



Republic of Croatia

Ministry of Science, Education and Sports



EDUCATION SECTOR DEVELOPMENT PLAN 2005 – 2010

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Education Sector Development Plan 2005 – 2010

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DEVELOPMENT PLAN
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Zagreb, 2005

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FOREWORD

The Century of Knowledge which we have entered, the globalization process, new scientific discoveries, new technologies and forms of communication, the time of interwoven, diverse and changing values are all factors which impact the education system as well.

Looking at education development trends in Europe and throughout the world, Croatia has also recognized the need to transform its education system to meet the new requirements.

The *Education Sector Development Plan 2005 – 2010*¹ is a strategic development document adopted by the Croatian Government on June 9, 2005. The plan is based on a comprehensive systemic educational framework and was discussed by numerous social experts, scientists and other partners over the past few years.

A particular strength of the document is its transparency regarding the needed improvements during the period of its implementation.

The aim of the *Development Plan* is to direct educational policy to improve the education system, so that it is a system that includes legal aspects, human resources, financial matters, scientific aspects and expertise. The educational system should provide education that aims to benefit all those participating in it as well as society as a whole. This collective effort should increase the quality of education that will cater to the needs of local culture, the economy and a society based on knowledge and democratic principles, and ensure the right to education for all. The starting point is to define the content and activities which would contribute to the development of a better quality, more accessible, more flexible and effective educational system that would create intellectual and working human capital as the key asset of the Croatian state.

The Croatian educational system provides educational services on the following levels: pre-school, primary, secondary and tertiary, and an adult education system. Special attention is given to the principle of lifelong learning with the aim of including adults and the unemployed in flexible educational and training programs to prepare them for active participation in the labor market.

We are faced today with major challenges which affect the development of the educational system: a declining population, changes in the economy aimed at manufacturing and the service industry, the need to rapidly acquire new knowledge, skills and competencies required in contemporary manufacturing and non-economic activities, the need for lifelong education, and the process of accession to the European Community.

¹ In the following text, the *Development Plan*.

Specific priority areas in the *Development Plan* through 2010 include:

- Improving teaching and learning in schools, developing knowledge and skills by training teachers and improving their social and monetary status;
- Improving working conditions in schools and upgrading school equipment;
- Developing the habit of lifelong learning, according to market needs;
- Increasing the use of information and communications technology;
- Strengthening the role of schools in preventing socially unacceptable behavior;
- Encouraging varied means of helping pupils with their learning and extra-curricular activities and creating an atmosphere which makes the school a learning community in which close and respectful relationships are built;
- Improving management of educational institutions and introducing a system of monitoring and external evaluating education;
- Rationalizing and decentralizing the educational system;
- Increasing direct support to regional development;
- Increasing family participation, the local community and other partners in improving the educational system;
- Innovative approaches to the educational process and harmonization with EU programs on all levels;
- Harmonizing the Croatian higher education system with the European system;
- Linking the higher education and science systems;
- Strengthening national and cultural values;
- Strengthening the awareness of belonging to the European cultural circle.

These and other activities should galvanize the quality of the overall educational system, make it accessible to all and improve the education and permanent professional training of teachers in Croatia.

The *Development Plan* will be implemented within the existing funding structure of the Government of the Republic of Croatia, supported by a loan from the World Bank, EU pre-accession funds for candidate countries and other sources. Therefore, it is of paramount importance for the preparedness of the state to increase funding for education in order to get closer to European standards. The Government's proposed measures to improve education and training, especially with regard to improving the educational infrastructure and adjusting secondary education so that it responds to the needs of young people, will require more efficient allocation and the rational use of financial resources.

The implementation of the *Development Plan* is based on the *Annual Development Plan (godišnji plan aktivnosti)*, developed by the *Ministry of Science, Education and Sports*, in order to conduct regular monitoring of the plan's implementation.

The evaluation of this *Development Plan* will be conducted in 2006 and 2009.

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1. INTRODUCTION

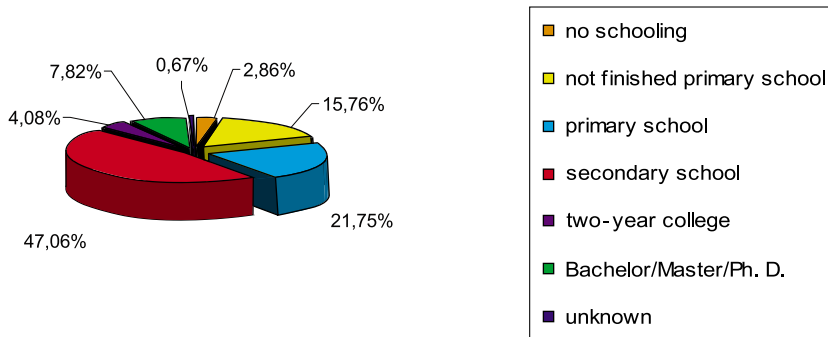
Taking into account the process of globalization and the stabilization process Croatia is undergoing, economic restructuring and the pressures of competition, demographic factors, as well as the need for modernization and the development of a knowledge-based society and economy, the need arises for effective changes in planning the development of the education system. To ensure continuity, new educational policies rely on preserving the fundamental values of the Croatian society and previous educational documents and successful practices, while also utilizing new guidelines and activities in order to develop the Croatian educational system in line with the state-of-the-art standards of Europe and the rest of the world.

The provision of educational services is still to a large extent in the jurisdiction of state and local authorities. However, as a result of democratic changes, private education institutions, training institutions, as well as the civil sector, have become parts of the educational process.

The level of education in Croatia is below the international average in many respects. Specifically, according to the 2001 census,¹ 2.86 percent of the population has not completed any form of schooling, 15.76 percent has not completed primary schooling, 21.75 percent of the population has only primary schooling, and 47.06 percent of the total population holds some form of secondary school education. Meanwhile, 4.08 percent of the population has completed two-year college programs, 7.82 percent of the population holds Bachelor/Master/Ph.D. degrees, while the level of education for 0.67 percent of the population is unknown. It is important to note that this data refer to all people older than 15.

¹ Central Bureau of Statistics, *Population census 2001*, <http://www.dzs.hr/Hrv/Popis%202001/popis20001.htm>.

Chart 1. The Percentage of the Population Over the Age of 15 According to the Level of Education Completed



Data on participation levels in the educational system range from an almost full inclusion rate of children in primary education to, according to European standards, a below-average participation rate in the tertiary education system. According to official data, participation in primary education is at 96.5 percent. Approximately 79.2 percent of primary school graduates enroll in secondary education, and approximately 69.5 percent of secondary school students complete their studies on time.

During the academic year 2000/2001, a total of 120,000 students, or 31 percent of youth aged 20 to 24, enrolled in tertiary education. According to official statistics, only 33 percent of the students completed their university studies and only 8 percent of the students graduated within the expected time.

A part of the legacy of the Yugoslav educational system is the multiple shift arrangement in schools. According to data of the *Ministry of Science, Education and Sports* for the school year 2004/2005, 25.45 percent of elementary schools have double-shifts, while 6.21 percent have triple-shifts. According to the same data, the proportion of high schools that have double-shifts is 76.24 percent.²

According to estimates by the *Ministry of Science, Education and Sports*, 82.5 percent of primary school pupils and 88.0 percent of secondary school pupils attend multiple shift schools. This is obviously an obstacle to developing schools as whole-day learning centers, and it also makes teachers' professional development in schools more difficult.

² See Table 4., p. 43.

Also, regional differences in the level of education of the population are most visible in the number of illiterate people in a certain region in comparison to the total illiteracy rate in Croatia. Specifically, counties such as Požega-Slavonija, Zadar, Šibenik-Knin, Vukovar-Srijem, Sisak-Moslavina and Lika-Senj that are at a below-average level of development have an illiteracy rate higher than 3 percent.

However, the total number of illiterate people is not much greater than in other countries. A much greater problem is the large number of adults who did not finish, or did not even start primary school, as well as a considerable number of people who have only completed a secondary school education. The high and long-term level of unemployment of those who have completed secondary education demands the re-examination of secondary education and its adjustment to the needs of the market.

In terms of the number of adults participating in primary school education, no systematically gathered data exist, but there are some on adult secondary education. For example, during the school year 2000/2001, 25,000 adults attended some type of verified secondary school program, of which around 90 percent of them are younger than 30.³ Approximately 11,000 participants earned certificates upon completion of training programs and additional training.

The quality of education is in principle guaranteed by a high standard of teacher training. It is therefore particularly important to pay attention to teachers' education and continuing professional development.

Table 1. The Structure of Teacher Training Levels in Croatia⁴

	High school education	Associate Degree (2-yr)	Bachelor Degree (4-yr)	Masters	Ph.D.
<i>Primary school</i>	5.16%	43.7%	50.76%	0.37%	0.01%
<i>Secondary school</i>	5.18%	6.48%	84.76%	1.44%	0.13%

The level of education of teachers does not always correspond to the actual knowledge, skills and competencies of teachers. This discrepancy can be ascribed to poor programs and uneven implementation of undergraduate studies, as well as inadequate and unmonitored professional training.

The unemployment experienced by young people makes it difficult for them to take an active role in society. Compulsory education lasts eight years, which means that students leave the educational system at the age of about 15. Their prospects of finding work are minimal, considering the state of the economy and the unemployment level. Therefore, special attention should be given to transforming vocational schools, which should offer varied educational and training possibilities, so that they are in accordance with the needs of employers and the real labor market.

³ Data on Adult Education 2000/2001, Birotehnika CDO, 2002, Zagreb.

⁴ Education staff data base 2004/2005, Ministry of Science, Education and Sports.

The need to increase investment in education is clear in light of the high standards of other well-established education systems with which we are seeking to align Croatian education. Financing and distributing funds for educational priorities will be worked out following an analysis and monitoring of educational system needs at all levels.

When speaking of financing education in Croatia, the question arises of how to distribute financial resources to the various sub-systems in education: pre-school, primary, secondary and tertiary education.

In addition, the process of educational funding must take into account various changes in the country's demography as well as the fact that the size of the school-age population is declining. This has important implications for human capital and budgetary allocations for education. Demographic changes are not uniform across all regions of the country, so the financing of education must take these regional variations into account.

2. CHANGES IN THE ENVIRONMENT

2.1. The Impact of Social and Economic Changes on Education

The role of the education system is to create and develop intellectual, professionally competent and humanistic-oriented human capital that will benefit the country and the common good.

Education has a crucial role in equipping all children, young people and adults with equal opportunities when entering society and the labor market, regardless of their social background. The educational system now faces the challenge of promoting and maintaining national, cultural and humanistic values which develop a sense of community, acceptance and tolerance of differences, solidarity, responsibility for sustainable development, as well as active citizenship and the development of democratic society as a whole. A precondition for the active involvement of people in the economy and a society based on knowledge is the acquisition of a basic level of linguistic, scientific, mathematical, technological and social education. Excessive differentiation in education and changing the economic and social environment could lead to fewer possibilities for continuing education and the exclusion of individuals and groups from the education system. One of the greatest risks of the Croatian educational system is precisely the question of adjusting to rapidly changing social needs.

Accession to the European Union creates new challenges for the Croatian educational system, such as attaining greater levels of quality, flexibility, mobility and responsiveness to changes in Croatian society and the European Community. The European Union policy of labor force mobility may result in young people leaving the country, especially those with higher education (brain drain). In order to avoid these risks, concerted action by the entire social and political community is necessary.

One of the prerequisites of active involvement in an information-based society is equipping people with the skills to use information and communication technology (ICT) in everyday life. All education systems must face the challenges of an information-based society, in which the use of information and communication technologies opens a wide range of possibilities for sustainable learning opportunities. Considering the fact that ICT has had a significant influence on the work environments and everyday life of people and has become an indispensable skill, middle-term and long-term education strategies must contain measures for expanding the use of ICT, contributing to the democratization of the learning process and advancing the concept of flexible and individualized education for all.

2.2. Demographic Trends

The population of Croatia is predicted to decline by 5.1 percent between 2000 and 2020, going from 4,380,000 people in 2000 to 4,158,000 in 2020.⁵ Thus, Croatia's demographic structure will change radically, primarily through predicted declines in the younger age groups. By 2010, it is envisioned that the 11 - 18 age group will decrease by about 24 percent. This trend will continue after 2010.

Table 2. Projected Number of School-age Children and Youth, 2000-2020

Age	2000	2010	Percent Change 2000-2010	2020	Percent Change 2000-2020
7	47,000	43,000	-8.5%	39,000	-17.0%
8-10	198,000	178,000	-10.0%	165,000	-16.7%
11-18	479,000	365,000	-23.8%	336,000	-30.0%
<i>Total students</i>	724,000	586,000	-19.5%	540,000	-25.4%
<i>Total population</i>	4,380,000	4,285,000	-2.2%	4,158,000	-5.1%

The demand for well-educated citizens will increase with the emergence of the knowledge-based economy. At the same time, some young people enroll at but never complete secondary or higher education, while others do not continue with their education after leaving secondary school. This problem demands specific measures within the education sector for pupils nearing the end of their secondary education. Such measures should keep them in the system and increase their employment opportunities.

The four principal ways in which the education system can respond to this problem are:

- *To increase the number of young people who complete secondary education;*
- *To develop a system of professional information and counseling services available to these groups as part of a lifelong professional orientation program;*
- *To promote the participation of adults with only primary education in adult education programs;*
- *To invest in improving the quality of learning at all educational levels.*

The shortage of workers will have a negative influence on economic growth. The expected difficulties stemming from limited access to the labor market due to demographic developments point to the need for the improved efficacy and performance of the education system, as well as the need to allow young people to obtain the necessary knowledge and skills in order to find employment after leaving primary and secondary education. This assumes the increased involvement in education programs and training by adults.

⁵ World Bank Edstats 2004.

2.3. Changes in the Labor Market

The need for knowledge will increase. It is estimated that the fastest growth in labor demand will take place in the intellectual services arena, especially through the burgeoning information and communication technology sector (ICT).⁶ The most dramatic drop in labor demand is expected in the lower-level education workforce.

Many jobs will require proficiency in modern technology. The structure of occupations will increasingly rely on the need for lifelong learning. The basic common competencies of obligatory and professional training will be developed according to European standards. For the obligatory education system, as well as professional training, several common goals are emphasized: acquiring language and communication skills, improving information technology and communications literacy, understanding mathematics, natural sciences, foreign languages, social studies and entrepreneurship, learning how to learn and general culture.

In case of rapid social and economic change, and therefore changes in the labor market, it is necessary to align and link pre-school, primary, secondary and higher education as well as adult education and training. The younger generations need to be prepared to work in challenging conditions, so it is important to assess, together with social and economic partners, the required profiles of the emerging labor force.

2.4. Regional Development

In the long term, better education, along with favorable changes in the economy aligned with labor market needs, is expected to contribute to a reduction in the unemployment rate. It is also expected that economic development will be encouraged as part of the revitalization of the demographically declining areas.

Regional differences in the Republic of Croatia will be eased by the planned implementation of measures that should contribute to balancing underdeveloped areas with the developed areas, and provide both with social links (e.g. long distance learning).

The EU is also dealing with regional differences as it implements its own guidelines and policies. The Republic of Croatia will make use of designated EU funding to promote and develop economic policies and strengthen the social cohesion of less developed areas.

⁶ World Bank Edstats 2004.

National Competitiveness Council, "55 Recommendations for Increasing Croatia's Competitiveness - Education for Growth and Development", 2004, http://nvk.multilink.hr/english/publications/105__NVK%2055Recommendations.pdf.

2.5. Financing Education

The development of education in Croatia will depend on the material investment that the Republic of Croatia is able to undertake. In 2004, public expenditure accounted for over 50 percent of the GDP, which is a very high percentage compared to EU accession and candidate countries. It is estimated that financing a more thorough and sustainable improvement of the educational system requires significant funding, of which the most urgent emergency increase should amount to more than 1 percent of the GDP.⁷

The *Ministry of Science, Education and Sports* provides the largest financial support to the education sector. In addition to MOSES, other ministries and local government also allocate funds for education. Thus, when estimating the share of public education expenditures in GDP terms, it is important to indicate all sources of financing in order to have a full picture. For example, the total budget of the *Ministry of Science, Education and Sports* accounted for 4.1 percent of the GDP in 2004. If we add the expenditures of the *Ministry of Science, Education and Sports* to expenditures made by other central ministries and at the local level, public education expenditures amounted to 4.3 percent of the GDP in 2004.

During the planning period, the financing of education requires the monitoring of the actual share of funds in the State budget, as well as estimates for potentially increasing the total amount of funds. During the planning period, it is necessary to define the financing of the education sector also by external funding sources.

Funds for the education sector will steadily increase in order to approach allocations in European countries.

In order to ease the burden on state spending and include society in the education process, businesses, individuals and specialized employment agencies that wish to speed up the employment process can contribute to professional and vocational education.

2.6. Globalization and Accession to the EU

The globalization of the economy means a more definitive division of labor and cooperation at the global level, as well as growing competition, changes in the employment structure, and changes in the required knowledge and skills. Student and labor mobility are expected to increase with globalization. These changes will also affect the education system.

Thus, taking into consideration the increasing opportunity for student mobility, it is necessary to retain the participants in educational services at education and training institutions by offering them applicable lessons and high quality teaching.

In recent years, the European Union has substantially intensified its activities in the

⁷ *Ministry of Science, Education and Sports*, Statistics Department.

education and research sectors, although the real authority in these matters lies mainly with the member states. Through the exchange of good educational practices in fields such as teacher training, basic foreign language skills, information and communication technology, finance, management and counseling, and informal learning and teaching, (with performance monitored by agreed indicators and benchmarks)⁸ a coherent education and research sector is emerging in Europe. Meanwhile, Croatia has to define its own profile in its own key knowledge areas.

International competition for talented pupils and students and teachers and researchers is gaining momentum. Croatia must provide its own educational and research systems that enable it to cooperate with others. Europe is pooling educational resources with a view toward strengthening its impact on the global level, and Croatia will soon be measured against the high standards of advanced EU countries.

Accession to the European Union includes the assumption that Croatia has its own educational system, and its quality is approaching the level of those in the member states. Globalization and the resulting inter-dependence of the countries of the world has been accepted as a process in which national identity and national interests are not lost. Therefore, a strategic document was prepared as the starting point for changes to the education system. This document was the "Declaration on Knowledge - Croatia Based on Knowledge and the Application of Knowledge" by the *Croatian Academy of Sciences and Arts of 2004*.⁹

The *Development Plan* is also founded on the principles and goals of the *Lisbon Declaration*¹⁰ "Education and Training until 2010" of 2000. This declaration calls on member countries to modernize their education systems to allow the EU to become the most competitive and dynamic knowledge-based economy in the world.

In the same way, the *Development Plan* also relies on the *Copenhagen Declaration*¹¹ (2002) by the European ministers responsible for vocational education. The plan is also influenced by the *Bologna Declaration*¹² which relates to the establishment of Europe as a unified area of higher education by 2010, which is of crucial importance for promoting the territorial and professional mobility of citizens and their search for employment. The Republic of Croatia signed the *Bologna Declaration* in 2001.

⁸ http://europa.eu.int/comm/education/index_en.html.

⁹ <http://www.hazu.hr/Deklaracija.pdf>.

¹⁰ http://europa.eu.int/growthandjobs/index_en.htm.

¹¹ http://europa.eu.int/comm/education/copenhagen/copenhagen_declaration_en.pdf.

¹² http://www.mzos.hr/Download/2005/05/03/3_BOLOGNA_DECLARATION.pdf.

3. PRIORITIES IN EDUCATIONAL DEVELOPMENT

It is of great importance for the Croatian education sector to be founded on clear priorities and clearly defined targets. This chapter describes the four key development priorities, namely:

1. Improving the quality and effectiveness of education;
2. Stimulating the continuing professional training of teachers and other education sector employees;
3. Developing strategies for improving the management and efficiency of the education system; and
4. Promoting education for social cohesion and economic growth and development.

3.1. Improving the Quality and Efficiency of Education

In order to improve the education system, particular attention has been given to updating the content and teaching methods used in schools, as well as evaluating the achievements and the continual professional training of teachers. A specific aim relates to the decentralization of education management. The entire education system will be strengthened in terms of what it offers, and implementation will closely follow the educational standards of the European Union.

- *The quality of learning and teaching will be improved in pre-school, primary and secondary schools as the basis for lifelong learning.*
- *The practice of acquiring factual, or a broad range of encyclopedic knowledge will be replaced by the development of comprehension skills, problem solving and the practical application of knowledge that contribute to the quality of life of students in the modern world.*
- *In order to modernize education in the broadest sense of the word, information and communication technology (ICT) will be used to provide for lifelong learning for all those interested, especially those in preschool, primary, secondary and higher education and in the adult education system. In 2005, work will begin on the systematic implementation of a project entitled: "Building a central eLearning portal for the Republic of Croatia".¹³*
- *Special educational programs will be offered to target groups such as minorities, young people, adults with low educational achievement, persons with special educational needs and those who live in villages or remote areas and in areas of special state concern.*
- *A system of external evaluation with standardized procedures will be established to develop, manage and improve the monitoring of the knowledge and skills acquired. Evaluation will also cover the overall work of schools and teaching staffs.*

¹³ [http://www.mzos.hr/default.asp?jezik=&ru=782&sid=.](http://www.mzos.hr/default.asp?jezik=&ru=782&sid=)

- *Higher education will be improved by measures that will decrease the number of students who give up their studies, and increase the number of students completing their studies within the regular time frame.*

3.1.1. Development of Teaching and Learning

The processes of learning and teaching will aim to promote lifelong learning, while respecting social and individual needs in order to facilitate employment. Through appropriate and effective support, pupils will be encouraged to remain in the education process. A supportive atmosphere will be developed, partner relationships encouraged, and the educational content will be linked with practical applications. Knowledge, skills and abilities gained in the course of informal learning will also be recognized.

- *The Croatian National Education Standards will be established and drawn up for primary and secondary education.*

New forms of teaching and learning will be developed in the classroom and outside of school. This process will be achieved by improving the initial training of teachers, extending probation periods for young teachers, providing intensive continuous professional in-service training for teachers and professional training for principals and staff associates.

- *A system will be introduced for the long-term support of professional training for teachers and principals to help them improve the quality of teaching and management in schools.*

The vulnerable groups of pupils, who make up about 15 to 20 percent of the Croatian education system, are particular challenges to improving teaching. The goal is to develop flexible school and extra-curricular programs for all pupils, thus preventing educational and social exclusion.

- *With the aim of early intervention and prevention, measures will be taken to improve the teaching of children and young people with special educational needs, and to develop various forms of counseling for pupils and their families at all stages of education.*
- *Support will be given for information technology education in educational institutions and for initial and long-term professional training for teaching staff.*
- *In order to prevent social divisions and the exclusion of individuals and groups, measures will be taken to enable unified access to educational services in the entire Republic of Croatia.*

3.1.2. Developing Links Between Education and the Labor Market

Scientific and technological development, social changes and employment changes are the key reference points for the development of education. Learning while working becomes an exceptionally important form of professional training, and innovations are frequently inter-disciplinary as the result of team work. In the education system, therefore, it is necessary to establish regional inter-disciplinary networks which will provide the necessary cooperation between the education system, researchers and the labor market.

Linking education with the labor market is a key factor in forming a Croatian education system which will be able to respond to market and social changes, thereby increasing opportunities for employment. For this reason, it is necessary to develop a unified system of school-based and professional guidance that is recognized in the EU countries as the “tool” of a unified policy of education and employment.

- *In the conception, development and application of education policies at all levels, all interested social and economic partners are invited to be involved.*
- *Education in entrepreneurship will be introduced as a developmental element within the existing educational framework of preschool and primary schools right up to higher education and adult education. Targeted professional training and support for teaching staff will be provided.*

3.1.3. Developing Educational Opportunities for Adults

One of the main aims of the education system is to increase the opportunities for including adults in the education system. It is the responsibility of the education system to enable the adult population to develop the knowledge and skills necessary for daily life. Adult education has an important role in meeting the needs of the labor market.

- *The emphasis will be on training adults who have less schooling in literacy and math and vocational skills, which will contribute to their employability.*
- *Those who implement nationwide adult education will contribute to the development of an education system with defined levels of achievement, aligned with those in the European Union.¹⁴*

¹⁴ *Europass* is a group of templates created by the European Commission transforming national qualifications into a joint format and international language: <http://europass.cedefop.eu.int/htm/index.htm>.

3.1.4. Improving Educational Opportunities and Equal Access

a. Equal Access to Education

Everyone must have an equal right to education and training according to their own abilities, needs and individual development, regardless of their monetary situation. The realization of equal access to education is one of the key elements in successfully preventing social exclusion.

In order to provide equal conditions for horizontal and vertical mobility, all young people must be given equal chances.

- The Constitution of the Republic of Croatia *guarantees obligatory and free primary education to all under equal conditions (Article 65).*¹⁵
- *State bodies and the local community will work together to make equal access possible for all to pre-school education and obligatory education throughout the country. Special emphasis will be placed on improving the situation in the less developed areas (villages, islands, hilly and mountain areas, demographically endangered areas and those affected by the war).*
- *In line with the Constitutional Law on Rights of National Minorities¹⁶ and the Law on Education in National Minority Languages and Scripts,¹⁷ education will be provided suitable to the needs of national minorities. The education of the Roma will be carried out in line with the National Program for the Roma¹⁸ and the Action Plan¹⁹ adopted by the Government of the Republic of Croatia.*
- *Social and private initiatives will be encouraged for opening children's kindergartens with a variety of programs for preschool education so that every child may be included.*

b. Participation in Education

A problem which will receive particular attention in Croatia relates to the early departure of students from the education system. In other words, a relatively large number of young people do not enroll at secondary school or do not complete the coursework. This group is socially vulnerable since it is exposed to poverty and social exclusion, and could possibly resort to socially unacceptable behavior.

According to the latest figures, 79.2 percent of primary school graduates continue secondary education in the same year. The following measures will be taken to provide education and training for those who do not complete primary and secondary schooling:

¹⁵ *The Constitution of the Republic of Croatia*, http://www.usud.hr/htdocs/en/the_constitution.htm.

¹⁶ *Official Gazette*, No. 155/2002.

¹⁷ *Official Gazette*, No. 51/2000.

¹⁸ http://www.vlada.hr/Download/2004/04/16/NACIONALNI_PROGRAM_ZA_ROME_ENGLESKI_TEKST.pdf.

¹⁹ *Action Plan of the Decade for Integration of Roma 2005 – 2015*, Government of the Republic of Croatia, Zagreb, March 2005.

- *Long-term and varying forms of student guidance and counseling will be carried out;*
- *Flexible secondary education will be promoted by 'bridging programs' to allow students to switch between vocational and general programs and vice versa;*
- *Monitoring and individual guidance and counseling for those who have not gained entry into post-compulsory education or training will be developed in cooperation with social and other partners;*
- *New forms of lifelong learning will be introduced, and adults will receive training for skills and jobs that are in short supply;*
- *After the completion of secondary education, progress will be monitored as students progress to higher levels of education and join the labor market.*

State and local governments will promote access to preschool education to increase the number of preschool children in the last year before entering primary schooling.

c. Student Enrollment in Tertiary Education Institutions

Despite the increase in the number of higher education institutions and programs, a large number of young people, due to their financial status, do not enroll in the field of study that corresponds to their expectations and capabilities. This trend reduces access to equal educational opportunities for all.

- *Measures to promote equal educational opportunities for all during enrollment in tertiary education will be developed.*
- *Together with economic and other partners, scholarship modules for enrolled students with insufficient financial means will be developed.*
- *Introduction of the national Matura examination will facilitate the access of candidate students to tertiary education.*

d. Regional Equality

In Croatia there are large regional disparities in the application rates to secondary and higher education. The *Ministry of Science, Education and Sports*, in cooperation with the ministries responsible for the economy, employment and regional development, as well as social partners and local authorities, will help develop regional human resource development plans in line with regional economic and social development needs and the needs of the local population. Measures will be taken to ensure equal access to education in the different parts of the country.

3.2. Supporting the Continuing Professional Development of Teachers and Other Education Personnel

Currently in Croatia there are several categories of teachers who were educated at different types of institutions. A mid- and long-term goal for the Croatian teaching workforce is to create an all-graduate profession in order to equalize the professionalism and status of teaching staff at all levels of the education system.

Teaching is a highly skilled and demanding profession, and teacher education is central to educational quality. Therefore it is necessary to provide teachers with a theoretical understanding of complex goals and tasks and provide practical training on how to perform them effectively. Croatia's social transformation and accession to EU membership require the application of lifelong learning and continuing professional development (CPD) in an effort to respond to the new demands placed on teaching staff. Enhanced learning and teaching on all levels is stressed as the ultimate goal of educational policy in educational institutions. The means of achieving this goal require an enhanced teacher education system that will enable them to understand not only educational aims, but also the needs of the pupils and their families as they operate in a changing social, cultural, economic and technological environment.

There is also an urgent need to develop and finance a comprehensive national strategy for teacher education, developed in consultation with key stakeholders and others who are responsible for the implementation of education. This strategy refers to the complete process of teacher education through the three phases of initial education, internship and continuing training. The strategy includes a mixed model of financing (government, local, private and foreign investment).

In the initial teacher education program, the Bologna Process will provide the framework and impetus for modernizing the teacher education curriculum and its harmonization with the EU standards. Priorities for initial education as well as in-service training will be to acquire quality subject knowledge, student-centered teaching methods, familiarity with the use of information and communication technologies (ICT), and an awareness of national identity, inter-cultural understanding and competency in foreign languages. An integrated model of professional learning should aim to train teaching staff to apply the content of their teaching to real life experience.

a. *Initial Teacher Education*

Changes in the school system require the continuous improvement of teacher education programs and the development of education institutions implementing such programs.

- *The pre-service teacher education system will be modernized in order to better understand the scientific basis of the subject he/she specializes in. Modernization will also focus on the adoption of pedagogical skills necessary for efficient practices in an education system that needs to respond to the needs of a contemporary society.*

- *The requirements of the Bologna process for teacher education will be implemented.*

b. *The Continuing Professional Development and Training of Teachers*

The Government is responsible for the professional, pedagogic and psychological training of teachers and their pre-service teacher training. Similarly, the Government also finances supplementary training in areas defined as having major relevance to education policy. Other continuing professional development is the employers' responsibility. The costs incurred from teachers' continuing professional training are co-financed by the Government as part of the statutory state aid for education.

Regarding the continuing professional development of instructors teaching vocational subjects in vocational and other schools, the changes in the nature and content of teaching necessitate a special *Development Plan*.

The educational policy priorities for the continuing professional training of school principals and teaching staff at educational institutions/professional learning communities include gaining the knowledge and skills to establish networks of contacts and partner relationships with parents and the local community.

The priorities are:

1. The design and management of innovative projects;
 2. Curriculum development and the use of contemporary teaching methods;
 3. The use of information and communication technology in teaching;
 4. The promotion of entrepreneurial skills;
 5. On-the-job learning;
 6. The development of cooperation and sharing of best practices between schools, and the acquisition of the knowledge; and
 7. Skills necessary to work with children with special educational needs.
- *A national strategy for implementing the new curriculum will be prepared to help the professional development of preschool, primary and secondary school teachers, trainers and instructors in vocational education and training, as well as teachers and trainers in adult education and training who will implement the new curriculum.*
 - *A continuing professional training for teachers will be introduced, specifying rights and responsibilities regarding annual training and development. A renewable teaching license will be introduced.*
 - *Educational bodies and county-based subject councils, composed of subject-specific teachers in each county, will play an important role in improving subject-specific teaching quality, as well as improving the entire education system.²⁰*

²⁰ *Guide to the Croatian National Education Standards for Primary Schools (CNES)*, Ministry of Science, Education and Sports, 2005.

c. *Development of Education Institution Management*

The overall aim of the *Development Plan* is to develop schools as professional learning communities.

The improvement of the education system assumes that schools will become learning communities in which the pupils may gain knowledge and life skills and teachers can learn in a partnership relationship with the pupils. In this environment, the head teacher/principal has a key role in supporting and carrying out the proposed changes. To perform these tasks successfully, head teachers/principals must understand the goals of the “new school,” and possess knowledge of the curriculum, contemporary teaching methods, and forms of learning. They need to be agents of change, leaders, providers of resources and material improvement, innovators, and they need to develop good communication skills.

- *The management of educational establishments will be improved by increasing the management skills of principals.*
- *Launching a licensing project for school principals/head teachers is envisioned.*

d. *Education Management and Financing*

The non-existence of the institutional education of principals and the insufficient management and leadership capacities at educational institutions, point to the need to draft a program for training principals. Training principals to foster more intense cooperation between schools and local communities and parents is also important.

- *Develop and implement the national strategy and school management system by 2008.*
- *Define national policy for the evaluation of educational outcomes by 2007.*
- *Implement a pilot project for a self-evaluation system for schools by the end of 2006. Begin its roll-out in early 2007.*
- *By 2010, ensure that 10 percent of pre-school principals, 50 percent of primary school principals and 75 percent of secondary school principals have completed the minimum required management training.*

The performance of the internal management and the monitoring of the central, regional and local institutions will determine the pace and extent of the planned changes.

- *The management and fiduciary capacities of the central administration, as well as the regional education offices, will be strengthened.*
- *The decentralization of education management will be advanced to fall in line with regional needs and educational sector development strategy.*

3.3. Development of Management Strategies for an Efficient Educational System

3.3.1. *Strengthening the Management System*

A successful education system requires good administration and effective financing along with other management mechanisms. An appropriate division of labor between decision-makers and effective managers makes the implementation of educational policies possible. Amendments to legislation, the devolution of power and the reform of the finance systems have increased the need for changes in educational administration, especially with regard to evaluation and monitoring performance.

- *Educational management at national, regional, and local levels, as well as education at the institutional level, will be developed in a coordinated manner to enable the short and medium-term implementation of development measures and to support and promote the achievement of education policy targets in the long-term.*
- *Target and results-oriented management will be developed throughout the entire educational system.*
- *Regional cooperation among educational institutions will be strengthened by exchanges of program and organizational experience, with the aim of improving the quality of the education system.*
- *University management will be developed to strengthen university autonomy, accountability and internal management.*

3.3.2. *Increasing the Financing of Education*

A quality education system entails a sufficient level of public financing that ensures access to education services and stimulates competitiveness.

All of the new educational goals and challenges emphasize the importance of prioritizing education as an important element of future growth. Special attention should be dedicated to possible public-private partnerships.

The goals are:

- *Ensure that the state budget allocation for education as a percentage of GDP moves closer to European standards. An adequate allocation of budget funds should be reserved to finance improvements in the education system.*
- *Special attention will be given to financing education in poorer regions and minority education, especially for those who are insufficiently integrated into society, such as the Roma population.*
- *Within budget limits, state support should be extended to ensure support for adults who wish to complete their primary or secondary education, and especially to those who need new qualifications and training for the labor market.*
- *Student financial support will be developed to give incentives for continuing education.*

As the Government cannot solely bear the financial burden, new financing mechanisms and incentives will be supported for adult learning that encourage co-investment by individuals and employers.

- *Direct Government subsidies will be earmarked primarily for those most in need.*

3.3.3. Measures for Improving the Monitoring of Education

Information management is critical for the effective and timely management of the education system. Present-day ministries have a key role in continuously following-up on the implementation of education policies, a process which requires sophisticated systems and professional capacities.

It is necessary to develop educational supervision (professional and pedagogic, management and inspection) to guarantee respect for education legislation and standards. The existing supervision needs to be gradually guided toward evaluation (internal and external) of educational establishments and the system as a whole.

- *The Education Management Information System (EMIS)²¹ will be established by 2008.*
- *The policy development and education sector monitoring by the Ministry of Science, Education and Sports will be strengthened.*
- *The gathering of education-related statistics will be improved throughout the education system.*
- *Education system indicators will be developed to monitor the performance of the education system, as well as all school activities.*

It is necessary to establish a unified methodology for gathering data for the needs of the labor market and the educational system at all levels. This methodology will provide the foundation for the development of a contemporary school system and professional information, guidance and counseling.

3.4. Education for Social Cohesion and Economic Growth and Development

Education is a strategic development priority for the development of Croatian society. Considering that “the quantity of new knowledge is expanding very fast, knowledge acquired through the traditional education system becomes outdated and insufficient to meet the needs of an individual and the community”.²² Citizens must therefore be prepared for life in a knowledge-based society, and so it is necessary to develop an awareness of lifelong learning and provide everyone with the opportunity for education. Lifelong learning is achieved through formal, informal and natural learning.

²¹http://portal.unesco.org/education/en/ev.phpURL_ID=10202&URL_DO=DO_TOPIC&URL_SECTION=201.html.

²² *A Strategy for Adult Learning*, The Government of the Republic of Croatia, November, 2004, p. 11.

- *Lifelong learning - the process of lifelong learning is aimed at personal development, the acquisition of new knowledge and more efficient adjustment to the labor market and new life circumstances.*

The entire education system must be prepared to provide educational services to meet the different needs of its potential pupils. All these activities need to be prepared by the schools in conjunction with the local community and various social partners.

Traditionally, education systems and schools must preserve and maintain a significant role in the development of the individual and community, as well as the transfer of cultural and national values. In addition to traditional skills, such as native language communication skills and mathematical literacy, the EU has defined five 'new basic skills' that every young person and adult need to acquire today. These are:

- Information and communication competencies;
- Technological skills;
- Foreign language abilities;
- Nature and science literacy;
- Entrepreneurial and social skills.²³

One area that requires special attention relates to specific pedagogic strategies for children with special needs. Such strategies should contribute to the process of integrating special needs children into society. All schools, parents and the local community in the broadest sense will have a major role in the process of integrating these children into society.

- *The principles of lifelong learning will be strengthened at all levels of education by focusing on developing learning-to-learn attitudes and skills.*
- *Social dimensions of education will be emphasized at all levels and in all fields of the education system.*
- *Due to the increasing pace of social and economic change, it is necessary to improve the flexibility of the education system, so that individuals have greater opportunities to change their education/training, in line with the changing needs of the labor market and the concept of lifelong learning.*

It is also necessary to develop a unified system of school-based and professional guidance which will give individuals the opportunity to use information services, guidance and counseling at all phases of their career development.

²³ http://europa.eu.int/comm/education/policies/2010/doc/basic-skills_en.pdf.

3.4.1. Developing a System for the External Evaluation of Education

An external evaluation system of educational processes and outcomes will be developed to ensure the proper implementation of educational legislation, to support educational development and to improve the quality of learning. The aim is to gather and analyze information in support of national education decision-making and the local development of education and training. The data compiled will be available to pupils and students, their parents, educational institutions, state bodies, businesses, as well as other stakeholders interested in improving the system.

The Croatian education system lacks external student learning assessments or examinations. The evaluation of a student's performance and achievements has been exclusively the responsibility of the school. However, more reliable, transparent and comparable assessment data is needed, especially at the end of secondary education. With this aim, the following steps will be taken:

- A National Examination and Assessment Center²⁴ will be operational in 2005.
- The National "Matura" Examination will be implemented for the academic year 2008/2009.

An international review of tertiary education will provide the opportunity to compare Croatian higher education with international standards. Cooperation among different universities and other partners will be encouraged in the evaluation process. With this aim, the following step will be taken:

- In 2005 a review of the tertiary education sector will be conducted within the framework of the OECD Tertiary Education Review project. The results of this project will be published in 2006.

The external assessment of student learning outcomes will also be applied to primary schooling. With this aim, the following step will be taken:

- Croatia will participate in the PISA²⁵ project in 2006 and 2009.

²⁴ The institution has been established pursuant to the *Law on National Examination and Assessment Center*, Official Gazette, No. 151/2004.

²⁵ PISA (Program for International Student Assessment) - international comparative tests organized and implemented by OECD in three-year cycles (2000, 2003, 2006).

4. TARGETS FOR CROATIAN EDUCATIONAL DEVELOPMENT

This chapter refers to qualitative and quantitative performance targets for the education system. These targets are defined according to the expected development benchmarks in the European Union for 2010. A systematic summary of qualitative performance indicators can be found in the Annex.²⁶

4.1. Pre-school and Primary Education

The task of pre-school and primary education is to develop children's competencies, knowledge and skills that will help them grow up and act as creative, competent, humanistic-oriented, responsible and active members of modern society. To fulfill this mandate, the education sector must improve access to quality educational services modernize educational content and methods and support a plurality of options to develop the quality of learning and prevent exclusion. The sector must also improve physical conditions such as learning facilities and equipment while strengthening the management system. Special attention will be given to involving parents and the local community in forming partnerships with schools.

4.1.1. Pre-school Education

Local communities are most frequently the founders of daycare centers, and they finance pre-school activities in their area. Such communities also have the greatest responsibility to organize pre-school education. Pre-school education for children from the age of 6 months to 6 years forms the core of early childhood education. This helps to reduce differences in social background and learning abilities, and meets the child's developmental needs as closely as possible while preparing children for their entry into the world of conscious learning (entry into primary school). Facilities, staff and equipment resources are recommended in order to include all children in preschool education programs, and particularly in preparation programs for school (preschool).

- *Pre-school institutions have trained staff that can provide high quality education to all pre-schoolers, and especially to those with special needs and gifted children.*
- *Special attention will be given to pre-schoolers from socially and economically disadvantaged families by including them in pre-school institutions.*

²⁶ See Table 3., pp. 41-42.

Development objectives:

- By 2010, increase enrollment rates in preschool programs from the current rate of 43% to 60%.²⁷
- By 2010, increase the participation of children in preschool (one year before starting primary school) from the current rate of 96% to 98%.

4.1.2. Primary Education

The developmental priority for primary education is to raise the quality and efficiency of pupils' schooling, and to develop the necessary knowledge and skills that will enable a pupil's personal development. A priority is also to help students finish primary education with the aim to continue education regardless of capabilities, gender, and religious, national or regional affiliation or social status.

Development objectives:

- By 2010, increase the net enrollment ratio of pupils from the current rate of 96.5% to 98% and the completion rate from the present rate of 91.0% to 95%.²⁸
- By 2010, increase the number of primary schools working in a single shift from the current rate of 25.45% to 40%, and by 2010 abolish classes operating in triple shifts.²⁹

a. *Developing the Croatian National Education Standards and National Curriculum (guidelines) for primary school*

Development of the National Curriculum (guidelines) will enable the harmonization of the national curriculum (guidelines) with European standards.

- *The Croatian National Education Standards (CNES) for primary schools will be finalized in 2005.*
- *The National Curriculum (guidelines) Council will be established in 2005.*
- *The preparation of the National Curriculum (guidelines) for primary school, based on the CNES, is planned by the end of the academic year 2005/2006.*

²⁷ *Ibid.*

²⁸ *Ibid.*

²⁹ See *Table 3.*, pp. 41-42 and *Table 4.*, p. 43.

Development objectives:

- During the academic year 2005/2006, the elements of the CNES will be experimentally introduced in 5% of schools in the Republic of Croatia. The experiences of these schools will be monitored and evaluated.
- During the academic year 2006/2007, all primary schools will start implementing the CNES and the National Curriculum.
- By the end of 2007, teachers will have completed a training program for the implementation of the CNES and the new curriculum (guidelines).
- By 2008, all teachers will have acquired the basic level of ICT competencies.

b. Evaluating Primary Education Outcomes

Improving the quality of education also implies the introduction of education process and outcome evaluation, about which students, teachers, parents and education management would be informed. The creation of new evaluation methods that will guide the development of teaching and management in schools is especially important. The PISA³⁰ project will make it possible to evaluate obligatory education at an international level.

In 2000 and 2003, within the framework of the OECD PISA project, pupils aged 15 were assessed on how they had developed the ability to analyze, draw conclusions, and successfully communicate, as well as gaining sustainable learning skills. Croatia did not participate in that program either in 2000 or in 2003, so unlike the other countries that took part in the PISA project, Croatia does not have reference data to use in comparing the performance of Croatian pupils to their international peers in 2006. It should be mentioned that, due to the non-compliance of the testing model with current teaching methods in Croatian schools, the interpretation of the results should be viewed with caution (as in other Central European countries).

Current internal or school evaluation is subjective, mostly due to the lack of national standards for learning evaluation. Therefore, it is important to develop a new national system for internal and external evaluation and simultaneously start with teacher training.

External evaluation, on the basis of experimental external evaluation of educational achievement in each class and for each subject, will be prepared and implemented by the National Examination and Assessment Center or another licensed institution in cooperation with the *Ministry of Science, Education and Sports*.

- *Recommendations on what makes a good school in Croatia will be developed with the help of teachers, students, parents and principals.*

³⁰ http://www.pisa.oecd.org/pages/0,2987,en_32252351_32235731_1_1_1_1_1,00.html.

- *The performance of schools will be monitored and incentives will be planned for schools that perform well, as well as professional pedagogical support for schools with lower performance ratings.*
- *Cooperation will be encouraged among schools, between schools and pupils, among pupils, and among schools and families and schools and the local community.*
- *School self-evaluation schemes will be implemented by 2008.*

c. *Pedagogic Development*

Contemporary pedagogic methods in teaching will be developed. This will include the application of different teaching methods, developing and improving learning skills and creating stimulating learning environments in schools. It also entails the modernization and improvement of teacher education, both initial and continuing professional training, as well as developing special pupil counseling programs.

- *Flexible and student-centered educational solutions will be supported and developed with the aim of promoting better quality primary education for all. The knowledge and skills needed for achieving this will be developed by teacher education.*
- *Teaching content and methods, as well as instructional equipment will be developed in order to better respond to different forms of learning.*
- *Educational institutions will develop flexible forms of cooperation on the local and regional levels.*
- *The concept of individualizing teaching based on the needs, previous knowledge, competencies and interests of the pupils will be developed.*

d. *Special Needs Education*

The Republic of Croatia includes special needs children in its education system. *The Act on Pre-School Education*³¹ regulates the priority of enrollment of special needs children in kindergartens. Special needs children have the same mandatory and free primary education as all other children do. These special needs children do have priority in enrolling in secondary schools.

However, due to insufficient financial resources and the organizational inadequacy of schools, numerous pupils with physical disabilities are not completely included in the regular education system.

To achieve better integration of pupils with special needs, teaching staffs need to be better trained to work with these pupils. For that purpose, the existing teaching personnel shall be trained through professional teacher training processes. New contemporary curricula will be developed for the education and training of special needs pupils. A monitoring system for special needs children even after they complete their schooling will be organized. Special institutions managed by the *Ministry of Health and Social Welfare* to provide professional logistic support to the regular educational system will be regulated.

³¹ *Official Gazette*, No. 10/1997.

Development objectives:

- Assure structural accessibility to educational institutions for children and pupils with physical disabilities.
- Aim to include children and pupils with special needs in the appropriate educational institutions on the local level. Education for children with special needs shall be regulated with additional legal and professional regulations.
- Increase the flexible and differentiated supply of programs with the aim of increasing the integration of children with special needs into the education system and society as a whole.

e. *Internationalization and the European Dimension in Education*

International cooperation in the field of education is important as Croatia prepares for accession into the European Union. In the EU, questions related to education are mostly national issues; accordingly, Croatia will make sovereign decisions that influence its own education policies. For the purpose of preserving its national identity, it is important to develop *Croatian National Education Standards (CNES)* prior to the accession of the Republic of Croatia into the European Union.

- *By learning the experiences and practices of the member countries of the OECD and the EU, and accounting for Croatian conditions and needs, the applicable experiences will be built in to the national plans.*
- *Croatia's educational priorities will be established for international educational cooperation.*
- *Participation in available EU programs will be increased.*

The preparations for Croatia's accession into the European Union mean that Croatia needs to form links with EU processes and prepare to meet the high EU educational objectives and benchmarks set for 2010. EU Member States cooperate through the 'open method of coordination,' which means that they have a joint base for statistical data, indicators, identification and dissemination of good practices, evaluation by foreign experts and pilot projects. Currently there is a list of 29 indicators and five European benchmarks for education system evaluation.³²

- *Croatian education specialists will continuously monitor the education development trends in the EU countries and incorporate examples of good foreign practices into national strategies.*

³² http://www.europe.eu.int/comm/education/policies/2010/doc/indicators-and-benchmarks_en.pdf.

Development objective:

- A system of indicators will be introduced by 2008 that will enable the *Ministry of Science, Education and Sports* to monitor and compare the development of the Croatian education system to the education standards set in EU member countries.
- National pedagogical standards will be drawn up for primary and secondary schools. Standards to develop a network of schools will be gradually implemented.

4.2. Secondary Education

4.2.1. Secondary School Education

Secondary education refers to programs in grammar schools (gimnazija), art schools, four-year vocational schools (technical, economic, health, etc.), as well as three-year vocational schools and programs for adult education and training. These are divided into classical school programs and practical programs. Since the school year 2003/2004, numerous craft and trade programs have been 'unified' in terms of content and practical training requirements.

Grammar school students will pass national school graduation examinations beginning in 2009, and students of four-year vocational and art schools starting in 2010. The State Matura Examination will contribute to the unification of student educational competencies, and facilitate access to higher qualified candidates.

- *The national graduation examination (Matura) represents a standardized external examination used to evaluate students' knowledge and competencies at the end of grammar school and other four-year secondary schools.*

The Rule Book on the secondary school graduation examination, the 'Matura,' and its implementation will regulate the implementation of the national examination. Its introduction will enable the external evaluation of student and institutional achievements in education and facilitate the selection procedure of candidates for higher education institutions.

Cooperation among institutions providing secondary education and training will be encouraged in order to improve the quality of and access to education. Simultaneously, the aim is to develop vocational pupils' various vocational skills and competencies and enable them to access further education. For the organization of the vocational education system, it is necessary to develop professional information and guidance services based on labor market needs.

- *A new competency level system will be introduced in line with the EU multi-level system and, accordingly, the list of corresponding vocational programs and professions. The existing system will be replaced by a new system of vocational qualifications which will be defined in cooperation with social partners.*

Development objectives:

- By 2010, increase the net enrollment ratio in secondary schools from the current rate of 79.2% to 83% of pupils who have completed primary school.³³
- By 2010, increase the number of pupils in grammar school programs from the current rate of 29% to 35% of the total number of pupils enrolled in secondary school programs.³⁴
- By 2010, increase the completion ratio in secondary programs from the current rate of 69.5% to 75% of the same generation of students.³⁵
- By 2008, all teachers will have acquired the basic level of ICT competency.

4.2.2. Grammar School (Gimnazija) and Art Schools

Grammar school programs enable students to acquire extensive general education knowledge, which is an excellent basis for continuing education at higher education institutions. Students may enroll in any of four types of grammar school programs: general, language, natural sciences and mathematics and classic. Out of the total of 79.2 percent of primary school graduates who enroll in secondary school, 29 percent enroll in grammar and art programs (2.5 percent). Most of those who enroll in art programs continue their education at art academies.

Some students find it difficult to cope with studies and achieve the expected results, leading to students dropping-out of the system. It is important to provide continuing support to pupils to enable them to be more successful in their studies, strengthen their self-confidence and help them overcome possible problems.

- *The national monitoring of secondary education enrollment and completion rates will be made possible by the Education Management Information System.*

³³ See Table 3., pp. 41-42.

³⁴ *Ibid.*

³⁵ *Ibid.*

Development objectives:

- Introduce a standardized external examination to evaluate students' knowledge and competencies at the end of grammar school and other four-year secondary schools. Grammar school students will pass national school graduation examinations beginning in 2009 and students at four-year vocational and art schools starting in 2010.
- Appropriate school and professional guidance and counseling will be available to secondary school pupils.

Changes in regional demographics, as well as economic and social demands on education, cause the network of secondary schools and programs to shift. Greater attention needs to be given to secondary education in the regions.

- *National and regional assessments of required educational profiles will be undertaken in collaboration with the ministries in charge of economic and regional development. These assessments represent an effort to design human resource development plans. Changes will be encouraged to comply with these plans.*
- *EU pre-accession funds will be used to develop new forms of planning and teaching.*
- *The new National Curriculum (guidelines) for secondary schools will define the duration and content of secondary school education in line with labor market needs higher education and lifelong learning requirements. The National Curriculum (guidelines) will be completed by 2010, and will follow the principles and methodology of the CNES for primary schools.*
- *The implementation of the new curriculum (guidelines) will be accompanied by continuing professional training for teachers and cooperation among teachers, schools, parents, local communities, and social partners. Cooperation will include the exchange of best practices.*

Development objective:

- By 2010 the new National Curriculum (guidelines) for secondary schools will be completed, and will follow the principles and methodology of the CNES for primary schools. The implementation of the new curriculum (guidelines) will be accompanied by continuing professional training for teachers.

4.2.3. Vocational Education

a. Vocational Education and Training

The *Ministry of Science, Education and Sports* has undertaken a series of concrete steps to improve vocational education. These steps are partially foreseen in the 'Green Book'.³⁶

An Agency for Vocational Education has been founded with the mandate, in cooperation with the *Ministry of Science, Education and Sports*, of developing, organizing, monitoring and evaluating the school system and the professional development of teachers in the field of vocational education. By 2010, the main steps taken within the National Education System will encourage the necessary synergy of national and global development, without diminishing the importance of national characteristics and traditions.

Development objectives:

- Changes to vocational training to make it less specialized and adapting it to the needs of students and the labor market.
- Adapting the employment profiles and programs to fit the labor market, social and economic needs, modernizing the content and methods of vocational education and training, and providing opportunities to continue with education following vocational school.

b. *Developing a Normative Framework, Planning and Managing*

- *A Council for Vocational Education (an advisory body) will be established. It will involve key ministries and institutions, as well as economic and social partners.*
- *Monitoring and analysis will be continuously carried out in addition to comparing national and international performance levels with the aim of identifying the emerging educational needs in the business sector.*
- *Methods of financing will be brought in line with the new Act on Vocational Education in order to support decentralized management.*

The long-term goal is to harmonize the number of schools and programs and to establish regional educational centers. These schools and centers will have different programs covering several areas and will attempt to meet the specific needs of young people and other interested pupils.

³⁶ Green book, CARDS VET 2001 component 1, sub-component 1.3.1, June, 2004, <http://cards.skolstvo.htnet.hr/?show=comp1>.

c. Qualifications and Programs, Introduction to Curriculum (Guidelines) Change in Schools and Modernizing School Workshop Equipment

Continuing professional training programs for teaching and management staff in vocational schools will be designed. Development projects for introducing and implementing the new curriculum (guidelines) will be created, and workshop equipment in schools and selected school centers will be modernized.

Regional educational centers will provide general knowledge and professional qualifications.

Development objectives:

- By 2010, secondary school dropout rates will be decreased by providing counseling services, supplementary classes and adjustable programs, as well as through practical learning.
- By 2010, the institutional capacities of the Agency for Vocational Education will be strengthened in order to support the development of the new CNES, the Curriculum (guidelines), and continuing professional teacher training.

4.3. Higher Education

4.3.1. Universities and Professional Studies

Higher education improvements shall be carried out by achieving four fundamental goals. These are: implementation of the Bologna process, functional integration of universities, strengthening of professional (polytechnic) studies through binary system development, and establishing a systematic monitoring and quality control mechanism for higher education teaching and scientific research work. In addition to the *Ministry of Science, Education and Sports*, the National Council for Higher Education and the Agency for Science and Higher Education, which includes the National ENIC/NARIC office, will also work within the public administration in order to achieve the above goals.

The Republic of Croatia signed the *Bologna Declaration*³⁷ in May 2001. The principles of the Bologna Declaration, as well as other fundamental goals for the development of higher education, have been established by the *Law on Science and Higher Education*,³⁸ dated July 2003, and *Amendments*³⁹ to this Law, dated July 2004. During 2005, the first phase of the Bologna process will be completed. This phase will include the introduction of a quality assurance system, a two cycle study program

³⁷ http://www.mzos.hr/Download/2005/05/03/3._BOLOGNA_DECLARATION.pdf.

³⁸ *Official Gazette*, No. 123/2003.

³⁹ *Official Gazette*, No. 105/2004.

system and the recognition of foreign higher education qualifications in line with the *Lisbon Convention*⁴⁰ recommendations. The key activities and deadlines to ensure implementation by 2010 have been incorporated into legislation in several ways:

- *A system of easily recognizable and comparable academic and professional degrees and diploma supplements will be introduced to enable faster and easier employment and international recognition;*
- *A unified three cycle system of studying (undergraduate, graduate and postgraduate) will be introduced together with the European Credit Transfer System;⁴¹*
- *The mobility of students and teachers will be encouraged;*
- *National monitoring and quality assurance systems will be established, and European cooperation in quality assurance will be promoted;*
- *The functional integration of universities will be increased by strengthening the capacity of human resources and IT infrastructures;*
- *Legal integration of the universities will be completed by December 31, 2007. During this period institutions of higher education that are not part of the university will be strengthened;*
- *By the beginning of the academic year 2010/2011, a binary system will be established to strengthen professional studies while improving polytechnic and higher level schools that would implement such studies. This would provide for better quality university study programs conducted at universities and the effective division of relative university and professional studies programs currently simultaneously implemented by universities.*

Development objectives:

- A quality assurance system will be introduced into the higher education system of the Republic of Croatia by 2006.
- Establishing a binary system will occur by the beginning of the academic year 2010/2011.

In 2005, the Republic of Croatia participates in the OECD Tertiary Education Review project that will provide more comprehensive insight into the Croatian higher education system. The Country Report will be published in 2006.

A strategy to ensure vertical and horizontal mobility in the binary higher education system across all three cycles (undergraduate, graduate and postgraduate) will be developed and implemented. This strategy will encourage lifelong learning and international cooperation at all levels through designated networks and models.

⁴⁰ http://www.mzos.hr/Download/2005/05/03/10_Lisbon_convention.pdf.

⁴¹ http://www.mzos.hr/Download/2005/05/03/ectskey_en.pdf.

Higher education institutions that are part of the university system, as well as those that are not, will harmonize their development strategies with the national strategy of the Croatian higher education system. The polycentric development of the higher education system will enable the universities to emphasize the development of excellence centers and to align university vision with regional needs. The polycentric development includes developing and strengthening polytechnic and professional studies according to the same model. The operation of higher education institutions will be brought in line with the procedures prescribed by the law and by-laws, with special attention given to:

- *The unity of scientific research and teaching processes at all educational levels;*
- *The continuous modernization of syllabi and the introduction of new ways of teaching;*
- *Increasing experimental opportunities for teaching and scientific research work, especially in the areas of technology, biotechnology, medicine and the natural sciences;*
- *The continuous recruiting of research and teaching staff at universities and polytechnic institutions. It is important to decrease the average age of the staff, in line with the national strategy;*
- *Encouraging students to graduate on time in all fields of study;*
- *Making student grading more objective;*
- *Increasing the total number of citizens in the Republic of Croatia who hold a higher education degree;*
- *Adapting the enrollment policy to meet labor market demands in the Republic of Croatia.*

The Law on Professional Titles and Academic Degrees, in accordance with the Law on Science and Higher Education and new study plans, will be adopted in 2005. Other by-laws designed to regulate all higher education issues (rule books, instructions, and so on) will also be passed.

Development objectives:

- Modernizing syllabi and encouraging more active student participation in the teaching process.
- By 2010, decreasing the dropout rates in tertiary education to 50%, in comparison with the current rate of 69.5%.⁴²
- By 2010, increasing the total number of higher education graduates by 30%.
- By 2010, increasing the number of teachers by 20-25%.
- Increasing opportunities for conducting experiments for teaching and scientific research work.
- By 2010, conducting external evaluation of the quality of higher education programs and institutions, and simultaneously developing quality assurance units at higher education institutions.
- Integrating the higher education and research sectors in the Republic of Croatia.

⁴² See Table 3., pp. 41-42.

4.3.2. *Development of Education for Teachers and Instructors*

The *Ministry of Science, Education and Sports* will develop a strategy for teaching staff education based on international standards in line with the Bologna process. Teachers, professors and other experts will be included in strategy development with the aim of improving the training of preschool, primary school and other teachers. Teacher education will be carried out in the following three stages:

- Initial Teacher Education (ITE);
- Internship; and
- Continuing Professional Development (CPD).

Standards and competencies for all categories and levels will be drawn up.

The following shall be developed and implemented:

1. The process of harmonizing studies with the Bologna Declaration enables university integrated five-year undergraduate and graduate teacher education studies, the completion of which brings 300 ECTS. (Such study programs will start during the 2005/2006 academic year, with the final deadline for full implementation in 2010. Teacher education at higher-level teacher schools with four-year professional teacher studies is potentially available. The completion of such a course brings 240 ECTS, while one-year specialist graduate professional studies bring 60 ECTS. For educating educators, a three-year pre-school education studies program, as the professional level, will be offered. To bring the studies in line with the Bologna Declaration, the duration of pre-school education studies have been extended from two to three year periods.);
2. National projects backed by international technical assistance (cascade model);
3. National program providers, e.g. the Institute of Education, the Agency for Vocational Education (needs-based, demand-led model). (This program of pedagogical and psychological education is intended for experts who have completed the so-called non-teaching faculties and are working [or preparing to work] in the classroom.);
4. Innovative NGO and regional programs (subsidized and fee-based);
5. School-based training activities that are the result of school self-evaluation, action research, reflection, and development planning.

The professional development strategy will proceed in a phased implementation by the above providers in cooperation with international experts. The strategy will concentrate in the short-term on building the capacity of provider institutions. The strategy will equally attempt to build a talented teaching staff as well as trainers capable of designing and presenting programs that will impact teaching practices. To improve the quality of learning, the overall objective of this document, school managers, mentors and advisors will need to plan and support the introduction of professional training in schools.

- *Pilot programs will be developed and monitored.*
- *In the mid-term, newly trained educators, classroom teachers, teacher-mentors, teacher-counselors and teacher-trainers will disseminate and*

- implement programs that have been successfully carried out. A comprehensive teacher education strategy will also be developed.*
- *In the long-term, teacher education will be decentralized and training will be open to market competition.*

Development objective:

- Train 20,000 teachers by 2010 through their participation in annual professional training related to the education policy priorities.

Content-wise, priority areas for both pre-service and continuing training for educators and teachers will include:

1. *Active teaching and learning methods and the development of appropriate learning materials;*
2. *Designing learning according to the new CNES and Curriculum (guidelines);*
3. *ICT literacy and its application to learning;*
4. *Dealing with pupils' social and behavioral problems;*
5. *Developing entrepreneurial skills;*
6. *Developing education for children with special educational needs (both for gifted students and those with learning difficulties);*
7. *Local and school-based pedagogic and subject-based mentor/advisor training programs;*
8. *Leadership skills development; and*
9. *Acquiring counseling skills for school and professional guidance.*

Educational Programs for Teachers

As part of the broader *Development Plan*, the development of education for teaching professions will play a key role in supporting many of the planned innovations in the education system. The innovations will, on the other hand, affect teacher training based on quality control, capacity-building in education studies at the MOSES and national agencies, curriculum (guidelines) development, regional innovations and the transformation of schools into professional learning communities.

Programs for teacher education will be carried out in line with the International Classification of Occupations, other international documents relating to the field and the prevailing program models in EU countries. The programs will allow teachers equal access to professional training. Meanwhile, progress can be gauged compared to other professional employees in the education system in Croatia and the European Union. The program, along with undergraduate studies, will also include lifelong training for educators and teachers. This form of teacher education will begin in the 2005/2006 academic year, and the deadline for its full implementation is 2010.

An educational network for educators and teachers will be developed in accordance with the needs of the people and reformed universities, as well as the employment situation at specific institutions. Organizational models include in principle the Teacher Education Academies and university departments for teacher education.

The *Ministry of Science, Education and Sports* will prepare the Rule Book on establishing scientific standards, thereby enabling progress in research and teaching and the development of scientific projects in disciplines that relate to teaching professions.

Scientific research on pre-school and primary school educational issues will be encouraged, since such research in Croatia has been clearly lacking over the past two decades (economic and demographic data, legal regulation, standards of classrooms, equipment, human resources, wages, performance, etc.).

Based on the evaluation of the current situation regarding facilities, all buildings and equipment for education studies will be standardized and improved by investment, especially investment in modern teaching equipment.

Workshops for students in education studies will be developed through special measures for standardizing staff and equipment, in order to create exemplary functional institutions for the practical training of future teachers and in-service training for current teachers.

Development objectives:

- Harmonize study programs with teaching staff needs and the Bologna process; harmonize academic titles and degrees with the law and the international classification of occupations.
- Involve the largest possible number of teaching staff in annual training programs.

4.3.3. Financing Higher Education

In the course of the next planning period, it is necessary to establish a new system of financing higher education. This system will replace the existing, inherited system of direct state administration of financial support for a part of the university system.

- *Financial support by the direct allocation of funds to faculties will be replaced by allocations of lump sums to university management starting on January 1, 2006. This change will give universities the chance to carry out their development strategies in accordance with national priorities, strategies and the principle of polycentric development.*
- *Efforts will be made to increase total state budget provisions for higher education, based on affordability. A major effort will be made to increase*

financing from other sources, particularly the private sector. This particularly applies to programs that can ostensibly meet the needs of staff while receiving funding from sources other than the state budget.

- *Croatian higher education institutions will be encouraged to compete for financial support intended for scientific research projects and study programs provided by national and international (European) bodies.*

During the 2005 to 2010 period, a model for student scholarships needs to be developed appropriate to the needs of students and society. This scholarship program will target specific occupations and human resources throughout the Republic of Croatia.

Development objectives:

- Beginning in 2006, a unified model for financing universities will be introduced.
- By 2010, out of budget expenditures on higher education and science will be increased.

4.4. Adult Education and Training

Adult education is an especially important area without which facets of future social development would be impossible: competition, increasing employment opportunities, social cohesion, active citizenship, development of democracy and civil society, as well as the sustainable development of all regions.

At the end of 2004, the Government of the Republic of Croatia defined the development of adult education in the following documents: *A Strategy for Adult Learning*⁴³ and *Action Plan for Implementing the Strategy for Adult Learning*.⁴⁴ In the meantime, a proposed *Draft Act on Adult Education* has been made. A priority is the recognition of adult education as an integral part of the education system. This is based on the concept of lifelong learning and the principles of openness and equal access, creativity and flexibility of forms, methods and content. Links between policy, theory and practice in adult education will be created by developing partnerships through the participation of adults in defining, monitoring and developing lifelong learning. The *Ministry of Science, Education and Sports* will have the leading role in coordinating and implementing the above tasks.

- *Increase investment by the business sector and the state in adult education at all levels.*
- *Develop participation and responsibility of social partners.*
- *Define activities and measures for asserting the right to education for all*

⁴³ *A Strategy for Adult Learning*, The Government of the Republic of Croatia, November, 2004.

⁴⁴ *Action Plan for the Implementation of the Strategy for Adult Learning in 2005*, The Government of the Republic of Croatia, November, 2004.

citizens during their lifetime, especially for target groups (the unemployed, war veterans, the illiterate, young people with inadequate education, etc.).

- *Conduct continuous professional training of teachers who participate in education and training programs for adults.*
- *The use of information and communication technologies in education and learning will be encouraged.*

The improvement in the education of the population will be achieved by:

- *Decreasing the cost of education and training, while introducing sources and mechanisms for stable financing;*
- *Reforming the traditional education system and introducing flexible educational programs;*
- *Harmonizing educational opportunities with labor market demands and increasing the availability of information concerning the existing educational offerings;*
- *Recognizing the knowledge and skills acquired in different forms of informal education;*
- *Adapting the education system to meet the needs and capabilities of adults as pupils;*
- *Strengthening adult education institutions by encouraging the development of adult education science;*
- *Establishing and developing a system of quality control in adult education.*

Priority target groups for lifelong learning include: adults without complete primary and secondary school education, adults with complete secondary education that does not correspond to the needs of the labor market, people living in specific areas (e.g. islands), people with special educational needs and others. Each target group needs to be approached with respect based on its unique needs and abilities.

Development objectives:

- *Adapt the adult education system to labor market needs and the ability of adults to learn, especially in the case of vulnerable target groups.*
- *Reduce illiteracy rates and create conditions for the completion of primary and secondary education in order to increase the number of employable workers.*

The development of the Croatian economy rests on the competitiveness of its labor force. Therefore, continuing efforts will be made to allow adults to complete as high a level of adult education as possible. By developing educational programs for continuing training this will be possible.

By developing mechanisms for higher educational access rates, adapting criteria for enrollment, stimulating flexible content and teaching approaches, and securing financial support, the conditions will be created for including adults in higher education programs.

Development objective:

- Increase adult enrollment in higher education programs.

The state, local authorities, social partners, educational institutions and civil society institutions will contribute to increasing all citizens' motivation to learn and to developing Croatia into a society based on knowledge. Such motivation will be created in a partnership environment by encouraging a learning culture and sensitizing the public to educational organizations and communities.

Development objectives:

- By 2010, education expenditures as a share of GDP will be increased to 4.9%.
- By 2010, regular expenditures for quality education, salaries excluded, will increase as a proportion of public expenditure for pre-tertiary education from the current rate of 9.6% to 13% of total public spending for education.

5. ANNEX

Table 3. Education Sector Development Indicator

System Performance Indicator	Present level		Progress	
	2004 ⁴⁵	EU average ⁴⁶	2007	2010
A1 Net enrollment ratio <i>The net enrollment ratio</i> is the ratio of enrolled children of the official age for the education level indicated to the total population at that age. Net enrollment ratios exceeding 100% indicate discrepancies between these two data sets.				
▪ Pre-school education	43.0	75.0	50.0	60.0
▪ Primary school education	96.5	95.0	97.5	98.0
▪ Secondary school education	79.2	85.0	81.0	83.0
▪ Grammar and art schools/vocational schools	29/71	55/45	31/69	35/65
A2 Completion rate <i>Primary completion rate</i> is the ratio of the total number of pupils of the same generation successfully completing the last year of primary school to the total number of children of official graduation age in the population.				
▪ Primary education	91.0	96.0	92.0	95.0
▪ Secondary education	69.5	78.7	71.0	75.0
A3 Participation in tertiary education <i>Participation in tertiary education</i> is the proportion of the population aged 18 and over, enrolled in formal tertiary education leading to a recognized Croatian degree qualification.				
▪ Enrollment in universities	122,000		125,000	130,000
▪ Enrollment in institutions outside universities	26,300		31,500	36,000
▪ The number of people aged 18-29 enrolled in higher education	15.0		16.0	17.0
▪ Dropout rate	69.5		60.0	50.0
▪ Length of study (in years) (universities)	7.1		6.9	6.5
A4 Education expenditures				
▪ Public education expenditures as a share of GDP (%)	4.4	4.94 (EU25)	4.6	4.9
▪ Private expenditures on education institutions as share of GDP	0.003	0.62	0.01	0.1
▪ Current expenditures for pre-tertiary education as a proportion of overall government expenditures	95	80	92	88

⁴⁵ Statistical data on schools for 2004, Ministry of Science, Education and Sports.

⁴⁶ http://www.eustatistics.gov.uk/publications/publicationlist/Eurostat_yearbook_2004.asp.

	▪ Recurring non-salary expenditures for education quality as a proportion of public expenditures for pre-tertiary education	9.6		11	13
	▪ Investments in new school buildings and renovation as a percentage of education budget	0.28 8.4 ⁴⁷		1	2
A5	Students who leave school early				
	▪ Percentage of population aged 18-24 with only vocational secondary education and did not continue their education/training	58	16.4	50	40
	▪ Percentage of those aged 22 who have successfully completed four-year secondary education (ISCED 3)	55	75.4 (EU15) 78.7 (EU25)	60	65
A6	Education provisioning				
	▪ Percentage of primary schools in single shift	25.45	N/A	30	40
	▪ Percentage of primary schools in three shifts	6.21	N/A	4	0
	▪ Percentage of primary pupils in single shift	17.5	N/A	30	50
	▪ Percentage of primary pupils in triple shifts	10.8	N/A	5	0
	▪ Percentage of secondary schools in single shift	23.76	N/A	26	32
	▪ Percentage of secondary students in single shift	12.0	N/A	20	25
A7	Student achievement				
	▪ Mean performance (and distribution) of students (age 15) on PISA reading literacy scale	N/A	494	480	490
	▪ Mean performance (and distribution) of students (age 15) on PISA mathematics literacy scale	N/A	475	470	475
	▪ Mean performance (and distribution) of students (age 15) on PISA natural science literacy scale	N/A	499	480	490

⁴⁷ The Ministry of the Sea, Tourism, Transport and Development.

Table 4. Institutions, Pupils/Students, Staff, and a Presentation of Work in Shifts (2004 – 2005)⁴⁸

	Number	Total number of pupils/students	Total number of teaching staff	No. of institutions with one shift	No. of institutions with two shifts	No. of institutions with three shifts
Preschool	1,192	163,747	7,020			
Primary school ⁴⁹	837	394,325	28,335	213 (25.45%)	572 (68.34%)	52 (6.21%)
Secondary school	402	195,340	16,738	96 (23.76%)	308 (76.24%)	
Tertiary	102	148,300	5,820	94 (92.16%)		
Total	2,533	901,712	57,913	403	880	52

⁴⁸ Source: Education Database, Ministry of Science, Education and Sports 2004/2005.

⁴⁹ There are a total of 837 central primary schools with 1,412 local branch schools.

