent*

	ISCED 2	ISCED 3	ISCED 4
<i>Industry</i>			
I strive for the highest possible marks.	34	38	29
It is important for me to fully understand what I have to do/learn.	40	43	31
I want to make a good impression on my teachers by achieving good grades.	28	26	25
I want to make a good impression on potential employers by achieving good grades.	32	32	30
I want to keep up with my fellow pupils.	48	44	33
I enjoy learning.	(22)	21	14
I am interested in practical subjects.	54	63	44
I am interested in general subjects (e.g. maths, foreign language).	25	23	19
<i>Service</i>			
I strive for the highest possible marks.	39	45	37
It is important for me to fully understand what I have to do/learn.	50	47	44
I want to make a good impression on my teachers by achieving good grades.	30	29	34
I want to make a good impression on potential employers by achieving good grades.	29	37	35
I want to keep up with my fellow pupils.	39	48	47
I enjoy learning.	30	27	24
I am interested in practical subjects.	54	61	59
I am interested in general subjects (e.g. maths, foreign language).	41	35	31

*Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*( ) n is less than 10, (()) n is less than 5*

<sup>xi</sup> *Students' learning incentives for learning, by VET structures and gender in percent*

	ISCED 2	ISCED 3	ISCED 4
<b>Male</b>			
I strive for the highest possible marks.	41	37	28
It is important for me to fully understand what I have to do/learn.	52	41	31
I want to make a good impression on my teachers by achieving good grades.	37	25	27
I want to make a good impression on potential employers by achieving good grades.	37	32	31
I want to keep up with my fellow pupils.	45	43	33
I enjoy learning.	31	20	17
I am interested in practical subjects.	54	62	47
I am interested in general subjects (e.g. maths, foreign language).	27	23	23
<b>Female</b>			
I strive for the highest possible marks.	32	47	41
It is important for me to fully understand what I have to do/learn.	38	50	49
I want to make a good impression on my teachers by achieving good grades.	(20)	31	33
I want to make a good impression on potential employers by achieving good grades.	23	38	34
I want to keep up with my fellow pupils.	41	49	49
I enjoy learning.	23	29	20
I am interested in practical subjects.	54	62	57
I am interested in general subjects (e.g. maths, foreign language).	42	36	26

Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

( ) n is less than 10, (()) n is less than 5

<sup>xii</sup> *Students' conducted work, by VET structures & programme orientation in percent*

	ISCED 2	ISCED 3	ISCED 4
Industry	30	30	40
Service	(10)	16	18

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

( ) n is less than 10, (()) n is less than 5

<sup>xiii</sup> *Students' conducted work, by VET structures & residency in percent*

	ISCED 2	ISCED 3	ISCED 4
Country village or a farm	(23)	28	33
Town or small city	((13))	20	24
Big city or the suburbs	(20)	24	39

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

( ) n is less than 10, (()) n is less than 5

<sup>xiv</sup> *Students' conducted work, by VET structures & gender in percent*

	ISCED 2	ISCED 3	ISCED 4
Male	27	32	40
Female	((8))	12	(14)

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

() n is less than 10, (( )) n is less than 5

<sup>xv</sup> *Students' conducted work, by VET structures & Index SES in percent*

	ISCED 2	ISCED 3	ISCED 4
Below average	((13))	31	34
Average	25	22	31
Above average	((0))	22	((28))

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

() n is less than 10, (( )) n is less than 5

<sup>xvi</sup> *Students' conducted work, by VET structures & school success in percent*

	ISCED 2	ISCED 3	ISCED 4
Low grades	15	28	31
High grades	(20)	16	33

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

() n is less than 10, (( )) n is less than 5

<sup>xvii</sup> *Satisfaction with the current programme, by VET structures & programme orientation in percent*

	ISCED 2	ISCED 3	ISCED 4
Industry	48	52	46
Service	38	57	46

Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

<sup>xviii</sup> *Percentage of students able to manage occupational tasks to a large extent, by VET structures*

ISCED 2	ISCED 3	ISCED 4
52	51	44

Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent". () n is less than 10, (( )) n is less than 5

<sup>xix</sup> *Percentage of students able to manage occupational tasks to a large extent, by VET structures & gender*

	ISCED 2	ISCED 3	ISCED 4
Male	52	47	40
Female	53	57	56

Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent".

<sup>xx</sup> *Percentage of VET students who acquired competencies overall to a large extent, by students success by VET structures*

ISCED 2	ISCED 3	ISCED 4
19	21	23

Question: E1b Overall, to what extent does your current programme prepare you to these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very".

<sup>xxi</sup> *Percentage of VET students who acquired competencies overall to a large extent, by VET structures & school success*

	ISCED 2	ISCED 3	ISCED 4
Low grades	22	19	24
High grades	((14))	26	25

Question: E1b Overall, to what extent does your current programme prepare you to these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very".

() n is less than 10, (( )) n is less than 5.

<sup>xxii</sup> *Percentage of VET students who acquired competencies overall to a large extent, by VET structures & SES*

	ISCED 2	ISCED 3	ISCED 4
Below average	((0))	17	(20)
Average	24	24	25
Above average	((25))	26	((29))

Question: E1b Overall, to what extent does your current programme prepare you to these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very".

() n is less than 10, (( )) n is less than 5.

xxiii *Students' professional goals, by VET structures & programme orientation in percent*

	ISCED 2	ISCED 3	ISCED 4
<b>Industry</b>			
Obtaining solid occupational proficiencies	39	43	38
Receiving a high income	48	57	51
Gaining job security	50	66	60
Having responsibility at work	67	67	57
Having opportunities to learn new things at work	72	68	60
Undertaking interesting tasks in the workplace	51	56	53
Having a job that makes me happy	69	69	66
Having a good relationship with colleagues	70	71	60
Advancing to a high level of status in society	67	61	53
Having enough spare time to do other things in life	64	60	51
Making and maintaining relationships with others (e.g. family and friends)	75	73	64
<b>Service</b>			
Obtaining solid occupational proficiencies	36	50	44
Receiving a high income	46	59	51
Gaining job security	47	70	61
Having responsibility at work	56	75	70
Having opportunities to learn new things at work	62	72	65
Undertaking interesting tasks in the workplace	46	61	65
Having a job that makes me happy	59	79	70
Having a good relationship with colleagues	60	80	70
Advancing to a high level of status in society	56	68	60
Having enough spare time to do other things in life	49	63	60
Making and maintaining relationships with others (e.g. family and friends)	63	81	68

*Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

xxiv *Students' professional goals, by VET structures & residency in percent*

	ISCED 2	ISCED 3	ISCED 4
<i>Country village or a farm</i>			
Obtaining solid occupational proficiencies	37	44	35
Receiving a high income	51	52	43
Gaining job security	53	65	55
Having responsibility at work	62	66	66
Having opportunities to learn new things at work	61	66	61
Undertaking interesting tasks in the workplace	61	56	58
Having a job that makes me happy	64	70	63
Having a good relationship with colleagues	58	74	57
Advancing to a high level of status in society	66	59	58
Having enough spare time to do other things in life	51	56	51
Making and maintaining relationships with others (e.g. family and friends)	61	76	64
<i>Town or small city</i>			
Obtaining solid occupational proficiencies	33	40	49
Receiving a high income	39	56	57
Gaining job security	41	65	67
Having responsibility at work	47	70	67
Having opportunities to learn new things at work	61	68	67
Undertaking interesting tasks in the workplace	45	55	58
Having a job that makes me happy	60	72	74
Having a good relationship with colleagues	65	73	71
Advancing to a high level of status in society	53	64	54
Having enough spare time to do other things in life	48	61	59
Making and maintaining relationships with others (e.g. family and friends)	67	75	63
<i>Big city or the suburbs</i>			
Obtaining solid occupational proficiencies	39	54	35
Receiving a high income	51	65	53
Gaining job security	48	74	60
Having responsibility at work	70	74	54
Having opportunities to learn new things at work	75	74	58
Undertaking interesting tasks in the workplace	39	63	57
Having a job that makes me happy	65	78	66
Having a good relationship with colleagues	68	77	65
Advancing to a high level of status in society	62	68	57
Having enough spare time to do other things in life	68	66	54
Making and maintaining relationships with others (e.g. family and friends)	75	79	70

*Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

xxv *Students' professional goals, by VET structures and parents' education in percent*

	ISCED 2	ISCED 3	ISCED 4
<i>Primary and lower secondary education</i>			
Obtaining solid occupational proficiencies	((26))	50	((50))
Receiving a high income	((0))	47	((50))
Gaining job security	((26))	52	((50))
Having responsibility at work	((60))	70	((75))
Having opportunities to learn new things at work	((60))	61	((100))
Undertaking interesting tasks in the workplace	((60))	58	((75))
Having a job that makes me happy	((26))	72	((50))
Having a good relationship with colleagues	((26))	77	((35))
Advancing to a high level of status in society	((26))	61	((50))
Having enough spare time to do other things in life	((26))	44	((27))
Making and maintaining relationships with others (e.g. family and friends)	((26))	77	((50))
<i>Upper-secondary and non-tertiary education</i>			
Obtaining solid occupational proficiencies	(31)	47	52
Receiving a high income	49	59	63
Gaining job security	53	71	71
Having responsibility at work	71	74	70
Having opportunities to learn new things at work	72	71	73
Undertaking interesting tasks in the workplace	54	59	64
Having a job that makes me happy	72	77	72
Having a good relationship with colleagues	72	77	76
Advancing to a high level of status in society	64	66	64
Having enough spare time to do other things in life	58	64	55
Making and maintaining relationships with others (e.g. family and friends)	81	79	73
<i>Tertiary education</i>			
Obtaining solid occupational proficiencies	40	50	32
Receiving a high income	46	61	39
Gaining job security	44	68	51
Having responsibility at work	64	72	56
Having opportunities to learn new things at work	74	73	50
Undertaking interesting tasks in the workplace	48	60	60
Having a job that makes me happy	64	73	60
Having a good relationship with colleagues	66	75	53
Advancing to a high level of status in society	66	66	49
Having enough spare time to do other things in life	58	63	59
Making and maintaining relationships with others (e.g. family and friends)	71	77	63

*Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*() n is less than 10, (()) n is less than 5*

xxvi *Students' professional goals, by VET structures and socio-economic status in percent*

	ISCED 2	ISCED 3	ISCED 4
<i>Below average</i>			
Obtaining solid occupational proficiencies	((17))	45	40
Receiving a high income	(45)	58	51
Gaining job security	(36)	66	63
Having responsibility at work	(49)	67	63
Having opportunities to learn new things at work	68	68	63
Undertaking interesting tasks in the workplace	(35)	59	61
Having a job that makes me happy	74	75	69
Having a good relationship with colleagues	61	77	59
Advancing to a high level of status in society	63	65	52
Having enough spare time to do other things in life	(58)	61	64
Making and maintaining relationships with others (e.g. family and friends)	74	77	72
<i>Average</i>			
Obtaining solid occupational proficiencies	40	49	44
Receiving a high income	59	60	56
Gaining job security	58	71	66
Having responsibility at work	64	73	70
Having opportunities to learn new things at work	74	71	70
Undertaking interesting tasks in the workplace	61	58	60
Having a job that makes me happy	64	74	72
Having a good relationship with colleagues	70	76	74
Advancing to a high level of status in society	73	64	62
Having enough spare time to do other things in life	54	62	55
Making and maintaining relationships with others (e.g. family and friends)	67	78	73
<i>Above average</i>			
Obtaining solid occupational proficiencies	((22))	51	((22))
Receiving a high income	((10))	66	((22))
Gaining job security	((10))	77	((31))
Having responsibility at work	((60))	77	((34))
Having opportunities to learn new things at work	((45))	79	((35))
Undertaking interesting tasks in the workplace	((28))	66	((34))
Having a job that makes me happy	((28))	82	(61)
Having a good relationship with colleagues	((45))	82	(46)
Advancing to a high level of status in society	((31))	69	(41)
Having enough spare time to do other things in life	((31))	70	(56)
Making and maintaining relationships with others (e.g. family and friends)	((59))	80	(49)

Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

() n is less than 10, (()) n is less than 5

xxvii *Average ratio of theory and practice*

	Theory	Practice
2nd Level Vocational programmes in Vocational Schools	35%	65%
3rd Level Vocational Secondary programmes in Vocational Secondary Schools	50%	50%

xxviii *Factors influencing students' programme choice, by VET structures & gender in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Male</i>		
The programme offered good job prospects	50	52
My previous examination grades prevented me being able to enrol on more preferable programmes	8	4
My parents suggested I enrol on this programme	13	10
The occupation(s) related to the programme appealed to me	60	57
The programme provides a good foundation for further qualifications / education	47	62
My friends have chosen to undertake the same programme	8	11
The reputation of the programme was attractive to me	32	22
Former teachers encouraged me to enrol on this programme	(5)	(3)
This programme was the most appropriate within a reasonable distance from my home	15	19
<i>Female</i>		
The programme offered good job prospects	29	39
My previous examination grades prevented me being able to enrol on more preferable programmes	20	7
My parents suggested I enrol on this programme	(14)	10
The occupation(s) related to the programme appealed to me	42	58
The programme provides a good foundation for further qualifications / education	37	57
My friends have chosen to undertake the same programme	(10)	9
The reputation of the programme was attractive to me	26	24
Former teachers encouraged me to enrol on this programme	16	5
This programme was the most appropriate within a reasonable distance from my home	16	23

*Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

*( ) n is less than 10, (()) n is less than 5*

xxix **Factors influencing students' programme choice, by VET structures & parents education in percent**

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Primary and lower secondary education</i>		
The programme offered good job prospects	(33)	48
My previous examination grades prevented me being able to enrol on more preferable programmes	((12))	(19)
My parents suggested I enrol on this programme	((18))	((13))
The occupation(s) related to the programme appealed to me	(39)	54
The programme provides a good foundation for further qualifications / education	(46)	42
My friends have chosen to undertake the same programme	((0))	((3))
The reputation of the programme was attractive to me	((27))	(16)
Former teachers encouraged me to enrol on this programme	((11))	((6))
This programme was the most appropriate within a reasonable distance from my home	((22))	(16)
<i>Upper secondary and non-tertiary education</i>		
The programme offered good job prospects	41	47
My previous examination grades prevented me being able to enrol on more preferable programmes	11	5
My parents suggested I enrol on this programme	13	9
The occupation(s) related to the programme appealed to me	57	58
The programme provides a good foundation for further qualifications / education	45	61
My friends have chosen to undertake the same programme	9	9
The reputation of the programme was attractive to me	27	23
Former teachers encouraged me to enrol on this programme	7	4
This programme was the most appropriate within a reasonable distance from my home	12	20
<i>Tertiary education</i>		
The programme offered good job prospects	62	43
My previous examination grades prevented me being able to enrol on more preferable programmes	((17))	(4)
My parents suggested I enrol on this programme	((9))	11
The occupation(s) related to the programme appealed to me	62	55
The programme provides a good foundation for further qualifications / education	(40)	59
My friends have chosen to undertake the same programme	((12))	12
The reputation of the programme was attractive to me	(34)	21
Former teachers encouraged me to enrol on this programme	((4))	(3)
This programme was the most appropriate within a reasonable distance from my home	((12))	23

*Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

*( ) n is less than 10, (( )) n is less than 5*

<sup>xxx</sup> *Factors influencing students' programme choice, by VET structures & employment/programme sector in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<b>Industry</b>		
The programme offered good job prospects	51	63
My previous examination grades prevented me being able to enrol on more preferable programmes	(6)	5
My parents suggested I enrol on this programme	17	10
The occupation(s) related to the programme appealed to me	67	65
The programme provides a good foundation for further qualifications / education	56	64
My friends have chosen to undertake the same programme	(6)	7
The reputation of the programme was attractive to me	32	23
Former teachers encouraged me to enrol on this programme	(8)	(3)
This programme was the most appropriate within a reasonable distance from my home	15	16
<b>Service</b>		
The programme offered good job prospects	34	34
My previous examination grades prevented me being able to enrol on more preferable programmes	17	6
My parents suggested I enrol on this programme	(9)	10
The occupation(s) related to the programme appealed to me	39	53
The programme provides a good foundation for further qualifications / education	30	56
My friends have chosen to undertake the same programme	13	12
The reputation of the programme was attractive to me	27	23
Former teachers encouraged me to enrol on this programme	(9)	5
This programme was the most appropriate within a reasonable distance from my home	16	24

*Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

*( ) n is less than 10, (()) n is less than 5*

xxxi *Factors influencing students' programme choice, by VET structures & parents employment status in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Part-time/temporarily/not employed</i>		
The programme offered good job prospects	37	43
My previous examination grades prevented me being able to enrol on more preferable programmes	17	(5)
My parents suggested I enrol on this programme	(14)	9
The occupation(s) related to the programme appealed to me	46	62
The programme provides a good foundation for further qualifications / education	42	63
My friends have chosen to undertake the same programme	((6))	13
The reputation of the programme was attractive to me	30	23
Former teachers encouraged me to enrol on this programme	(10)	(4)
This programme was the most appropriate within a reasonable distance from my home	17	24
<i>Full-time</i>		
The programme offered good job prospects	48	46
My previous examination grades prevented me being able to enrol on more preferable programmes	10	5
My parents suggested I enrol on this programme	12	10
The occupation(s) related to the programme appealed to me	59	56
The programme provides a good foundation for further qualifications / education	48	58
My friends have chosen to undertake the same programme	10	8
The reputation of the programme was attractive to me	29	23
Former teachers encouraged me to enrol on this programme	(8)	4
This programme was the most appropriate within a reasonable distance from my home	14	19

Question: A4 How important were the following aspects for you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

( ) n is less than 10, (( )) n is less than 5

xxxii *Percentage of students considering alternative programmes, by VET structures*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
No, I didn't considered any alternative programme	27	22
I was considering at least one other alternative programme	73	78

Question: A6 Did you consider any alternative programme when you were selecting your current one?

xxxiii *Percentage of students considering alternative programmes, by VET structures & Parents Education*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Primary and lower secondary education	84	66
Upper secondary and non-tertiary education	76	77
Tertiary education	(38)	80

Question: A6 Did you consider any alternative programme when you were selecting your current one? Presented answers 2, 3, 4 and 5 on a scale from 1="No, I didn't consider any alternative programme", 2="I was considering one other alternative programme" to 5="I was considering more than three alternative programmes"

( ) n is less than 10, (( )) n is less than 5

<sup>xxxiv</sup> *Students spending time in school, by VET structures & gender in hours*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Male	33.1	34.2
Female	28.5	34.1

Question: B3 How many school hours per week do you spend at school?

*Students spending time in school, by VET structures & programme orientation in hours*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Industry	32.1	34.3
Service	31.5	34.1

Question: B3 How many school hours per week do you spend at school?

<sup>xxxv</sup> *Hours students spend learning outside school, by VET structures & SES in hours*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Below average	(16)	39
Average	23	36
Above average	((12))	40

Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)? Presented answers 3, 4, 5, 6, 7 on a scale from 1="No time at all", 2="Up to two hours", 3="Up to four hours" to 7="More than sixteen hours"

() n is less than 10, (( )) n is less than 5

xxxvi *Students' learning incentives towards learning, by VET structures in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Industry</i>		
I strive for the highest possible marks.	31	31
It is important for me to fully understand what I have to do/learn.	48	49
I want to make a good impression on my teachers by achieving good grades.	21	22
I want to make a good impression on potential employers by achieving good grades.	42	34
I want to keep up with my fellow pupils.	18	14
I enjoy learning.	(7)	7
I am interested in practical subjects.	63	66
I am interested in general subjects (e.g. maths, foreign language)	19	17
<i>Service</i>		
I strive for the highest possible marks.	34	40
It is important for me to fully understand what I have to do/learn.	42	57
I want to make a good impression on my teachers by achieving good grades.	23	21
I want to make a good impression on potential employers by achieving good grades.	32	41
I want to keep up with my fellow pupils.	14	14
I enjoy learning.	(7)	7
I am interested in practical subjects.	43	56
I am interested in general subjects (e.g. maths, foreign language)	15	22

*Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*( ) n is less than 10, (()) n is less than 5*

xxxvii *Students' learning incentives towards learning, by VET Structures and gender in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<b>Male</b>		
I strive for the highest possible marks.	32	29
It is important for me to fully understand what I have to do/learn.	48	45
I want to make a good impression on my teachers by achieving good grades.	22	22
I want to make a good impression on potential employers by achieving good grades.	41	33
I want to keep up with my fellow pupils.	20	14
I enjoy learning.	(6)	9
I am interested in practical subjects.	62	61
I am interested in general subjects (e.g. maths, foreign language)	18	17
<b>Female</b>		
I strive for the highest possible marks.	31	44
It is important for me to fully understand what I have to do/learn.	39	62
I want to make a good impression on my teachers by achieving good grades.	22	20
I want to make a good impression on potential employers by achieving good grades.	31	44
I want to keep up with my fellow pupils.	(9)	15
I enjoy learning.	(9)	5
I am interested in practical subjects.	35	58
I am interested in general subjects (e.g. maths, foreign language)	(14)	23

Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

( ) n is less than 10, (()) n is less than 5

xxxviii *Students who work, by VET structures & where you live in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Coutry village or a farm	68	60
Town or small city	65	63
Big city or the suburbs	77	67

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

*Students who work, by VET structures & gender in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Male	71	64
Female	65	61

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

xxxix *Students who work, by VET structures & parents education in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Primary and lower secondary education	72	69
Upper secondary and non-tertiary education	70	62
Tertiary education	79	62

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

*Students who work, by VET structures & socio-economic status in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Below average	80	63
Average	70	64
Above average	63	57

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

*Students who work, by VET structures & school success in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Low grades	69	65
High grades	70	60

Question: C6a Have you worked for payment during the last year outside your programme (e.g. work that is not part of the completion of the programme)? Presented answers 1 and 2 on a scale 1="Yes, I work regularly," 2="Yes, but I only work during the holidays" and 3="No"

<sup>xi</sup> *Students' satisfaction with the current programme, by VET structures in percent*

Secondary vocational education (3-year)	Secondary technical education (4-year)
44	45

Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all, I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

*Satisfaction with the current programme, by VET structures & programme orientation in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Industry	56	49
Service	28	43

Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all, I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

<sup>xli</sup> *Percentage of students able to manage occupational tasks to a large extent, by VET structures & programme orientation*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Industry	51	57
Service	46	58

*Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"*

*Percentage of students able to manage occupational tasks to a large extent, by VET structures & gender*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Male	50	56
Female	44	59

*Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently Presented answers on a scale from 1="Poor" to 5="Excellent"*

*Percentage of students able to manage occupational tasks to a large extent, by VET structures & parents education*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Primary and lower secondary education	(28)	57
Upper secondary and non-tertiary education	50	60
Tertiary education	68	55

*Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently Presented answers on a scale from 1="Poor" to 5="Excellent"*

*( ) n is less than 10, (()) n is less than 5*

*Percentage of students able to manage occupational tasks to a large extent, by VET structures & socio-economic status*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Below average	58	61
Average	47	59
Above average	54	61

*Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently Presented answers on a scale from 1="Poor" to 5="Excellent"*

*Percentage of students able to manage occupational tasks to a large extent, by VET structures & school success*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Low grades	43	52
High grades	61	66

*Question: E1a\_1 Please assess your current level of these abilities. Being able to manage occupational tasks independently Presented answers on a scale from 1="Poor" to 5="Excellent"*

<sup>xlii</sup> *Percentage of VET students who acquired competencies overall to a large extent, by VET structures and school success*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Low grades	19	26
High grades	40	37

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

*Percentage of VET students who acquired competencies overall to a large extent, by VET structures & programme orientation*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Industry	29	30
Service	20	30

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

*Percentage of VET students who acquired competencies overall to a large extent, by VET structures & gender*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Male	25	29
Female	25	31

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

*Percentage of VET students who acquired competencies overall to a large extent, by VET structures & parents education*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Primary and lower secondary education	((23))	32
Upper secondary and non-tertiary education	26	31
Tertiary education	(30)	29

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

( ) n is less than 10, (( )) n is less than 5

*Percentage of VET students who acquired competencies overall to a large extent, by VET structures & socio-economic status*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
Below average	26	26
Average	25	32
Above average	((17))	31

Question: E1b Overall, to what extent does your current programme prepare you for these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

( ) n is less than 10, (( )) n is less than 5

xliii *Students' professional goals, by VET structures & programme orientation in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<b>Industry</b>		
Obtaining solid occupational proficiencies	56	63
Receiving a high income	49	67
Gaining job security	48	55
Having responsibility at work	55	55
Having opportunities to learn new things at work	56	64
Undertaking interesting tasks in the workplace	65	69
Having a job that makes me happy	68	76
Having a good relationship with colleagues	76	82
Advancing to a high level of status in society	62	72
Having enough spare-time to do other things in life	74	79
Making and maintaining relationships with others (e.g. family and friends)	80	80
<b>Service</b>		
Obtaining solid occupational proficiencies	39	58
Receiving a high income	47	69
Gaining job security	42	61
Having responsibility at work	47	57
Having opportunities to learn new things at work	58	62
Undertaking interesting tasks in the workplace	54	65
Having a job that makes me happy	61	81
Having a good relationship with colleagues	72	85
Advancing to a high level of status in society	66	74
Having enough spare-time to do other things in life	64	80
Making and maintaining relationships with others (e.g. family and friends)	62	83

*Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*( ) n is less than 10, (()) n is less than 5*

*Students' professional goals, by VET structures & where you live in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Coutry village or a farm</i>		
Obtaining solid occupational proficiencies	55	64
Receiving a high income	49	71
Gaining job security	51	63
Having responsibility at work	51	61
Having opportunities to learn new things at work	60	66
Undertaking interesting tasks in the workplace	64	67
Having a job that makes me happy	65	83
Having a good relationship with colleagues	75	88
Advancing to a high level of status in society	63	75
Having enough spare-time to do other things in life	70	82
Making and maintaining relationships with others (e.g. family and friends)	74	85
<i>Town or small city</i>		
Obtaining solid occupational proficiencies	31	59
Receiving a high income	41	66
Gaining job security	30	57
Having responsibility at work	57	51
Having opportunities to learn new things at work	57	58
Undertaking interesting tasks in the workplace	53	68
Having a job that makes me happy	63	79
Having a good relationship with colleagues	70	80
Advancing to a high level of status in society	64	72
Having enough spare-time to do other things in life	61	81
Making and maintaining relationships with others (e.g. family and friends)	71	82
<i>Big city or the suburbs</i>		
Obtaining solid occupational proficiencies	41	54
Receiving a high income	51	63
Gaining job security	43	50
Having responsibility at work	47	51
Having opportunities to learn new things at work	44	63
Undertaking interesting tasks in the workplace	54	64
Having a job that makes me happy	64	71
Having a good relationship with colleagues	74	78
Advancing to a high level of status in society	67	70
Having enough spare-time to do other things in life	77	73
Making and maintaining relationships with others (e.g. family and friends)	66	74

Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

( ) n is less than 10, (()) n is less than 5

xliv *Students' professional goals, by VET structures and parents' education in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Primary and lower secondary education</i>		
Obtaining solid occupational proficiencies	66	66
Receiving a high income	(38)	65
Gaining job security	(49)	57
Having responsibility at work	72	62
Having opportunities to learn new things at work	(56)	60
Undertaking interesting tasks in the workplace	66	57
Having a job that makes me happy	78	76
Having a good relationship with colleagues	79	88
Advancing to a high level of status in society	57	66
hHaving enough spare-time to do other things in life	79	71
Making and maintaining relationships with others (e.g. family and friends)	73	68
<i>Upper secondary and non-tertiary education</i>		
Obtaining solid occupational proficiencies	43	63
Receiving a high income	46	70
Gaining job security	42	61
Having responsibility at work	50	57
Having opportunities to learn new things at work	58	63
Undertaking interesting tasks in the workplace	57	66
Having a job that makes me happy	62	79
Having a good relationship with colleagues	70	84
Advancing to a high level of status in society	63	74
having enough spare-time to do other things in life	64	81
Making and maintaining relationships with others (e.g. family and friends)	68	84
<i>Tertiary education</i>		
Obtaining solid occupational proficiencies	60	55
Receiving a high income	65	67
Gaining job security	57	57
Having responsibility at work	47	56
Having opportunities to learn new things at work	61	64
Undertaking interesting tasks in the workplace	80	71
Having a job that makes me happy	80	84
Having a good relationship with colleagues	92	86
Advancing to a high level of status in society	80	77
hHaving enough spare-time to do other things in life	88	81
Making and maintaining relationships with others (e.g. family and friends)	88	81

Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

( ) n is less than 10, (()) n is less than 5

<sup>xlv</sup> *Students' professional goals, by VET structures and socio-economic status in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Below average</i>		
Obtaining solid occupational proficiencies	53	58
Receiving a high income	52	75
Gaining job security	44	73
Having responsibility at work	51	59
Having opportunities to learn new things at work	55	71
Undertaking interesting tasks in the workplace	75	70
Having a job that makes me happy	75	85
Having a good relationship with colleagues	79	90
Advancing to a high level of status in society	76	80
Having enough spare-time to do other things in life	78	85
Making and maintaining relationships with others (e.g. family and friends)	77	84
<i>Average</i>		
Obtaining solid occupational proficiencies	47	60
Receiving a high income	49	68
Gaining job security	50	58
Having responsibility at work	54	56
Having opportunities to learn new things at work	61	62
Undertaking interesting tasks in the workplace	56	65
Having a job that makes me happy	68	79
Having a good relationship with colleagues	79	82
Advancing to a high level of status in society	68	72
Having enough spare-time to do other things in life	76	77
Making and maintaining relationships with others (e.g. family and friends)	78	82
<i>Above average</i>		
Obtaining solid occupational proficiencies	(35)	66
Receiving a high income	50	69
Gaining job security	(36)	52
Having responsibility at work	(35)	58
Having opportunities to learn new things at work	50	67
Undertaking interesting tasks in the workplace	53	72
Having a job that makes me happy	49	82
Having a good relationship with colleagues	58	87
Advancing to a high level of status in society	(41)	78
Having enough spare-time to do other things in life	58	87
Making and maintaining relationships with others (e.g. family and friends)	63	88

*Question: D1 To what extent do you agree with the following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

<sup>xlvi</sup> *Sectors students want to work in, by VET structures and residency in percent*

	Secondary vocational education (3-year)	Secondary technical education (4-year)
<i>Coutry village or a farm</i>		
Industry (e.g. producing industry, steel, motor, oil)	25	17
Services (e.g. nursing, policing, hairdressing)	42	45
Trade (e.g. banking, financing, business)	21	28
Agriculture, forestry and fishery	19	10
Public administration (e.g. local government, education)	8	22
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((2))	8
Other	18	18
<i>Town or small city</i>		
Industry (e.g. producing industry, steel, motor, oil)	(17)	15
Services (e.g. nursing, policing, hairdressing)	48	47
Trade (e.g. banking, financing, business)	(18)	34
Agriculture, forestry and fishery	((7))	9
Public administration (e.g. local government, education)	(18)	22
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((5))	14
Other	(22)	17
<i>Big city or the suburbs</i>		
Industry (e.g. producing industry, steel, motor, oil)	(25)	13
Services (e.g. nursing, policing, hairdressing)	40	47
Trade (e.g. banking, financing, business)	30	31
Agriculture, forestry and fishery	((3))	(6)
Public administration (e.g. local government, education)	((7))	17
Non-governmental organisation (e.g. charities, not-for-profit organisations)	((0))	10
Other	(23)	23

Question: D5 Which sector would you like to work in the most?

() n is less than 10, (( )) n is less than 5

<sup>i</sup> *Table: Students' place of birth, by country in percentage.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
In own country	96	96	84	99	98	96	95
In other country	4	4	16	1	2	4	5

Question: G3a Where were you born?

<sup>xlviii</sup> *Table: Percentage of students enrolled in industry and service sector programmes, by country.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Industry	42	31	56	34	56	42	5
Service	58	69	44	66	44	58	95

Question: B2a What is the title of the programme you are enrolled on?

<sup>xlix</sup> Table: Percentages of at least one of parents born in other country, by country and socio-economic status.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Parents in country</i>							
Below average	15	13	39	28	27	18	8
Average	56	57	53	58	61	60	75
Above average	29	30	7	14	11	22	17
<i>Parents other country</i>							
Below average	13	22	44	33	29	30	10
Average	68	61	49	52	52	52	63
Above average	19	16	7	15	19	18	27

Question: G14. Which of the description below comes closest to how you feel about your family's income?

<sup>l</sup> Table: Parents' employment status by country in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Below average (Father employment)</i>							
Full-time	83	79	66	66	51	77	78
Part-time/temporarily	7	12	28	24	27	11	14
Not employed	10	9	7	9	22	11	9
<i>Below average (Mother employment)</i>							
Full-time	45	42	34	62	43	74	59
Part-time/temporarily	35	42	43	20	26	12	25
Not employed	20	15	23	18	31	14	16
<i>Average (Father employment)</i>							
Full-time	90	88	72	73	60	80	75
Part-time/temporarily	6	6	17	18	23	8	10
Not employed	4	6	11	8	17	12	15
<i>Average (Mother employment)</i>							
Full-time	48	40	39	70	52	72	48
Part-time/temporarily	36	43	31	15	23	11	24
Not employed	16	17	29	15	25	18	28
<i>Above average (Father employment)</i>							
Full-time	90	91	80	83	68	84	87
Part-time/temporarily	3	5	12	8	20	10	4
Not employed	7	4	8	9	11	6	9
<i>Above average (Mother employment)</i>							
Full-time	51	37	51	76	61	84	58
Part-time/temporarily	35	48	20	9	25	6	25
Not employed	14	15	29	15	14	10	16

Question: G9 What is the employment status of your parents?

*ii Table: Parents' employment status, by country and parents' education*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
<i>High education parents (Father employment)</i>						
Full-time	88	90	78	78	64	78
Part-time/temporarily	8	6	16	17	23	12
Not employed	4	4	6	5	12	10
<i>High education parents (Mother employment)</i>						
Full-time	56	40	44	73	59	79
Part-time/temporarily	34	47	38	18	23	12
Not employed	10	13	18	9	18	9
<i>Low education parents (Father employment)</i>						
Full-time	89	88	63	69	53	80
Part-time/temporarily	5	7	26	20	23	9
Not employed	6	5	11	11	24	12
<i>Low education parents (Mother employment)</i>						
Full-time	46	41	34	63	44	72
Part-time/temporarily	37	44	36	17	24	11
Not employed	17	15	30	20	32	17

Question: G8 What is the 'highest level of schooling' completed by your father / mother?

iii Table: Factors affecting students' decision making about the programme, by countries and socio-economic status in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Below average SES</b>							
The programme offered good job prospects	<b>77</b>	<b>55</b>	<b>36</b>	<b>52</b>	<b>30</b>	<b>44</b>	<b>66</b>
My previous examination grades prevented me being able to enrol on more preferable programmes	4	8	9	13	10	10	14
My parents suggested I enrol on this programme	13	11	12	19	12	7	22
The occupation(s) related to the programme appealed to me	<b>71</b>	<b>70</b>	<b>30</b>	36	<b>43</b>	<b>54</b>	<b>63</b>
The programme provides a good foundation for further qualifications / education	<b>82</b>	<b>77</b>	<b>47</b>	<b>52</b>	<b>47</b>	<b>50</b>	<b>66</b>
My friends have chosen to undertake the same programme	22	17	28	26	16	10	18
The reputation of the programme was attractive to me	46	39	27	31	27	28	57
Former teachers encouraged me to enrol on this programme	9	13	13	6	6	6	29
This programme was the most appropriate within a reasonable distance from my home	43	36	16	<b>40</b>	20	18	54
<b>Average SES</b>							
The programme offered good job prospects	<b>81</b>	<b>63</b>	<b>30</b>	<b>52</b>	<b>35</b>	<b>46</b>	<b>73</b>
My previous examination grades prevented me being able to enrol on more preferable programmes	3	8	7	10	9	6	13
My parents suggested I enrol on this programme	13	13	11	20	15	11	14
The occupation(s) related to the programme appealed to me	<b>71</b>	<b>73</b>	<b>30</b>	<b>39</b>	<b>48</b>	<b>59</b>	<b>75</b>
The programme provides a good foundation for further qualifications / education	<b>85</b>	<b>79</b>	<b>52</b>	<b>57</b>	<b>54</b>	<b>55</b>	<b>74</b>
My friends have chosen to undertake the same programme	20	16	27	18	18	9	13
The reputation of the programme was attractive to me	50	43	28	33	30	23	60
Former teachers encouraged me to enrol on this programme	6	14	13	6	6	5	17
This programme was the most appropriate within a reasonable distance from my home	36	36	15	35	19	21	54
<b>Above average SES</b>							
The programme offered good job prospects	<b>80</b>	<b>67</b>	<b>34</b>	<b>53</b>	<b>40</b>	<b>44</b>	<b>71</b>
My previous examination grades prevented me being able to enrol on more preferable programmes	2	6	6	7	9	5	12
My parents suggested I enrol on this programme	17	11	11	15	16	9	15
The occupation(s) related to the programme appealed to me	<b>69</b>	<b>75</b>	<b>39</b>	<b>38</b>	<b>35</b>	<b>59</b>	<b>80</b>
The programme provides a good foundation for further qualifications / education	<b>84</b>	<b>84</b>	<b>52</b>	<b>57</b>	<b>62</b>	<b>58</b>	<b>72</b>
My friends have chosen to undertake the same programme	18	17	12	17	15	9	12
The reputation of the programme was attractive to me	45	38	21	31	29	21	67
Former teachers encouraged me to enrol on this programme	9	14	12	5	6	3	20
This programme was the most appropriate within a reasonable distance from my home	36	34	15	<b>38</b>	14	15	48

Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

<sup>iii</sup> Table: Factors affecting students' decision making about the programme, by countries and school success in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Low grades</b>							
The programme offered good job prospects	<b>76</b>	<b>62</b>	<b>29</b>	<b>54</b>	<b>31</b>	<b>44</b>	<b>63</b>
My previous examination grades prevented me being able to enrol on more preferable programmes	3	9	9	11	10	8	13
My parents suggested I enrol on this programme	17	13	11	20	13	11	15
The occupation(s) related to the programme appealed to me	<b>67</b>	<b>68</b>	<b>30</b>	<b>38</b>	<b>43</b>	<b>55</b>	<b>66</b>
The programme provides a good foundation for further qualifications / education	<b>83</b>	<b>77</b>	<b>44</b>	<b>55</b>	<b>49</b>	<b>54</b>	<b>66</b>
My friends have chosen to undertake the same programme	26	19	28	21	16	9	15
The reputation of the programme was attractive to me	49	41	28	30	27	24	57
Former teachers encouraged me to enrol on this programme	8	12	11	6	5	5	18
This programme was the most appropriate within a reasonable distance from my home	37	37	14	36	18	20	49
<b>High grades</b>							
The programme offered good job prospects	<b>80</b>	<b>70</b>	<b>39</b>	<b>55</b>	<b>38</b>	<b>47</b>	<b>77</b>
My previous examination grades prevented me being able to enrol on more preferable programmes	3	4	6	6	6	6	13
My parents suggested I enrol on this programme	11	10	14	13	15	10	14
The occupation(s) related to the programme appealed to me	<b>74</b>	<b>77</b>	<b>38</b>	<b>49</b>	<b>45</b>	<b>60</b>	<b>78</b>
The programme provides a good foundation for further qualifications / education	<b>85</b>	<b>80</b>	<b>56</b>	<b>63</b>	<b>54</b>	<b>59</b>	<b>74</b>
My friends have chosen to undertake the same programme	18	13	25	19	15	9	12
The reputation of the programme was attractive to me	48	39	27	48	31	25	61
Former teachers encouraged me to enrol on this programme	7	13	17	9	5	5	20
This programme was the most appropriate within a reasonable distance from my home	35	36	16	31	17	17	54

Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

<sup>liv</sup> Table: Importance of 'My friends have chosen to undertake the same programme', by country and school success in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Low grades	26	19	28	21	16	9	15
High grades	18	13	25	19	15	9	12

Question: A4\_6 How important were the following aspects to you when you were choosing your current programme? My friends have chosen to undertake the same programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

*Table: Importance of 'My friends have chosen to undertake the same programme', by country and socio-economic status in percentage.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Below average	22	17	28	26	16	10	18
Average	20	16	27	18	18	9	13
Above average	18	17	12	17	15	9	12

*Question: A4\_6 How important were the following aspects to you when you were choosing your current programme? My friends have chosen to undertake the same programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

*iv Table: Factors affecting students' decision making about the programme, by countries and parents' education in percentage.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
<i>High education parents</i>						
The programme offered good job prospects	<b>80</b>	<b>63</b>	<b>27</b>	<b>51</b>	<b>35</b>	<b>44</b>
My previous examination grades prevented me being able to enrol on more preferable programmes	1	6	9	12	9	6
My parents suggested I enrol on this programme	13	17	14	19	17	12
The occupation(s) related to the programme appealed to me	<b>67</b>	<b>67</b>	<b>27</b>	<b>43</b>	<b>46</b>	<b>55</b>
The programme provides a good foundation for further qualifications / education	<b>83</b>	<b>80</b>	<b>45</b>	<b>57</b>	<b>56</b>	<b>55</b>
My friends have chosen to undertake the same programme	23	18	<b>29</b>	21	18	13
The reputation of the programme was attractive to me	44	35	24	33	31	22
Former teachers encouraged me to enrol on this programme	8	13	12	6	6	3
This programme was the most appropriate within a reasonable distance from my home	33	32	17	34	18	21
<i>Low education parents</i>						
The programme offered good job prospects	<b>81</b>	<b>66</b>	<b>33</b>	<b>54</b>	<b>34</b>	<b>45</b>
My previous examination grades prevented me being able to enrol on more preferable programmes	3	7	7	11	8	7
My parents suggested I enrol on this programme	13	10	11	22	11	11
The occupation(s) related to the programme appealed to me	<b>73</b>	<b>75</b>	<b>34</b>	<b>38</b>	<b>44</b>	<b>57</b>
The programme provides a good foundation for further qualifications / education	<b>86</b>	<b>80</b>	<b>50</b>	<b>56</b>	<b>49</b>	<b>56</b>
My friends have chosen to undertake the same programme	19	17	26	21	16	8
The reputation of the programme was attractive to me	49	44	29	33	28	23
Former teachers encouraged me to enrol on this programme	7	12	11	7	4	6
This programme was the most appropriate within a reasonable distance from my home	37	38	14	<b>39</b>	17	18

*Question: A4 How important were the following aspects to you when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"*

<sup>iv</sup> Table: Information sources students used when deciding for programme by country and type of programme in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Less demanding</i>							
Teachers	7	7	<u>17</u>	17	6	8	<u>21</u>
Parents or family members	<u>42</u>	<u>41</u>	<u>22</u>	<u>30</u>	<u>18</u>	<u>24</u>	<u>27</u>
Friends or classmates	17	14	<u>21</u>	22	<u>12</u>	9	<u>28</u>
Job centre	10	17	8	10	4	9	5
Informative days / fair / open days at school	24	21	8	<u>33</u>	<u>12</u>	<u>33</u>	11
Online information and/or other public media (e.g. newspapers)	<u>26</u>	<u>43</u>	16	<u>26</u>	<u>24</u>	15	14
An aptitude test offered by an educational establishment	13	5	5	20	7	12	15
A previous internship or work placement (not asked in Slo)	<u>40</u>	<u>60</u>	16	13	6	NA	12
School counsellors or career advisors (not asked in Aus and Ger)	NA	NA	<u>17</u>	16	7	<u>17</u>	<u>21</u>
<i>More demanding</i>							
Teachers	9	17	18	12	5	7	<u>41</u>
Parents or family members	<u>38</u>	<u>39</u>	<u>23</u>	<u>29</u>	<u>19</u>	<u>21</u>	<u>32</u>
Friends or classmates	24	25	<u>22</u>	20	<u>10</u>	14	20
Job centre	2	12	9	8	3	6	4
Informative days / fair / open days at school	<u>65</u>	31	9	<u>26</u>	8	<u>41</u>	<u>28</u>
Online information and/or other public media (e.g. newspapers)	<u>29</u>	<u>34</u>	16	<u>27</u>	<u>20</u>	<u>23</u>	27
An aptitude test offered by an educational establishment	15	6	11	15	9	10	13
A previous internship or work placement (not asked in Slo)	3	<u>33</u>	<u>19</u>	12	5	NA	13
School counsellors or career advisors (not asked in Aus and Ger)	NA	NA	<u>19</u>	9	5	13	20

Question: A5 How important were the following information sources when you were choosing your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

<sup>ivii</sup> Table: Students spending time in school, by country and gender in hours per week.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Male	37.6	24.9	24.3	33.8	30.5	33.8	20.9
Female	33.4	23.3	25.5	34.6	29.3	33.4	22.2

Question: B3 How many school hours per week do you spend at school?

<sup>iviii</sup> Table: Students spending time in school, by country and level of education in hours per week.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
Primary and lower secondary education	32.0	23.1	23.5	34.6	32.1	34.4
Upper secondary and non-tertiary education	35.6	25.1	25.3	34.1	29.6	34.0
Tertiary education	35.2	25.9	24.0	34.0	30.2	33.5

Question: B3 How many school hours per week do you spend at school?

*lix Table: Students spending time in school, by country and socio-economic status in hours per week.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Below average	36.9	23.1	24.2	33.8	29.8	33.0	19.5
Average	35.0	23.1	24.9	34.0	29.8	34.3	22.0
Above average	35.9	25.7	27.5	34.1	31.0	33.9	20.1

Question: B3 How many school hours per week do you spend at school?

*lx Table: Students spending time in school, by country and type of programme in hours per week.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Less demanding	34.5	18.7	22.7	33.5	30.1	31.8	25.6
More demanding	36.2	30.7	27.2	34.3	29.7	34.2	19.0

Question: B3 How many school hours per week do you spend at school?

*lxi Table: Students spending time studying outside school, by country and type of programme in hours per week.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Less demanding</i>							
No time at all	16	24	24	12	25	37	53
Up to two hours	27	45	44	40	44	43	22
Up to four hours	25	21	15	27	18	14	10
Up to eight hours	20	7	9	14	8	3	12
Up to twelve hours	7	2	4	5	3	1	0
Up to sixteen hours	3	0	2	1	1	1	1
More than sixteen hours	2	1	2	1	1	0	2
<i>More demanding</i>							
No time at all	6	15	31	12	30	21	6
Up to two hours	20	35	38	41	41	43	20
Up to four hours	28	26	12	22	16	22	32
Up to eight hours	27	17	13	14	8	9	26
Up to twelve hours	12	5	4	5	2	3	9
Up to sixteen hours	4	1	1	2	1	2	2
More than sixteen hours	3	1	1	3	1	0	5

Question: C4 All in all, how much time in the average school week do you study outside school (e.g. homework or preparation for school)?

*lxii Table: Students' incentives towards learning, by countries and socio-economic status in percentage.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Below average</i>							
I strive for the highest possible marks.	61	54	23	41	35	31	77
It is important for me to fully understand what I have to do/learn.	70	66	48	57	41	48	81
I want to make a good impression on my teachers by achieving good grades.	35	35	30	38	27	26	75
I want to make a good impression on potential employers by achieving good grades.	73	76	43	52	34	36	86
I want to keep up with my fellow pupils.	45	41	18	35	44	14	69
I enjoy learning.	8	9	26	25	20	6	62
I am interested in practical subjects.	67	61	61	64	57	58	72
I am interested in general subjects (e.g. maths, foreign language)	20	19	14	23	27	18	29
<i>Average</i>							
I strive for the highest possible marks.	60	64	26	37	44	38	78
It is important for me to fully understand what I have to do/learn.	71	71	50	59	47	52	82
I want to make a good impression on my teachers by achieving good grades.	39	39	34	36	28	20	79
I want to make a good impression on potential employers by achieving good grades.	76	83	49	54	35	38	88
I want to keep up with my fellow pupils.	46	50	23	34	47	15	75
I enjoy learning.	8	9	27	24	26	7	68
I am interested in practical subjects.	68	70	68	65	64	59	83
I am interested in general subjects (e.g. maths, foreign language)	24	22	16	22	27	20	35
<i>Above average</i>							
I strive for the highest possible marks.	57	64	36	41	45	35	86
It is important for me to fully understand what I have to do/learn.	70	73	67	64	47	56	91
I want to make a good impression on my teachers by achieving good grades.	34	38	27	35	29	18	87
I want to make a good impression on potential employers by achieving good grades.	69	85	54	58	40	40	94
I want to keep up with my fellow pupils.	48	52	28	33	44	13	84
I enjoy learning.	13	14	30	33	30	7	83
I am interested in practical subjects.	69	69	64	67	65	60	91
I am interested in general subjects (e.g. maths, foreign language)	36	31	18	24	34	18	36

*Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"*

*lxiii* Table: Student's incentives towards learning, by countries & type of programme in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Less demanding</i>							
I strive for the highest possible marks.	73	62	30	41	41	32	65
It is important for me to fully understand what I have to do/learn.	77	69	54	65	45	45	83
I want to make a good impression on my teachers by achieving good grades.	43	37	33	50	27	22	76
I want to make a good impression on potential employers by achieving good grades.	77	80	47	60	34	38	85
I want to keep up with my fellow pupils.	45	49	21	42	45	16	65
I enjoy learning.	10	8	29	35	24	7	54
I am interested in practical subjects.	71	70	67	65	62	54	76
I am interested in general subjects (e.g. maths, foreign language)	26	22	15	28	29	17	26
<i>More demanding</i>							
I strive for the highest possible marks.	49	62	22	37	32	36	81
It is important for me to fully understand what I have to do/learn.	65	72	47	58	36	54	82
I want to make a good impression on my teachers by achieving good grades.	31	39	30	34	28	21	79
I want to make a good impression on potential employers by achieving good grades.	68	83	44	51	32	38	88
I want to keep up with my fellow pupils.	45	48	22	30	38	14	76
I enjoy learning.	9	14	24	24	18	7	70
I am interested in practical subjects.	66	67	63	64	50	60	83
I am interested in general subjects (e.g. maths, foreign language)	26	28	15	21	24	20	33

Question: C2 To what extent do you agree with the following characteristics that apply to your study behaviour? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

*lxiv* Table: Students spending time outside school<sup>lxiv</sup>, by countries & gender in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
<b>Male</b>						
Spending time with friends or peers (e.g. socialising)	79	83	87	90	81	81
Reading books	10	10	21	14	16	8
Watching television	57	64	66	57	64	58
Undertaking paid work (not related to your programme)	23	23	39	38	37	28
Exercising	51	62	60	46	64	54
Social networking	49	55	57	57	41	55
Surfing the Internet	55	60	62	59	59	60
Playing computer games	29	37	51	44	47	37
Undertaking voluntary work	17	18	16	14	14	16
Doing something creative	19	17	27	25	18	22
Caring for someone else	12	13	21	20	21	13
To commute from home to school (and back)	42	39	20	40	33	37
<b>Female</b>						
Spending time with friends or peers (e.g. socialising)	73	79	86	91	85	78
Reading books	17	22	28	28	35	18
Watching television	61	67	73	53	66	54
Undertaking paid work (not related to your programme)	20	23	26	25	30	25
Exercising	34	42	29	20	36	29
Social networking	55	53	63	63	46	58
Surfing the Internet	47	44	54	42	54	45
Playing computer games	7	6	18	10	16	8
Undertaking voluntary work	12	12	10	11	11	12
Doing something creative	21	20	26	31	29	17
Caring for someone else	22	24	30	30	34	22
To commute from home to school (and back)	41	44	19	42	33	34

Question: C5 How much time on an average day do you usually spend doing the following things? If you don't do certain things daily, please estimate how much time it is if you distribute on each day. Presented answers 3, 4, 5, 6 on a scale from 1="No time at all", 2="Up to one hour", 3="One hour until up to two hours" to 6="Four hours or more"

*lxv* Table: Students spending time outside school, by countries and programme type in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
<i>Less demanding</i>						
Spending time with friends or peers (e.g. socialising)	84	83	88	88	84	78
Reading books	12	12	23	22	23	7
Watching television	53	64	70	63	65	62
Undertaking paid work (not related to your programme)	28	16	32	41	33	37
Exercising	44	50	46	38	52	38
Social networking	49	53	57	60	43	58
Surfing the Internet	45	51	58	48	57	52
Playing computer games	19	21	34	31	33	26
Undertaking voluntary work	16	13	12	16	12	20
Doing something creative	16	16	25	33	21	15
Caring for someone else	21	16	25	33	25	21
To commute from home to school (and back)	41	41	18	49	31	37
<i>More demanding</i>						
Spending time with friends or peers (e.g. socialising)	70	77	88	91	76	81
Reading books	14	19	26	20	22	14
Watching television	63	66	67	54	64	54
Undertaking paid work (not related to your programme)	16	32	34	31	37	23
Exercising	43	55	50	33	61	43
Social networking	54	55	61	60	41	56
Surfing the Internet	56	53	60	51	58	52
Playing computer games	17	20	42	28	47	22
Undertaking voluntary work	13	20	14	11	19	12
Doing something creative	24	22	26	26	24	21
Caring for someone else	14	21	23	23	29	16
To commute from home to school (and back)	43	43	19	39	39	35

Question: C5 How much time on an average day do you usually spend doing the following things? If you don't do certain things daily, please estimate how much time it is if you distribute on each day. Presented answers 3, 4, 5, 6 on a scale from 1="No time at all", 2="Up to one hour", 3="One hour until up to two hours" to 6="Four hours or more"

*lxvi* Table: Students spending time outside school, by countries and socio-economic status in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
<i>Below average</i>						
Spending time with friends or peers (e.g. socialising)	81	83	84	89	82	80
Reading books	10	7	19	19	17	10
Watching television	67	71	72	59	68	60
Undertaking paid work (not related to your programme)	34	28	29	38	35	34
Exercising	54	51	49	32	53	38
Social networking	56	63	59	60	45	58
Surfing the Internet	51	57	59	49	54	50
Playing computer games	20	23	42	29	38	23
Undertaking voluntary work	17	14	13	13	12	19
Doing something creative	18	16	29	29	20	17
Caring for someone else	21	16	24	27	26	21
To commute from home to school (and back)	39	38	21	45	30	35
<i>Average</i>						
Spending time with friends or peers (e.g. socialising)	77	80	90	91	86	80
Reading books	11	15	27	19	23	12
Watching television	57	68	69	51	66	57
Undertaking paid work (not related to your programme)	19	21	38	30	34	26
Exercising	41	51	49	35	52	42
Social networking	51	53	61	60	42	56
Surfing the Internet	51	51	59	51	61	51
Playing computer games	17	19	36	26	35	21
Undertaking voluntary work	14	14	14	12	10	13
Doing something creative	19	17	24	25	21	18
Caring for someone else	16	17	25	25	23	16
To commute from home to school (and back)	40	41	19	41	32	36
<i>Above average</i>						
Spending time with friends or peers (e.g. socialising)	73	81	92	92	83	82
Reading books	18	20	33	21	36	16
Watching television	56	54	59	56	57	54
Undertaking paid work (not related to your programme)	19	21	22	24	35	21
Exercising	41	55	53	40	56	45
Social networking	47	51	54	63	42	57
Surfing the Internet	53	50	73	54	56	60
Playing computer games	21	21	36	25	32	23
Undertaking voluntary work	15	21	13	10	16	11
Doing something creative	25	22	35	32	27	26
Caring for someone else	14	21	30	19	29	18
To commute from home to school (and back)	45	44	18	33	30	39

Question: C5 How much time on an average day do you usually spend doing the following things? If you don't do certain things daily, please estimate how much time it is if you distribute on each day. Presented answers 3, 4, 5, 6 on a scale from 1="No time at all", 2="Up to one hour", 3="One hour until up to two hours" to 6="Four hours or more"

*lxvii* Table: Students spending time outside school, by countries and parents education in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
<i>Low education parents</i>						
Spending time with friends or peers (e.g. socialising)	76	83	89	92	84	81
Reading books	12	15	21	21	21	11
Watching television	59	65	69	57	66	59
Undertaking paid work (not related to your programme)	21	21	32	29	34	26
Exercising	41	50	45	30	52	39
Social networking	53	55	56	59	40	56
Surfing the Internet	52	52	56	47	57	50
Playing computer games	18	21	32	25	32	21
Undertaking voluntary work	14	16	12	11	9	14
Doing something creative	21	17	21	23	20	16
Caring for someone else	16	18	24	23	25	17
To commute from home to school (and back)	40	42	18	39	33	35
<i>High education parents</i>						
Spending time with friends or peers (e.g. socialising)	75	77	84	91	83	78
Reading books	19	17	28	19	27	17
Watching television	56	60	69	52	64	49
Undertaking paid work (not related to your programme)	21	26	38	34	35	24
Exercising	51	61	55	40	56	53
Social networking	48	50	65	60	45	58
Surfing the Internet	48	46	65	53	59	56
Playing computer games	19	19	47	31	39	25
Undertaking voluntary work	14	18	19	12	15	14
Doing something creative	20	22	37	31	24	30
Caring for someone else	16	17	25	25	26	18
To commute from home to school (and back)	45	38	24	41	31	39

Question: C5 How much time on an average day do you usually spend doing the following things? If you don't do certain things daily, please estimate how much time it is if you distribute on each day. Presented answers 3, 4, 5, 6 on a scale from 1="No time at all", 2="Up to one hour", 3="One hour until up to two hours" to 6="Four hours or more"

<sup>lxviii</sup> Table: Percentage of students undertaking paid employment by country and socio-economic status.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Below average</b>							
Yes, I work regularly.	36	30	31	12	6	12	49
Yes, but I only work during the holidays.	28	13	32	50	25	57	8
No	36	57	37	38	69	31	43
<b>Average</b>							
Yes, I work regularly.	21	25	28	11	5	14	30
Yes, but I only work during the holidays.	39	14	34	46	19	51	6
No	40	61	37	42	77	35	65
<b>Above average</b>							
Yes, I work regularly.	18	23	20	9	6	11	43
Yes, but I only work during the holidays.	43	15	37	37	16	48	8
No	38	62	43	54	78	42	49

Question: C6a Have you worked for payment during the last year outside your programme (eg. work that is not part of the completion of the programme)?

<sup>lxix</sup> Table: Percentage of students who agreed they are all in all satisfied with the programme, by country.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
Low grades	64	59	36	61	49	38
High grades	76	74	49	73	60	56

Question: B5\_10 Please indicate to what extent you agree with the following statements? All in all I am satisfied with the programme. Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

<sup>lxx</sup> Table: Percentage of VET students considering to leave current programme, by country and school success - not asked in the UK.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
Low grades	14	9	6	7	5	12
High grades	8	4	4	8	4	10

Question: B8 How often have you thought about leaving your current programme? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very often"

<sup>lxxi</sup> Table x: Students' school success, by country in percentage.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Low grades	35	59	67	90	71	60	51
High grades	65	41	33	10	29	40	49

Question: C1b What was your average final grade on your last report /school year in your current programme?  
UK only: Question: C1c How would you rate this final grade in comparison to other pupils in your class?

*lxxii* Table: Students' school success, by country and gender in percent.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
<i>Male</i>						
Low grades	38	61	73	95	79	69
High grades	62	39	27	5	21	31
<i>Female</i>						
Low grades	31	56	57	84	57	48
High grades	69	44	43	16	43	52

Question: C1b What was your average final grade on your last report /school year in your current programme?

*lxxiii* Table: Percentage of VET students who acquired certain competence to a large extent, by country and parents' education – no data for UK

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia
<i>Students with high education parents</i>						
Being able to manage occupational tasks independently	<b>79</b>	<b>80</b>	42	51	54	56
Being able to work as a team member	<b>84</b>	<b>86</b>	50	<b>63</b>	<b>66</b>	<b>73</b>
Being able to quickly familiarise myself with new tasks related to job occupations	<b>76</b>	<b>78</b>	<b>51</b>	<b>59</b>	<b>61</b>	62
Being able to perform well under pressure	73	68	47	44	52	48
Being able to communicate ideas and suggestions to others clearly	72	67	<b>52</b>	57	59	<b>63</b>
Being able to approach and engage with others with confidence (e.g. networking)	<b>76</b>	70	<b>56</b>	<b>61</b>	<b>64</b>	<b>67</b>
<i>Students low education parents</i>						
Being able to manage occupational tasks independently	<b>80</b>	<b>84</b>	48	51	53	<b>56</b>
Being able to work as a team member	<b>88</b>	<b>90</b>	<b>55</b>	<b>65</b>	<b>67</b>	<b>71</b>
Being able to quickly familiarise myself with new tasks related to job occupations	<b>77</b>	<b>78</b>	<b>58</b>	<b>55</b>	<b>60</b>	<b>61</b>
Being able to perform well under pressure	71	71	47	38	43	44
Being able to communicate ideas and suggestions to others clearly	70	64	<b>55</b>	51	47	52
Being able to approach and engage with others with confidence (e.g. networking)	73	73	<b>57</b>	<b>58</b>	<b>57</b>	<b>56</b>

Question: E1a The following question asks for your perception of certain skills and abilities which are listed below. Please assess your current level of these abilities. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

*lxiv* Table: Percentage of VET students who acquired certain competence, by country and socio-economic status.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Below average</i>							
Being able to manage occupational tasks independently	<b>78</b>	<b>80</b>	45	45	48	58	<b>73</b>
Being able to work as a team member	<b>89</b>	<b>82</b>	45	<b>59</b>	<b>65</b>	<b>73</b>	<b>77</b>
Being able to quickly familiarise myself with new tasks related to job occupations	71	<b>72</b>	<b>51</b>	<b>51</b>	<b>56</b>	<b>63</b>	<b>70</b>
Being able to perform well under pressure	69	68	45	38	47	42	55
Being able to communicate ideas und suggestions to others clearly	65	56	<b>52</b>	47	50	50	66
Being able to approach and engage with others with confidence (e.g. networking)	<b>73</b>	68	<b>53</b>	<b>54</b>	<b>58</b>	<b>60</b>	68
<i>Average</i>							
Being able to manage occupational tasks independently	<b>78</b>	<b>82</b>	47	51	53	56	<b>76</b>
Being able to work as a team member	<b>88</b>	<b>88</b>	<b>56</b>	<b>64</b>	<b>67</b>	<b>70</b>	<b>86</b>
Being able to quickly familiarize myself with new tasks related to job occupations	<b>76</b>	<b>76</b>	<b>57</b>	<b>58</b>	<b>60</b>	<b>61</b>	<b>77</b>
Being able to perform well under pressure	69	69	45	41	44	44	67
Being able to communicate ideas und suggestions to others clearly	68	61	54	53	52	56	73
Being able to approach and engage with others with confidence (e.g. networking)	73	69	<b>57</b>	<b>59</b>	<b>59</b>	<b>59</b>	74
<i>Above average</i>							
Being able to manage occupational tasks independently	<b>81</b>	<b>83</b>	43	57	60	<b>60</b>	<b>79</b>
Being able to work as a team member	<b>87</b>	<b>89</b>	56	<b>62</b>	<b>68</b>	<b>75</b>	<b>89</b>
Being able to quickly familiarize myself with new tasks related to job occupations	<b>77</b>	<b>78</b>	<b>69</b>	<b>66</b>	<b>68</b>	<b>68</b>	<b>84</b>
Being able to perform well under pressure	74	70	37	45	55	51	71
Being able to communicate ideas und suggestions to others clearly	72	66	<b>65</b>	56	54	57	74
Being able to approach and engage with others with confidence (e.g. networking)	73	73	<b>59</b>	<b>60</b>	<b>62</b>	59	71

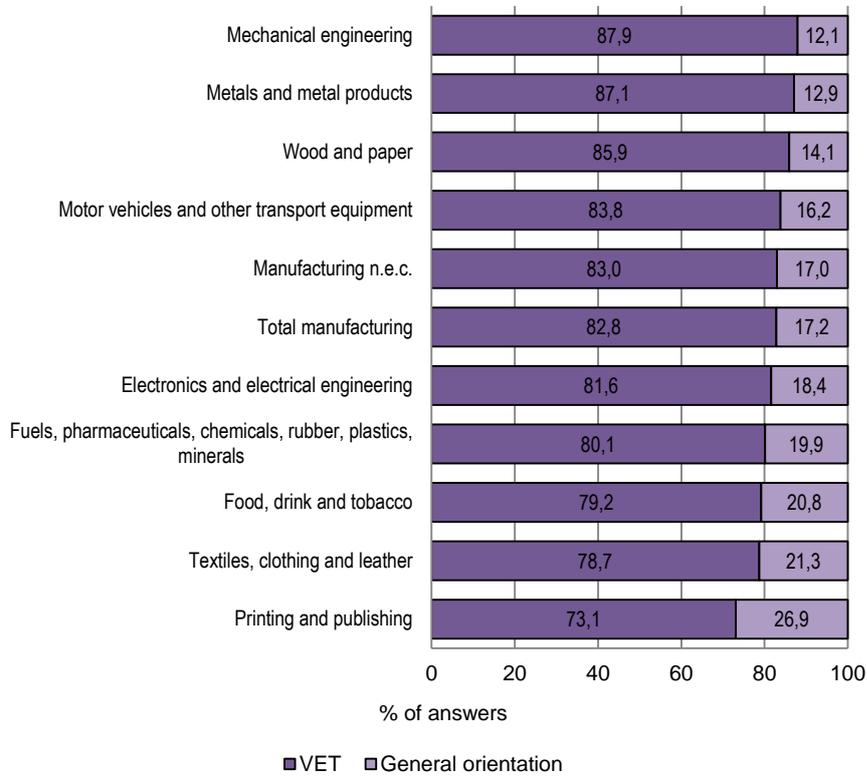
Question: E1a The following question asks for your perception of certain skills and abilities which are listed below. Please assess your current level of these abilities. Presented answers 4 and 5 on a scale from 1="Poor" to 5="Excellent"

*lxv* Table: Percentage of students who believe that their current programme prepared them well for surveyed competences all together, by country and gender.

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Male	63	67	43	37	20	28	61
Female	60	64	56	47	23	30	64

Question: E1b Overall, to what extent does your current programme prepare you to these activities? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Very"

*lxvii* Chart: Distribution of medium-level graduates working in detailed manufacturing sectors by educational orientation, 15-34 year-olds, EU-27+, 2009.



Source: CEDEFOP, European Centre for the Development of Vocational Training. 2012. From education to working life. The labour market outcomes of vocational education and training. Pg. 62

*lxvii* Table: Drivers of VET students for professional development, by country and gender in socio-economic strata

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<i>Below average</i>							
Obtaining solid occupational proficiencies	59	53	49	57	42	55	75
Receiving a high income	85	80	51	64	56	66	80
Gaining job security	93	90	49	65	63	61	80
Having responsibility at work	73	71	50	63	64	55	75
Having opportunities to learn new things at work	76	77	49	63	67	63	82
Undertaking interesting tasks in the workplace	84	81	44	56	56	69	80
Having a job that makes me happy	91	89	58	69	72	77	86
Having a good relationship with colleagues	90	88	58	64	73	85	88
Advancing to a high level of status in society	57	51	48	56	62	78	78
Having enough spare-time to do other things in life	81	75	37	54	60	82	78
Making and maintaining relationships with others (e.g. family and friends)	77	75	62	68	75	82	78
<i>Average</i>							
Obtaining solid occupational proficiencies	66	67	50	60	47	56	80
Receiving a high income	85	86	53	68	59	64	88
Gaining job security	94	95	53	70	69	56	86
Having responsibility at work	71	77	48	64	72	55	84
Having opportunities to learn new things at work	80	81	48	65	70	61	87
Undertaking interesting tasks in the workplace	89	85	45	61	58	62	85
Having a job that makes me happy	96	93	57	72	73	76	91
Having a good relationship with colleagues	94	95	60	69	75	80	88
Advancing to a high level of status in society	59	53	49	61	64	71	75
Having enough spare-time to do other things in life	84	79	39	60	60	76	76
Making and maintaining relationships with others (e.g. family and friends)	81	76	63	72	76	80	86
<i>Above average</i>							
Obtaining solid occupational proficiencies	75	75	68	69	47	61	93
Receiving a high income	79	80	69	67	59	67	86
Gaining job security	87	93	71	70	69	51	89
Having responsibility at work	77	74	60	69	73	55	91
Having opportunities to learn new things at work	83	80	60	70	73	64	94
Undertaking interesting tasks in the workplace	92	87	48	66	59	70	94
Having a job that makes me happy	97	96	70	79	78	77	96
Having a good relationship with colleagues	94	91	74	68	77	82	95
Advancing to a high level of status in society	54	49	47	61	64	73	72
Having enough spare-time to do other things in life	86	74	50	69	66	84	84
Making and maintaining relationships with others (e.g. family and friends)	78	74	74	76	75	85	92

Question: D1 How far do you agree with following statements concerning your professional and life goals? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"

<sup>lxxviii</sup> *Table: Students' preferences towards working in »services«, by country & gender in percentage.*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Male</b>							
Industry (e.g. producing industry, steel, motor, oil)	41	53	30	26	39	31	37
Services (e.g. nursing, policing, hairdressing)	25	25	20	30	21	35	33
Trade (e.g. banking, financing, business)	21	18	23	33	31	28	34
Agriculture, forestry and fishery	16	8	11	18	14	16	4
Public administration (e.g. local government, education)	12	15	8	14	9	13	15
Non-governmental organisation (e.g. charities, not-for-profit organisations)	2	4	4	5	4	6	3
Other	17	18	24	15	11	19	6
<b>Female</b>							
Industry (e.g. producing industry, steel, motor, oil)	11	17	4	4	14	3	15
Services (e.g. nursing, policing, hairdressing)	45	48	65	60	54	57	50
Trade (e.g. banking, financing, business)	32	21	12	40	33	27	30
Agriculture, forestry and fishery	5	5	3	5	2	2	3
Public administration (e.g. local government, education)	26	24	9	12	18	23	19
Non-governmental organisation (e.g. charities, not-for-profit organisations)	5	5	7	10	7	11	4
Other	18	21	18	15	9	17	6

Question: D5 Which sector would you like to work to the most?

<sup>lxxix</sup> *Table: Percentage of VET students who consider to continue schooling, by country and type of programme*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Less demanding	34	45	38	37	36	35	34
More demanding	50	54	40	40	32	52	54

Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

<sup>lxxx</sup> *Table: Percentage of VET students who consider to continue schooling, by country and socio-economic status*

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
Below average	29	42	32	32	34	39	51
Average	44	46	42	41	38	51	44
Above average	58	59	61	58	47	57	46

Question: D6 Do you plan to continue schooling or further education after your programme has ended (for example doing a specialised programme)? Presented answers 4 and 5 on a scale from 1="Definitely not" to 5="Definitely"

*bxxx* Table: Students' main drivers for continuing education, by countries and employment/programme sector in percentage

	Austria	Germany	Greece	Latvia	Lithuania	Slovenia	UK (England)
<b>Industry</b>							
Further education enables me to follow my professional interest	67	62	41	44	50	54	71
Further education enables me to gain a good qualification/education	83	80	41	65	59	67	75
Further education enables me to take on leadership role later on in life	70	70	38	61	42	59	71
Further education enables me to earn a high income later in life	83	83	58	71	62	68	82
Further education enables me to become an expert in my field	74	72	61	65	62	69	85
Further education enables me to enhance my career options	78	83	50	68	62	69	80
Further education enables me to postpone starting a full-time work	31	27	33	42	33	42	40
Further education enables me to experience a pupil exchange programme	18	17	23	34	30	29	42
Further education enables me to fulfil my parents expectations	27	29	32	45	37	39	56
<b>Service</b>							
Further education enables me to follow my professional interest	72	62	42	54	50	52	80
Further education enables me to gain a good qualification/education	85	85	47	73	64	63	85
Further education enables me to take on leadership role later on in life	70	69	40	65	44	53	68
Further education enables me to earn a high income later in life	80	78	53	69	61	61	85
Further education enables me to become an expert in my field	69	67	58	69	64	63	82
Further education enables me to enhance my career options	83	78	54	77	65	71	82
Further education enables me to postpone starting a full-time work	30	26	33	44	31	35	46
Further education enables me to experience a pupil exchange programme	29	20	19	42	33	30	44
Further education enables me to fulfil my parents expectations	26	28	22	35	32	37	45

Question: D8 This is about your opinion regarding further education (e.g. advanced training or studying). How far do you agree with the statements below about undertaking further education (or participate in further training)? Presented answers 4 and 5 on a scale from 1="Not at all" to 5="Completely"