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# Croatia

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## Principles and general objectives of education

As stated in the National Curriculum Framework of 2010, the educational goals in the Republic of Croatia are the following:

- providing a systematic method of teaching students which fosters and enhances their intellectual, physical, aesthetical, social, moral, and spiritual development in keeping with their abilities and aptitudes;
- developing student awareness regarding the preservation of Croatian national identity as well as the material, spiritual, historical, and cultural heritage of the Republic of Croatia;
- promoting and developing awareness of the Croatian language as a key factor in Croatian identity, systematically fostering the Croatian standard (literary) language in all areas, cycles, and at all levels of the education system;
- raising and educating students in conformity with general cultural and civic values, including those of human rights and rights and obligations of the child, rendering children competent to live in a multicultural world, to respect differences, and to participate actively and responsibly in the democratic development of society;
- ensuring that students acquire key (general education) and vocational competences, making them able to live and work in a social and cultural context of change according to the requirements of the market economy, modern information and communication technologies, and scientific knowledge and accomplishments;
- encouraging and developing independence, self-confidence, responsibility, and creativity in students;
- training students for lifelong learning. (MSES, 2010).

The fundamental educational values of the National Curriculum Framework reflect the commitment of the national education policy to: the all-round personal development of students; fostering and developing the national, spiritual, material, and natural heritage of the country; European co-existence; and the creation of a knowledge-based society that will enable sustainable development. The values embedded in the National Curriculum are:

- **Knowledge:** The country has committed to the development of a knowledge-based society because knowledge is the basic driver of production and development in a society. Knowledge, education, and lifelong learning are key to the development of Croatian society; they enable individuals to better and more critically understand the society in which they live, and to cope with new circumstances and success in life and work.
- **Solidarity:** This implies a systematic training of children and youth to show concern for others; for the family; for the weak, the poor, and the



underprivileged; for inter-generational care; for the natural environment; and for their overall living environment.

- Identity: Education fosters the strengthening of an individual's personal, cultural, and national identity. In the globalization era, in which there is a steady and powerful mixing of cultures, world views, and religions, people need to become people of the world, while preserving their national identities (i.e. their cultural, social, moral and spiritual heritage). Education should promote, encourage and develop one's personal identity while linking it to a respect for differences.
- Responsibility: Education promotes the active participation of children and youth in social life as well as a sense of responsibility towards the well-being of society, nature, work, the self, and others. (*Ibid.*).

The Education Sector Development Plan 2005-2010 contemplates four key development priorities, namely: improving the quality and effectiveness of education; stimulating the continuing professional training of teachers and other educational staff; developing strategies for improving the management and efficiency of the education system; and promoting education for social cohesion and economic growth and development. (MSES, 2005).

According to the Strategic Development Framework 2006-2013 and the Strategy of the Government Programmes 2010-2012, Croatia's strategic vision is to progressively achieve social prosperity through development and employment in a competitive market economy acting within European welfare state of the Twenty-first century. In terms of the *Charter on the Development of the Republic of Croatia to 2025*, the country is viewed as an European Union member state with high value-added products and services, an efficient social state that stimulates and values knowledge, responsibility and work to ensure cultural diversity, social equality and the prosperity of all citizens.

## Laws and other basic regulations concerning education

After independence (30 May 1990), the *Sabor* of the Republic of Croatia passed many new laws referring to education. Between 1990 and 1999 separate laws were passed for each sub-system, regulating the legal, financial and organizational aspects of preschool, primary and secondary education. As a result of this legislation, the financing and management of primary and secondary schools were centralized, with the (then) Ministry of Education and Sports in charge of programmes and legislative decision-making. Legislative changes initiated in primary and secondary education in 2000 enabled: the opening of private schools and introduction of alternative programmes (such as Waldorf schools and foreign schools); the decentralization of funding to enable cities and counties to co-fund primary and secondary schools; the decentralization of management to include local self-government bodies and parents' involvement in decision-making; the realization of the rights of national minority children to the appropriate education; and greater school and teacher autonomy.

Through the adoption of the **Law on Social Care for Children of Preschool Age** (1991) and the **Preschool Education Act No. 10/97** (last amended in October



2007), preschool education has become an integral part of the education system; each child is entitled to receive preschool education.

The democratic changes in 1990 imposed the need for redefining aims and objectives of primary education through the **Primary Education Act No. 59/90** (as amended in 1993, 1996 and 2003). A new system of financing was introduced as well as a new system of running of schools, which replaced the old socialist one. Special attention was given to pupils by a more precise defining of their rights and responsibilities (i.e. maximum workload, special educational needs, etc.) as well as to teachers (i.e. work qualifications and in-service training, introduction of state examinations, workload).

Following the adoption of the **Secondary Education Act No. 19/92** (as amended in 1993, 1995 and 2003), various new vocational schools (technical, trade, industrial, medical, economic, agrarian, etc.) and new grammar schools were introduced. Content matters regarding vocational training and practice were significantly extended; subjects and content dealing with self-managing and Marxist ideology were abolished; and the right to establish private schools and dual education schools was introduced.

The new **Primary and Secondary Education Act**, adopted in 2008, provides the legal framework for the enhancement of quality in education. As stated in the new Act, it is among the basic goals of education to ensure a systematic approach to teaching, providing students with basic academic, lifelong learning and vocational competences, equipping them for living and working in a social and cultural context which is changing in accordance with the demands of the market economy, modern information and communication technologies and scientific developments and achievements. The **National Standards for Preschool, Primary and Secondary Education** were adopted in 2008.

The **Primary and Secondary Education Textbooks Act** of 2006 regulates the publication of textbooks and allows teachers to independently choose textbooks among those approved by the Ministry of Education. It also regulates the financing of the textbooks for compulsory education from the state budget.

The **Vocational Education and Training (VET) Act**, adopted in 2009, provides for the establishment of Sector Councils ((in charge of defining standards for different occupations and contributing to the development of VET curricula) and the National VET Council. The Act stipulates that the main goal of vocational education and training is to enable students to acquire key competences as well as vocational competences. The Act defines key competences as a set of knowledge and skills necessary to meet basic needs, developing social cohesion, democratic society and employment. The Baseline for the Croatian Qualifications Framework (CROQF) was adopted in July 2007 and the Committee for the Development of CROQF was set up in September 2007.

The **Adult Education Act** of 2007 recognizes adult education as an integral part of the education system, thus enabling anyone who dropped out from formal education to re-enter the system and continue his/her education without any limitations. According to the Act, the monitoring, development and evaluation of



adult education are ensured by Adult Education Council and the Agency for Adult Education (merged with the VET Agency in 2010).

The **Quality Assurance in Science and Higher Education Act** of April 2009 provides for the procedures of initial accreditation, re-accreditation, thematic evaluation and audit of higher education institutions, as well as the status, activities and organization of the Agency for Science and Higher Education. The **Act on Scientific Activity and Higher Education** (2003, last amended in July 2007) regulates the higher education sub-sector.

According to the **Law on Institutions** (1993), the schools have become public institutions. This Law stipulates the methods and procedures for their establishment and registration, and their relationship with the administrative bodies.

The **Educational Inspection Act No. 50/95** (amended in 1997) regulates the monitoring and supervision of the educational activities. Aspects related to the career of teachers were defined at the national level by the **Regulatory Act on the Promotion of Teachers in Primary and Secondary Schools** of 1995.

Article 65 of the **Constitution** (last amended in 2010) stipulates that primary education (eight-year programme) shall be compulsory and free of charge; secondary and higher education shall be equally accessible to everyone.

## **Administration and management of the education system**

Administrative and managing functions in education (coordination, decision-making, supervision, etc.) are distributed at the national, regional (counties, cities, districts) and school levels.

Since counties and districts in Croatia are relatively small administrative units, economically and demographically too small for some important decisions concerning the development of education, the network of schools, funding and curricula, these functions are fulfilled the national level. Until recent years, the Ministry of Education and Sports was responsible for pre-primary, primary and secondary education, while the Ministry of Science and Technology was responsible for higher education. In 2003 they have been merged into one, the **Ministry of Science, Education and Sports** (MSES). The Ministry is organized into 13 Directorates (responsible for higher education, science, secondary education, preschool and primary education, inspection, etc.), including the **Directorate for the National Curriculum**, which comprises the Department of National Curriculum Quality Assurance and the Department of Professional Development of Educational Staff.

The **Council for the National Curriculum**, established in 2006, deals with issues related to the design and development of the national curriculum. The Council makes proposals regarding the qualitative improvement of educational activities at the preschool, primary and secondary levels; is in charge of the preparation of the action plan for implementing the National Curriculum Framework as well as the annual plan for the implementation of external evaluation of schools; and provides advice to the Minister of Education on issues concerning all components of the national curriculum.



The **Education and Teacher Training Agency** (formerly the Institute of Education, which was restructured under the Education and Teacher Training Agency Act enacted in 2006) is responsible for the provision of professional and advisory support in the area of general education. Among other tasks, the Agency: is in charge of the monitoring, improvement and development of education from preschool to high school level, including adult education; participates in the process of preparation, development and implementation of the national curriculum; monitors the development and implementation of the National Educational Standards as a part of the national curriculum; organizes and implements in-service training of preschool, primary and secondary school teachers, counsellors and principals (unless stated differently by separate regulations); and administers license examinations for educational staff in accordance with separate regulations. The Agency can establish regional offices. At the county level, teacher professional development activities are organized by **Teacher Councils** established for each subject or cross-curricular area. The network of teacher councils at county level was set up in 2006.

The **National Centre for External Evaluation of Education**, established in 2004, is responsible for the external evaluation of the education system, which includes the preparation of tests, the organization and administration of national exams and the State Matura, as well as scientific research in the field of education. The Centre organizes and administers the *matura* examinations (national school-leaving exam) at the end of secondary education. The national school-leaving exam was successfully implemented for the first time in 2010.

The Higher Education Act of 2003 provided for the creation of the **National Council for Higher Education**, an advisory and independent body responsible for the development and quality of the higher education system, as well as the accreditation of higher education institutions.

The mission of the **Agency for Science and Higher Education**, established in 2004, is to continuously support quality improvement of science and higher education, by applying European and international best practices. According to the Act on Quality Assurance in Science and Higher Education (2009) the Agency is in charge of part of the procedure of initial accreditation, procedures of reaccreditation, thematic evaluation and audit, and collects and processes data on higher education, science and related systems. The Agency also provides information and systematizes data on higher education enrolments. The Agency supports the activities of the National Council for Higher Education, National Council for Science, Council for Financing Scientific Activity and Higher Education, among others.

The mission of the **Agency for Vocational Education and Training (VET) and Adult Education**, established in 2005, is to support the development of the VET system for providing young people with the necessary knowledge, skills and competences for successful employment and/or further education, as well as participation in the lifelong learning process. Among other tasks, the Agency: plans, organizes, monitors and evaluates the VET system; develops and modernizes existing VET curricula based on VET qualifications; takes care of the professional development and training of VET teachers; and cooperates with Sector Councils (bodies established under the VET Act of 2009) comprising representatives of all VET partners and stakeholders. According to a decision taken in February 2010, the



former Agency for Adult Education (established in 2006 with the purpose of monitoring, developing and evaluating the adult education system) has been merged with the VET Agency.

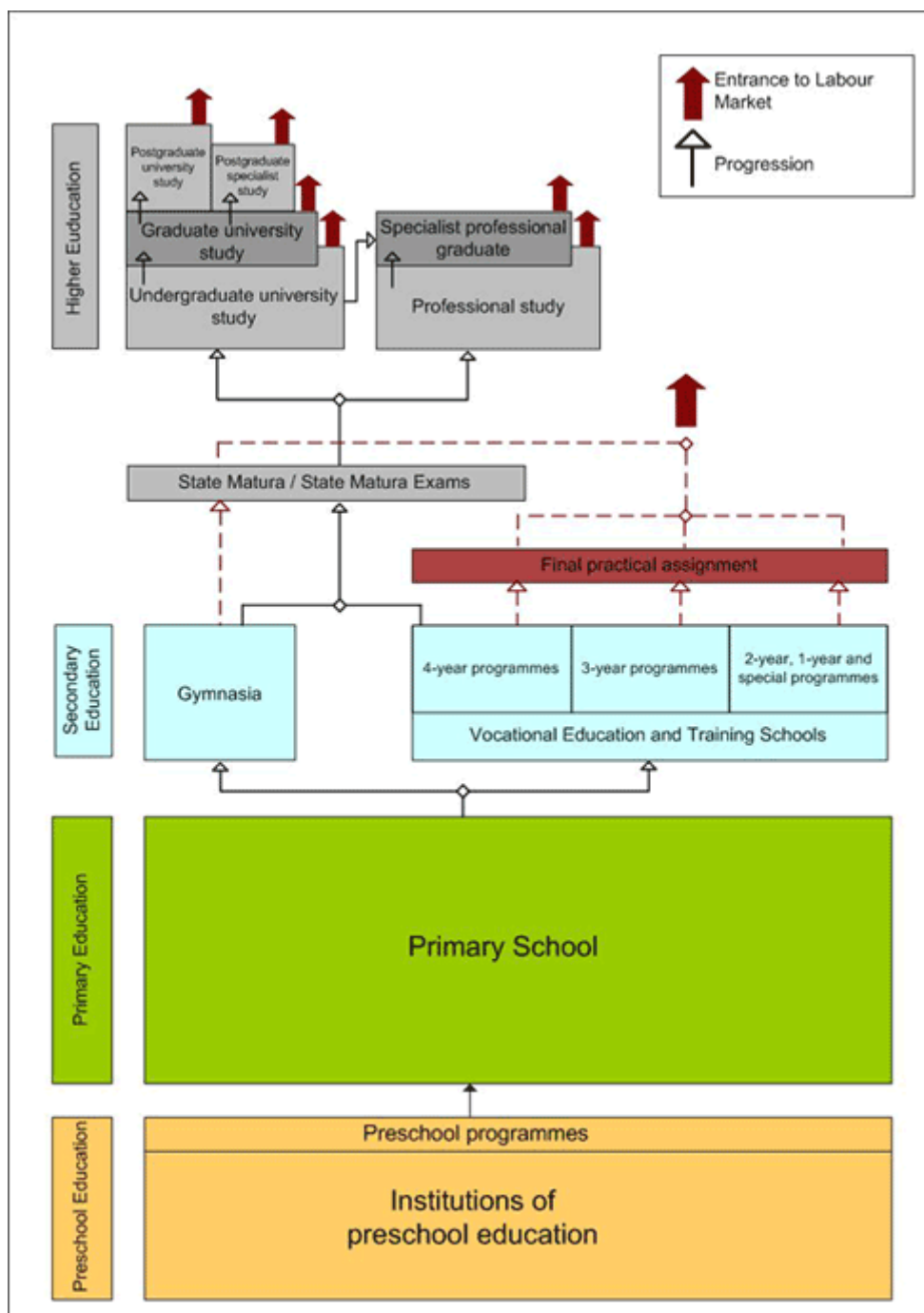
As an expert and advisory body to the government, the main task of the **Adult Education Council**, which comprises representatives of ministries, employers, unions and educational institutions, is monitoring the development of adult education and proposing initiatives for its improvement. The Council also makes proposals regarding the funding for adult education programmes from the state budget.

The **Agency for Mobility and European Union Programmes** was established in 2007 as a national coordinating organization for Lifelong Learning Programme 2007-2013 (Comenius, Erasmus, Leonardo da Vinci, and Transversal Programme).

Administrative functions at the regional level include coordination and development of schools in cities, districts and regions, proposals for new schools to be established and decision-making on additional programmes and their funding (pupils grants, school equipment, building, etc.).

## Structure and organization of the education system

### Croatia: structure of the education system



Source: Ministry of Science, Education and Sports.

### Pre-school education

Children can attend preschool education institutions as early as at the age of 1. Kindergartens cater to children between 3 and 6 years of age. The last year of preschool education is considered as a preparatory year before admission to primary school. Preschool education is not compulsory. According to the National Curriculum





Framework of 2010, preschool education comprises three cycles based on the age of children, i.e. from 6 months to one year of age; from 1 to 3 years; from age 3 years to the start of primary education.

## Primary education

Primary education is compulsory for children aged 6/7. Primary education lasts eight years (grades 1-8) divided into two four-year cycles: lower primary (classroom teachers) and upper primary (subject teachers). The National Curriculum Framework of 2010 is organized into four cycles, of which the first three cover grades 1-4, grades 5-6, and grades 7-8 of primary education. The fourth cycle covers years 1-2 of secondary vocational and arts schools and years 1-4 of gymnasias.

## Secondary education

Secondary education lasts: four years in grammar schools (gymnasias) and arts schools, which prepare students for further education; four years in vocational (technical) secondary schools, also giving access to tertiary-level education; and three years in vocational schools (industrial and crafts schools), mainly preparing for work. Starting from 2010, students completing general secondary and four-year vocational education must pass the national *matura* exam, which shall gradually replace admissions exams at higher education institutions.

## Higher education

Secondary education graduates can continue their studies at the tertiary level in universities, polytechnics and postsecondary vocational colleges. Polytechnics and colleges offer two- and three-year programmes leading to a professional diploma as well as three- to four-year programmes leading to an undergraduate professional diploma. Traditionally, most higher education institutions offered four-year programmes at the undergraduate level. Within the framework of implementation of the Bologna process, university programmes have been re-structured into three- to four-year bachelor's degree programmes (five years in the case of engineering, veterinary medicine and dentistry; six years in the case of medicine); and one- to two-year master's degree programmes following the bachelor's degree. At the postgraduate level, doctoral degree programmes normally take three years to complete. Universities also offer postgraduate specialist programmes in certain fields, lasting one to two years (three years in the case of medicine).

The school year 2011/12 in pre-primary, primary and secondary schools started on 5 September and will end on 15 June 2012 (on 18 May for final-year students). It is organized into two semesters and classes are to be organized and conducted during at least 175 school days (or 35 school weeks), and at least 160 school days (or 32 school weeks) for final-year students. The academic year starts in October and ends in September of the following calendar year. It is divided into two semesters.



## The educational process

The Ministry of Science, Education and Sports (MSES) prescribes the curricula and syllabi, which may be considered a centralized decision-making process. However, the process of drawing up curricula is only centralized in form. The prescribed curricula and syllabi provide only a framework and their implementation is completely decentralized.

The elements of the curricular structure are defined by the MSES, but schools and other educational institutions, especially in vocational training, may propose new subjects to replace existing ones, or propose the introduction of new programmes, which the educational authorities usually accept and approve. Teachers and other experts are statutorily required to draw up their own programmes and choose textbooks and other teaching aids. However, neither the school nor the teacher can influence the amount of time allotted to any particular subject and expressed in a specified number of hours. Professional teachers unions are becoming more influential at the national and local levels, and changing and modifying work methods and approach. The number of parents' associations is growing too, and they are using their influence to channel desired changes.

According to the *Strategy for the construction and development of the national curriculum for preschool education, general compulsory and secondary school education* (2007), the aims and objectives of curriculum change are to: synchronize the national curriculum with the needs and developmental goals of society and the developmental needs of the individual; synchronize the national curriculum with the most recent educational trends and improve it permanently; connect more efficiently the national curriculum with other components of the education system; and develop a national curriculum whose goals, implementation and impact are clear and transparent to its users. The national curriculum should include a common part, compulsory for all schools (core curriculum), and a specific part, defined at the school level (school curriculum). The core curriculum ensures equal conditions for all students at a national level. It defines the general goals, curriculum fields, goals and objectives for each educational cycle, mandatory subjects, integrated and cross-curricular thematic units, projected timetable for mandatory subjects, etc. The school curriculum is developed by schools to respond to specific needs of students and the local context, which in turn defines the school's individual profile. Schools can offer more in-depth study of some compulsory subjects included in the core curriculum or can expand the mandatory curriculum by providing additional subject contents. (MSES & CNC, 2007).

The preparation of the National Curriculum Framework (NCF) was set as one of the priorities of the national education policy, since this document enables the harmonization and integration of all elements of the system. The NCF is a fundamental document that determines all the essential elements of the education system, from preschool to the completion of the secondary education. The preparation of the NCF was preceded by a number of activities aimed at the improvement of the quality of education. In 2005 the Education Sector Development Plan 2005-2010 was adopted and in the same year the MSES started implementing a school reform project known as the Croatian National Education Standards (CNES), which marked the commencement of the qualitative changes in primary school programme contents. A



new primary school curriculum was introduced in 2006, and the strategy for the development of the national curriculum was delivered one year later. Within the NCF, curriculum is conceived as the aggregate of a child and student's growth, upbringing and education, a long-term, systematically devised, permanent, meaningfully-assembled, and harmonious organization of the educational process which is broader and deeper than course syllabi alone. (MSES, 2010).

The NCF constitutes the baseline for the preparation of syllabi, i.e., defining optimal workload for students, and building on educational area achievements to prepare subject-based curricula. The successful implementation of the national curriculum requires the preparation of systematic training programmes to enable teachers, educational staff and principals to apply the curriculum-based approach. The Framework will also be used for the preparation of textbooks and other teaching and educational aids. The key feature of the NCF is a transition to a system based on competences and student achievement (learning outcomes), unlike the previous one, which focuses on content. The development of national curricula that focus on student competences represents one of the main avenues of curriculum policy in European and other countries. To respond successfully to the challenges of the development of the knowledge-based society and the world market, the European Union has adopted eight key competences for lifelong learning, also adopted by Croatia. They are: communication in the mother tongue; communication in foreign languages; mathematical competence and basic competences in science and technology; digital competence; learning to learn; social and civic competences; sense of initiative taking and entrepreneurship; and cultural awareness and expression. Pursuant to the definition of the concept of key competences in the European competence framework, key competences are reflected in the expectations of student achievement, i.e., in clearly defined educational outcomes that represent the knowledge, skills, and attitudes that students are expected to acquire and be able to demonstrate upon the completion of a specific programme, educational cycle, or level of education.

The principles that constitute the value base for the preparation and implementation of the national curriculum are the following: high quality of education for all; equality of educational opportunities for all; compulsory quality of general education; horizontal and vertical mobility; inclusion of all students; scientific foundation; respect for human rights and the rights of the child; competence and professional ethics; democracy; independence of schools; pedagogical and school pluralism; European dimension of education; and interculturalism. The NCF adopts a student-centered approach, which means among others adapting educational and teaching forms, methods and work resources to the individual needs and capabilities of the students, in order to ensure successful educational performance of every individual, accepting different styles of learning, using various relevant sources of knowledge and teaching aids that encourage participation, observation, independent research, experimentation, discovery, deduction, curiosity and learning to learn. (*Ibid.*).

The NCF establishes four educational cycles for students to acquire key competences, i.e.; grades 1 to 4; grades 5 and 6; grades 7 and 8 (final year of primary education); and years 1 and 2 of secondary vocational and art schools (years 1 to 4 of gymnasias). The fourth cycle also pertains to the acquisition of the lowest level of vocational qualifications, which means that a student may acquire his/her first



qualification at the age of 16. Educational cycles are primarily used to plan and prepare curricula and subject content, and are guided by the principles of inter-connectivity, purposeful harmony, and clearly defined student workloads over the course of either a specific educational cycle or one school year in the core, differentiated, and school curricula. The structure of the NCF in primary and secondary schools consists of the core curriculum (common for all students), the differentiated curriculum (i.e. one or more optional subjects offered at the national and/or school level that are part of the compulsory educational standard for students), and the school curriculum (i.e. non-compulsory subjects, extra classes/additional instruction, remedial instruction, extracurricular activities, projects, excursions, and other options for students determined at the school level). The NCF addresses only the subject framework of specific learning areas. The subject structure of the national curriculum, i.e., the list of compulsory, optional, and non-compulsory subjects constituting the core, differentiated and school curricula, respectively, will be determined in the next phase of national curriculum development, immediately following the preparation of the educational plan, i.e., the optimal student workload. Curriculum planning also implies taking into consideration interdisciplinary themes. These are compulsory in all subjects, and all schools are obliged to implement them. Therefore it is important to take them into consideration over the course of programming the core and differentiated curricula. Schools are free to elaborate on proposed interdisciplinary themes, and to devise ways to implement them. The NCF provides for the implementation of the following interdisciplinary themes, content, and/or modules in primary and secondary schools: personal and social development; health, safety, and environmental protection; learning to learn; entrepreneurship; use of information and communication technologies (ICT); and civic education.

Interdisciplinarity represents a comprehensive (holistic) approach to the development of student abilities. This trend is reflected in an increasingly visible organization of curricula into broad learning areas that incorporate interdisciplinary themes. Introducing educational areas, i.e., related subject units connected by interdisciplinary themes, allows not only for the acquisition of new abilities in students, but also for better planning and drawing of conceptual connections between subjects. Learning areas and interdisciplinary themes also enable students to consider the problems that they encounter from the point of view of various disciplines or subjects. The NCF contemplates the following learning areas: language and communication; mathematics; science; technology and ICT; social sciences and humanities; the arts; and physical education and health. In the NCF, expectations of student achievement for each learning area are determined at the level of educational cycles rather than at the level of a specific grade. Subject curricula, i.e., course goals and expectations of student achievement, will be elaborated for each grade level. Determining expectations of student achievement at the level of learning areas and cycles facilitates the setting and reaching of goals in subject curricula from one grade to the next. It also enables a more rational organization and harmonization of subject matter in each curriculum area. Each learning area is accompanied by: a description of the area itself, which defines the area's purpose, importance, and contribution to the general goals, principles, and values of the NCF; a list of educational goals, which articulates that which is expected of students in each respective area; and a list of expectations of student achievement, i.e., expected education outcomes for each learning area and cycle. The subject structure of each learning area will be elaborated according to educational cycles and grade levels in separated documents. (*Ibid.*).



The NCF also aims at ensuring the education of children and students with special educational needs in accordance with their abilities and needs, and sets out conditions for including students who cannot regularly attend school. Educational institutions have to assume a range of roles to provide students with the necessary support both inside and outside the institution. In collaboration with the local community, schools shall develop a network of services and programmes catering to children and students with special educational needs and their families. Whenever possible, children and students with disabilities are to be included in the education system using appropriate measures of support in various scopes, depending on student's personal needs. These measures are prescribed in supporting legislation. It is particularly important to ensure the availability of adapted forms of teaching and other professional and support services and programmes. Students with disabilities who are included into regular classes in primary and secondary schools shall receive a comprehensive and student-oriented support from within the educational institution or/and from support services at the local and regional level. Professional teams in educational institutions, consisting of teachers and relevant specialists shall prepare individualized programmes, monitor their implementation and adjust them accordingly.

Within the NCF, the assessment and evaluation of student achievement is based on a comprehensive (holistic) approach, which requires the awareness and encouragement of students' general development. Educational institutions must provide systematic education of students, create positive and stimulating environment for their development in accordance with their affinities and aptitudes, and should systematically monitor their progress. This means that the intention is to identify and encourage development in the areas in which the student can experience success, whereas those activities that clearly cannot yield any satisfactory results are avoided. This is particularly true in the case of the general compulsory education, which should be based on the pedagogy of success for all. School assessment should contain a qualitative and quantitative appraisal of all student achievements and engagement, i.e.: students' verbal and written response; students' competences and abilities; the degree in which students use their abilities and students' engagement and activity in the classroom. In assessing students, teachers must pay special attention to students' motor and emotional development. Students' responsibility and readiness for collaboration, as well as their performance in interdisciplinary themes, should also be assessed. An important element in monitoring and assessing will also be students' capability and motivation with respect to lifelong learning. Continual monitoring and assessment of students' performance encourage students to acquire good study habits. School marks, irrespective of how they are expressed, have a triple role: that of recognition (diagnosis), prediction (prognosis) and encouragement (motivation). Formative assessment is a way to increase motivation and determine the quality and quantity of students' knowledge and other learning outcomes, as well as a way to monitor and guide students' progress, and evaluate the efficiency of teaching and students' learning strategies. When drawing up subject curricula or modules, or defining specific competences, it is important to set out expected student achievements with clear criteria set for each mark on the scale from 1 to 5 (2 being 'sufficient' and 5, 'excellent'). This approach to the preparation of subject curricula will be helpful to students and parents/guardians, and will allow students to have clear insight into their achievements. (*Ibid.*).



The National Standards for Preschool, Elementary and Secondary Education, adopted in 2008, regulate the following issues among others: the organization of educational programmes according to their purpose and duration; the number of children per groups; the number of teachers and other educational staff (pedagogues, psychologists, and special education experts); the material conditions and benchmarks for funding; nutrition, hygiene and children health care; kindergarten and school facilities and equipment; and didactic materials and teaching aids.

## Pre-primary education

As mentioned, children can attend preschool education institutions as early as at the age of 1. Kindergartens normally cater to children between 3 and 6 years of age; the last year of preschool education is considered as a preparatory year before admission to primary school. Preschool education is not compulsory, and parents have to cover 30 to 40% of the costs for their children's accommodation.

According to the National Curriculum Framework (NCF) of 2010, preschool education comprises three cycles based on the age of children, i.e. from 6 months to one year of age; from 1 to 3 years; from age 3 years to the start of primary education. The NCF stipulates that the basic function of preschool education is to create conditions for the comprehensive and harmonious development of children's personalities, therefore contributing to the quality of their upbringing and, indirectly, to the quality of their family lives. The purpose of preschool education is to provide an environment that guarantees the development of abilities of every child, and ensure that all children receive equal opportunities. The aim of the preschool curriculum is to encourage personality development by boosting a positive and realistic self-image in the child, and encourage children to notice and accept differences and internalize basic moral values. The structure of the preschool curriculum is organized into three broad categories in which children acquire abilities: the image of oneself; me and the others (family, other children, the immediate social community, kindergarten, and the local community); and the world around me (the natural and the wider social environment, cultural heritage, and sustainable development). In each category the content that connects the pedagogical and psychological dimensions of the educational process is determined. Classroom conditions, content and activities ensure the stimulation of the overall physical, intellectual, psychological, emotional, moral, and spiritual development of the child. The curriculum also considers the following three key dimensions:

- **Basic knowledge:** learning and using the concepts according to which children understand themselves, their behaviour and choices, and their relationships with other people. Children are expected to absorb information, i.e. to build up the knowledge that enables them to communicate smoothly with peers and adults, and to respond to educational subject matter in a way that ensures adaptability to the immediate environment and to future challenges such as the start of formal education.
- **Skills and abilities:** the acquisition and development of the skills of learning, connecting themes, thinking logically, making arguments, reasoning deductively and solving problems; the ability to revisit one's own ideas and notions about children/childhood, and to present in a well-

argued manner one's own way of thinking; the ability to identify various methods of learning, and to explain their diverse application; the ability to establish, develop, and maintain good relationships with other children and adults through participation, negotiation and conflict resolution; understanding and observing differences between people; the ability of the child to engage in joint (concerted) activities with other children and adults; the ability to behave responsibly towards oneself, others and the environment; ethics, solidarity, trust, and tolerance in communicating with others; the ability to adjust to new, changeable circumstances (i.e., resilience and adaptability); creativity; the ability to reflect on and assess one's own work and achievements; innovation and entrepreneurial abilities.

- Values and attitudes: acceptance, nurturing, and developing family, community, and social values. (MSES, 2010).

Since 1990 the percentage of children in preschool education has been growing. Preschool institutions are managed and funded by local self-governments. They are wide open to market conditions and their programmes already have the features of a curriculum, incorporating the most up-to-date educational approach, also making use of foreign alternative experiences (Waldorf, Montessori etc.), which meets with the approval of users and the support of the educational authorities. Preschool programmes can be implemented in schools, in library playrooms, and in other social, cultural, and sport institutions and organizations.

Since May 2007 all kindergartens and other legal persons implementing preschool education programmes have been obliged to introduce into their annual plans and programmes measures of safety, protection and prevention activities and create protocols for acting in any possible crisis situation for the children's safety in accordance with the national programmes. The national standards for preschool education came into force in June 2008 and all new kindergartens and new programmes are being coordinated within the framework of these provisions.

The overall coverage of preschool age children in regular programmes (five- and ten-hour programmes) in the year 2009/10 amounted to 58%. The coverage of children in shorter programmes was about 28%. In the year before enrolment into school, 99.6% of children were included in preschool education programmes, both in regular kindergarten programmes and preschool programmes. The MSES reports that in 2009/10 there were 673 kindergartens, of which 435 run by local governments and 238 by private entities. The total enrolment was 151,514 children, mainly (80.6%) in institutions maintained by local governments. The total number of staff was 16,133, including 10,021 education staff and 6,112 other staff. (Website of MSES, November 2011).

The Croatian Bureau of Statistics reports that in 2009/2010 there were 1,444 kindergartens and other legal entities providing preschool education (children from 3 years to school age). The total enrolment was 121,433 children (of whom 58,474 were girls) and the total number of teachers was 9,699 (of whom 9,623 were women). (CBS, 2010).



## Primary education

As mentioned, primary education is compulsory for children aged 6/7. Primary (basic) education lasts eight years (grades 1-8), divided into two four-year cycles: lower primary (classroom teachers) and upper primary (subject teachers). The National Curriculum Framework (NCF) of 2010 is organized into four cycles, of which the first three cover grades 1-4, grades 5-6, and grades 7-8 of primary education.

In accordance with the national curriculum, the expected student achievements (outcomes) upon completion of general compulsory education are the following:

- developed communication competences (in mother tongue and foreign languages);
- developed mathematical competences (conceptual knowledge and use of mathematics in problem solving, including problems in various life situations);
- developed computer literacy (be familiar with and use IT and communication technology);
- awareness and understanding of natural phenomena and a developed reasoning in nature sciences;
- developed critical thinking and problem solving capabilities;
- developed creative capabilities;
- self-organized studying competence;
- developed social competences;
- knowledge of human and children's rights and competence to respect and carry them through;
- developed basic knowledge and positive attitude towards artistic creation and expression;
- developed basic knowledge and positive attitude towards one's own culture and other cultures;
- developed consciousness of one's own health and the health of others;
- developed consciousness of the need for nature and environment preservation;
- developed practical and working skills for everyday life;
- developed entrepreneurial competence;
- developed competence for decision-making regarding personal professional development;
- developed self-confidence, self-respect and own capabilities awareness. (MSES & CNC, 2007).

Optional subjects, supplementary and additional contents of teaching are established by the school, according to the interests and needs of pupils and according to material and personnel resources. A school can determine the contents of optional subjects, which must be approved by the Ministry of Science, Education and Sports (MSES). The weekly lesson timetable applied in 1997 is presented in the table below:



**Primary education: weekly lesson timetable (1997)**

Subject	Number of weekly periods in each grade							
	First cycle				Second cycle			
	I	II	III	IV	V	VI	VII	VIII
<u>Compulsory subjects:</u>								
Croatian language	6	6	6	6	5	4	4	4
Fine arts	1	1	1	1	1	2	1	1
Music	1	1	1	1	1	2	1	1
Foreign language	–	–	–	2	3	3	3	3
Mathematics	5	5	5	5	4	4	4	4
Nature	–	–	–	–	1.5	2	–	–
Biology	–	–	–	–	–	–	2	2
Chemistry	–	–	–	–	–	–	2	2
Physics	–	–	–	–	–	–	2	2
Nature and society	2	2	3	3	–	–	–	–
History	–	–	–	–	2	2	2	2
Geography	–	–	–	–	1.5	2	2	2
Technical culture	–	–	–	–	1	2	1	1
Physical education	3	3	3	2	2	2	2	2
Sub-total	18	18	19	20	22	25	26	26
Optional subjects	2	2	2	2	2	2	2	2
Out-of-school activities	1	1	1	1	2	2	1	1
Supplementary/additional lessons	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1
<b>Total weekly periods (max.)</b>	<b>22</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>27</b>	<b>30</b>	<b>30</b>	<b>30</b>

Each teaching period lasts 45 minutes.

As mentioned, for primary and secondary education the 2010 NCF contemplates the following learning areas: language and communication; mathematics; science; technology and ICT; social sciences and humanities; the arts; and physical education and health. Furthermore, the NCF provides for the implementation of the following interdisciplinary themes, content, and/or modules in primary and secondary schools: personal and social development; health, safety, and environmental protection; learning to learn; entrepreneurship; use of information and communication technologies (ICT); and civic education. The subject structure of each learning area will be elaborated according to educational cycles and grade levels in separated documents.

Currently, pupils' knowledge and skills can be tested in different ways. The most common forms are written and oral examinations, essay writing, task-performing, experimental work, tests, permanent assessment of pupils' progress in periods devoted to revision, synthesis, etc. of the acquired contents. Primary schools generally apply permanent (daily) assessment and encouragement of pupils' progress. Basic personal data, grades for acquired knowledge and skills in each subject and other important facts about achievement are recorded in pupil's books. Students enrolled in higher grades of primary schools are awarded certificates at the end of each school year.



The Croatian Bureau of Statistics reports that in 2009/2010 there were 2,131 basic schools with a total enrolment of 361,052 students (of whom 175,528 were girls). The total number of teachers was 32,083 (of whom 25,973 were women). At the end of 2008/09, the total number of teachers was 30,980, of whom 24,888 were full-time teachers. In addition, at the end of 2008/09 there were 57 schools and 333 class units and educational groups attended by children and youth with special educational needs. The total enrolment was 2,115 students (of whom 800 were girls) and the number of teachers was 846, of whom 725 were women and 759 were full-time teachers. Furthermore, there were 84 music and ballet schools (grades 5-8) with 14,501 students enrolled (of whom 9,013 were girls) and 1,336 full-time students. (CBS, 2010).

## Secondary education

(Upper) secondary education is offered in grammar schools (general education or specialized gymnasia, four-year programmes), arts schools (four-year programmes), vocational (technical) secondary schools (four-year programmes), and industrial, trade and other schools (one- to three-year programmes preparing for work). Most of the students enrol in vocational education programmes. Starting from 2010, students completing general secondary and four-year vocational education must pass the national *matura* exam, which shall gradually replace admissions exams at higher education institutions.

In accordance with the national curriculum, the expected student achievements (outcomes) upon completion of secondary education are the following:

- developed language and communication, mathematical, scientific and social competences;
- acquired ICT, technical and technological competences;
- acquired professional competences, considering professional qualification, and understanding the meaning of work for an individual and for the community;
- developed entrepreneurial competences;
- personal and social responsibility and independence/autonomy;
- developed consciousness towards personal health and the health of others;
- developed social and intercultural competences;
- developed sense of national cultural heritage preservation and national culture cultivation;
- developed ecological consciousness;
- familiarity with, respect for and appliance of human rights;
- capacity to recognize and solve problems within and outside one's community;
- capacity for self-organized study;
- capacity to face changes, find solutions and opportunity for oneself and for others;
- capacity to accept and practice lifelong learning. (MSES & CNC, 2007).

Secondary education is becoming increasingly required although it is not yet compulsory. Due to the economic situation, the National Programme of Measures for

the Introduction of Compulsory Secondary Education launched in 2007 has been temporarily suspended. The various types of secondary schools have different curricula. At gymnasia the objective is to provide knowledge and skills for enrolment in any type of higher education establishment. The curricular common core for all four types of gymnasia (general, language, science and mathematics, classical studies) is the same. The differences lie primarily in the scope and depth of subject contents and in the number of teaching periods allocated to some subjects.

The grammar school is a traditional institution whose curriculum and time schedule are set down by the Ministry of Science, Education and Sports (MSES). Grammar schools fall into several types, which is reflected in the number of periods per week devoted to particular subject groups. The weekly lesson timetable of gymnasia applied in 1997 is presented in the table below:

**Secondary education (gymnasium): weekly lesson timetable (1997)**

Subject	Number of weekly periods in each form							
	General				Maths & Natural sciences			
	I	II	III	IV	I	II	III	IV
<u>Compulsory subjects:</u>								
Croatian language	4	4	4	4	4	4	4	4
Foreign language I	3	3	3	3	3	3	3	3
Foreign language II	2	2	2	2	2	2	2	2
Latin	2	2	–	–	2	2	–	–
Music	1	1	1	1	1	1	–	–
Fine arts	1	1	1	1	1	1	–	–
Psychology	–	1	1	–	–	–	1	–
Logic	–	–	1	–	–	–	1	–
Philosophy	–	–	–	2	–	–	–	2
Sociology	–	–	2	–	–	–	2	–
History	2	2	2	3	2	2	2	2
Geography	2	2	2	2	2	2	2	2
Mathematics	4	4	3	3	4	4	5	5
Physics	2	2	2	2	3	3	3	3
Chemistry	2	2	2	2	2	2	2	2
Biology	2	2	2	2	2	2	2	2
Informatics	2	–	–	–	2	2	2	2
Politics and economy	–	–	–	1	–	–	–	1
Physical education	2	2	2	2	2	2	2	2
Ethics/Religion	1	1	1	1	1	1	1	1
<u>Optional subjects</u>	–	2	2	2	–	–	–	–
<b>Total weekly periods</b>	<b>32</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>34</b>	<b>33</b>

(Each teaching period lasts 45 minutes).

In technical and four-year vocational schools, common core subjects, science and mathematics-based subjects, computer science and technical contents for some secondary school categories cover about 50% of the curriculum, while 50% of the teaching disciplines belong to specific vocations and vary depending on the type of school. In three-year trade, industrial and similar schools, common core subjects make up 30 to 40% of the curricula, while the part devoted to skills and crafts takes from 60 to 70% of the curriculum and is different in the various craft schools.



Secondary school students receive certificates at the end of each school year. The form and the contents of the certifications given by state schools are established at the national level and include students' personal data, the type of programme they have completed, the marks they were given in each subject and their general passing mark. At the end of secondary education students sit the school-leaving matriculation or final exam (national *matura* examination starting from 2010). Grammar-school pupils pass matriculation exams, secondary vocational school pupils pass final exams. After passing the matriculation exam pupils have gained a secondary education; after passing the final exam they have gained secondary vocational qualification.

In secondary schools, where principles of selection according to the students' abilities and learning results predominate, the drop-out rate is about 15%. Around 5% of students repeat the same form again. Upon completion of secondary school, 44% of students continue their education at higher education institutions (88% of all students who completed gymnasias, technical or similar four-year schools). (Data refer to 2001).

The Croatian Bureau of Statistics reports that at the end of 2008/09 there were 679 secondary schools, including: 174 gymnasias (grammar schools), 259 technical/vocational schools, 199 industrial and crafts schools, and 47 art schools. There were 57,776 students enrolled in gymnasias (of whom 31,888 were girls), 82,398 students in technical/vocational schools (of whom 40,173 were girls), 39,668 students in industrial and crafts schools (13,944 girls), and 4,957 students in art schools (3,467 girls), for a total enrolment of 177,799 students at the (upper) secondary level. The total number of teachers was 23,092 (of whom 15,036 were women and 11,588 were full-time teachers). In addition, there were 35 schools and 189 class units and educational groups attended by students with special educational needs. The total enrolment was 1,445 students (of whom 594 were girls) and the number of teachers was 440, of whom 278 were women and 206 were full-time teachers. At the end of 2008/09 the total number of graduates was 44,877, of whom 12,726 students from grammar schools and 31,286 from vocational and other schools (CBS, 2010).

## Assessing learning achievement nationwide

In 2006, Croatia participated for the first time in the OECD Program for International Student Assessment (PISA). Concerning the standardized test in mathematics, Croatia ranked 36 out of 57 countries.

## Teaching staff

Teachers are trained in higher education institutions. Traditionally, educators in preschool establishments are graduates of two-year (four semesters) programmes. Primary school teachers (classroom teachers, grades 1 to 4) were graduates of two-year programmes until 1992, when a four-year programme was introduced. Primary school subject teachers (grades 5 to 8) and secondary school teachers have to complete a four-year programme. They study not only the subject matters they have chosen, but receive additional training in pedagogy, psychology and methodology.



Secondary vocational school teachers must hold a higher education degree (usually a bachelor's of science).

Starting from 2005/06 and in the framework of implementation of the Bologna process, pre-service training programmes for preschool teachers are being transformed into three-year programmes leading to the award of a bachelor's degree. The new curriculum emphasizes children-centered approaches and project work. Pre-service training programmes for classroom teachers are to become programmes lasting five years, or four years plus an additional year of study. There is emphasis on the research component and partnerships between universities and schools for teaching practice are envisaged. The five-year programme consists of a total of 3,522 hours of study, including 252 hours (or 7%) of teaching practice in schools; 30% of time is devoted to academic disciplines, 23% to subject methodology, 18% to educational sciences, and 22% to optional courses. Pre-service programmes for subject teachers are being replaced by a 3+2 scheme, i.e. three-year courses at the undergraduate and two-year courses at the graduate level. (Pavin, 2006).

Prospective teachers who have completed their studies and possess the required qualifications, must spend one year practicing in school supervised by a teacher-mentor; at the end of the one-year period, if the evaluation is positive they become certified teachers. Teachers are trained in nine teachers colleges (of which seven within universities) and in some 14 teachers' faculties. In 2004, there were 4,038 students enrolled in colleges and 15,647 students enrolled in faculties. (Pavin, 2006).

Primary and secondary schools are gradually being equipped with computers, and every year a certain number of schools are provided with either informatics classrooms (sixteen computers) or smaller sets. In primary school, work with computers gives the pupils the basic computer literacy. In secondary school, the work connected to computers depends on the professional profile of pupils. Teachers are trained in various seminars organized by the Ministry of Science, Education and Sports (MSES) and professional organizations for computer science education. Some teachers take part in research projects led by faculties or other scientific institutions, while many of them occasionally participate in applied research organized by the Ministry.

In-service training of teachers is organized by the MSES, very often together with faculties and various professional organizations. The most common forms of in-service training are seminars and consultative meetings. In seminars, teachers are usually informed about innovations in school and about teaching methods that are to be introduced. Consultative meetings are organized in order to discuss some problems stemming from teaching practice and to find solutions for them. Seminars and consultative meetings are usually organized at the beginning of each school year, to enable the professionals from the MSES and certain faculties to inform the teachers about their duties and curricular innovations, new textbooks, teaching technology, etc. for the following school year. Seminars are usually held in each county's centres, but more important consultative meetings usually gather to a common location all teachers teaching certain subjects. In-service training is compulsory and offers possibilities for professional promotion to a higher level. Headmasters are also receiving in-service training in special seminars and meetings organized for them.



Teacher in-service training is reinforced with professional newspapers and magazines and national radio and specialized television programmes.

Teachers are appointed after a public competition, which is stipulated by law. If more teachers apply, the advantage is given to the outstanding ones. While serving at school, a teacher can be promoted to two higher levels (mentors, advisers) which is reflected in workload and salary.

Most schools have a double-shift system; teachers are obliged to work in shifts if necessary. If it is possible and the organization of the school allows that, they often work only one shift. Teachers use educational technology available at their schools. Unfortunately, many schools are equipped with out-of-date technology. The teacher's workload is forty hours a week; he/she has to teach 18-24 weekly hours in primary and 20-28 weekly hours in secondary schools. Apart from teaching periods, duties include: preparation of classes, correcting homework, evaluation, supervising studies and recreation, optional subject teaching, additional work with pupils with difficulties, teaching of gifted students, administration and working with parents.

Because of low salaries and poor working conditions, young people are not interested in the teaching profession. The lack of interest results in the lack of teachers. Teachers usually take up additional jobs in order to earn some extra money (teachers in the country deal with agriculture, while those in urban areas take paid activities like tuition, selling or dealing with crafts at home). Salaries are not attractive, ranging from a minimum of €50 (beginning of the career) to a maximum of €720 (teacher-counsellor). (Pavin, 2006).

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## Web resources

Agency for Science and Higher Education: <http://www.azvo.hr/> [In Croatian and English. Last checked: November 2011.]

Agency for Vocational Education and Training and Adult Education: <http://www.aso.hr/> [In Croatian and English. Last checked: November 2011.]

Education and Teacher Training Agency: <http://www.azoo.hr/> [In Croatian; some information in English. Last checked: November 2011.]

Ministry of Science, Education and Sports: <http://public.mzos.hr/> [In Croatian and English. Last checked: November 2011.]

National Centre for the External Evaluation of Education: <http://www.ncvvo.hr/> In Croatian. Last checked: November 2011.]



*For updated links, consult the Web page of the International Bureau of Education of UNESCO: <http://www.ibe.unesco.org/links.htm>*