

The Former Yugoslav Republic of Macedonia

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Principles and general objectives of education

The Former Yugoslav Republic of Macedonia is a sovereign, independent and democratic state. The Constitution of 1991 guarantees, in the spirit of the Universal Declaration of Human Rights, the basic freedoms and rights for all citizens; it regulates the organization and the character of the new democratic institutions, as well as the basic principles of education.

The education system is aimed at full development of the personality and enhancing rights and basic freedoms. Education is based on the generally accepted values of democracy and humanism. The basic principles are applied in order to provide equal educational opportunities to all children, regardless of nationality, sex, social origin or religious beliefs.

Current educational priorities and concerns

During the transition period, there have been profound and considerable transformations in the political, economic and social situation of the country. The difficult economic situation had a negative impact on the education system, leading to a number of restrictions and preventing its further development. The deteriorating physical condition of schools and educational institutions, the limited investments in this field, and the insufficient salaries of elementary and secondary school teachers were the most evident problems. The analyses of the educational level of the population show that of the total number of persons aged 15+, 3.85% have no education, 10.77% have not completed primary education, and 34.77% have completed primary education. Most of the unemployed in Macedonia have attained a low educational level. (MES, 2006).

Before the 1990s, the education policy was aimed at expanding the educational network and raising the enrolment of students, which led to an indisputable quantitative expansion. However, this growth also had a number of limitations, and the results were often below expectations. Efforts have been made to stabilize the education system and introduce innovations; on the other hand, alternative solutions for the development of the education system, as well as for the planning and management of the educational process, have been explored.

The new educational policy in the Republic has considered several important aims for the further development of the education system, in particular: improving efficiency; developing standards for compulsory, secondary and higher education; improving education for young people in the age group 12-19 years; and expanding adult education opportunities. The process of democratization of the whole society has been guided by two basic principles: equality (justice and respect of the rights of all) and participation (freedom of expression and choice, and adequate participation in the decision-making process).



Reforms are supported by the Education Modernization Project (EMP) 2004-2009, funded by the World Bank and the Government of the Netherlands. The EMP aims at improving the quality and participation in (initial) education and supporting capacity-building for education management within the framework of a decentralization process. The initial education component includes: (i) drafting school development plans and provision of grant finance for school improvement; (ii) designing and pilot-testing national examinations at the end of Grades IV and VIII, and a national matura examination at the end of upper secondary education; (iii) providing in-service teacher training on general subjects. (European Training Foundation, *The FY Republic of Macedonia 2007 Country Plan*).

In 2005 the Parliament adopted a National Strategy for the Development of Education 2005-2015, which envisages major reforms at all educational levels and aims at: promoting education for all, increasing social partnerships, supporting activities of NGOs and other associations within the framework of lifelong learning, establishing closer links between formal and non-formal education, increasing the opportunities for educational mobility, and raising adults' professional and social competences.

In the line with the principles of the Bologna process, the Law on Amending to the Law on Higher Education adopted in 2003 created a new legal framework for a higher education system based on three cycles of study. Recent legislative changes at the pre-university level include the extension of compulsory education (in principle covering secondary education as of 2007) and the adoption of a compulsory nine-year primary education programme (2004).

Laws and other basic regulations concerning education

In September 1995, two new laws were adopted: the **Law on Elementary Education** and the **Law on Secondary Education**, which also authorizes the establishment of private secondary education establishments. Both laws have been amended several times since 1995.

According to the amendments to the Law on Primary Education adopted on 20 September 2004, primary education is compulsory for all children in the age group 6–15 years and includes: one preparatory pre-primary year, and two four-year cycles (classroom teaching and subject teaching). In accordance with the amendments introduced on 29 May 2007, primary education now lasts nine years divided into three three-year cycles. According to the changes and amendments to the Law on Secondary Education adopted on 18 April 2007 secondary education is in principle compulsory for every citizen under equal conditions.

The **Higher Education Act** of June 2000 created a new legal basis for the reform of university and higher education. It stipulated that five-year programmes are to be adopted for the activities and development of State universities and higher education institutions. It also set forth that funds were to be provided by the State and other sources. In the line with the principles of the Bologna process, the **Law on Amending to the Law on Higher Education** adopted in 2003 created a new legal framework for a higher education system based on three cycles of study.



The **Law on Child Protection** was passed in the year 2000 and amended in 2004.

Administration and management of the education system

All issues concerning the education system fall under the competence of the **Ministry** of Education and Science (formerly the Ministry of Education and Physical Culture). The Republic Pedagogical Council, the Pedagogical Institute of Macedonia, and the Republic Inspectorate for Education are part of the Ministry. The **National Education Inspectorate** supervises the implementation of the laws and other acts, the provision of quality education, and the implementation of educational standards.

Pre-school, elementary and public secondary education curricula and syllabi are prepared by the Pedagogical Institute (now the **Bureau for Education Development**) in collaboration with the **Republic Pedagogical Council**, which gives its professional advice. Distinguished teachers, academics and other professional personnel from the faculties, institutes, business and other institutions, take part in their development.

Curricula and syllabi for secondary education may also be proposed by the schools themselves, enterprises, institutions and other civil legal entities, for the purpose of meeting their own requirements (re-qualification, acquisition of a higher educational level, etc.). Curricula at all levels of higher education are determined by teachers' councils.

Each kindergarten has a **teachers' council**, headed by the principal. Representatives of the parents and the units of local self-government also participate in the management of the pre-school institutions. To this end, extended membership councils are formed.

The **Ministry of Labour and Social Policy** is responsible for overall coordination of pre-school education. The **Ministry of Health** is responsible for the health promotion and protection components, and the Ministry of Education and Science for implementation of programmes and standards. In accordance with the Law on Local Self-Governance (2005), establishment, financing, investments and maintenance of kindergartens are responsibility of the **municipalities**.

According to the laws on elementary and secondary education, the **school board** is the supreme management organ. It is comprised of representatives of teachers and professional workers, as well as the founder of the school and the parents. The school board adopts the annual programme, reports, and financial plans; it participates in the election of the principal (issues the announcement and gives its opinion for recall of the principal); adopts the statutes and reviews issues stipulated in them. Principals are appointed by the Minister, upon prior opinion of the Pedagogical Institute of Macedonia and of the school boards.

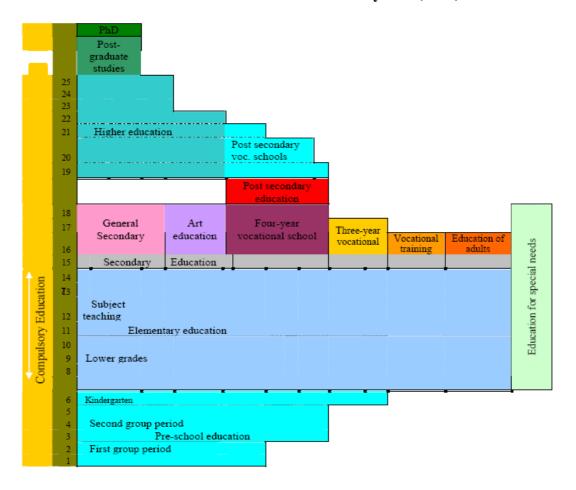
According to the programmes of higher education institutions, regular and extraordinary annual assemblies are convoked. Students' representatives take part in the work of the senate, and therefore they participate in the election of the rector and



vice-presidents. Moreover, teachers and students may also form councils. The **Higher Education Development and Financing Council**, established in October 2003, is responsible for the development and implementation of measures and criteria for financing of higher education. The **National Agency for Evaluation of Higher Education** and the **National Accreditation Board** are the main bodies responsible for quality assurance in higher education.

Structure and organization of the education system

The FYR of Macedonia: structure of the education system (2003)



Pre-school education

Pre-school education is provided in kindergartens and in the reception year groups within primary schools. As from September 2005, the reception (pre-primary preparatory) year became part of compulsory primary education.

Primary education

Compulsory elementary (primary) education used to last eight years divided into two four-year cycles, and children who have reached the age of 7 by the end of the calendar year enrolled in the first grade of the eight-year elementary (basic) school. In 2004, a new nine-year primary programme compulsory for all children in the age group 6–15 years has been introduced, consisting of: one preparatory pre-primary



year, and two four-year cycles (classroom teaching and subject teaching). According to legislative changes introduced in 2007 primary education will last nine years, divided into three three-year cycles.

Secondary education

Upon completion of elementary (basic) education, students can enrol in: four-year secondary education schools (general education, languages, and science and mathematics gymnasia), four-year technical education schools, or four-year specialized schools (art, music, and ballet). Graduates from primary education may opt for vocational education schools offering two-, three-, or four-year courses. At the end of Grade XII students sit the matura examination. There are also final exams at the end of three- and four-year vocational education programmes. According to legislative changes introduced in 2007, in principle secondary education is compulsory.

Tertiary-level professional colleges offer two-year courses. Before the implementation of the Bologna process, at the universities most undergraduate programmes lasted four years (five years in the case of professional studies, six years in the case of medicine). Since 2004/05, some faculties started to adopt the two-cycle pattern, and have also introduced short-cycle courses within the first three-year cycle. There are also faculties that continue to offer four- or five-year undergraduate degree programmes. Concerning second-cycle programmes, some faculties started offering master's degree programmes lasting one and a half to two years (six to eight semesters), regardless of the duration of undergraduate programmes. Doctoral degree programmes last three years.

The school year at the elementary and secondary levels starts on 1 September and ends on 10 June of the following year. As a rule, at the elementary (basic) level the school year consists of two terms. Schools operate five days a week and are obliged to provide instruction for 180 days during the year (175 days in Grade VIII).

The academic year at the higher education level consists of two semesters (summer and winter). The year starts on 1 October and ends on 30 September of the following year. The vacation period for winter and summer is determined in the statutes of the institutions. As a rule, students have a one-month winter vacation and a somewhat longer summer vacation.

The financing of education

Salaries of staff employed in pre-school institutions (teachers and other staff), as well as material costs, are funded from the State budget, through the competent ministries (Ministry of Education and Science and Ministry of Labour and Social Policy). Parents pay a certain amount for meals, depending on the material situation, i.e. if parents have a low income (unemployed, students, etc.), the child may use kindergarten services free of charge.

Elementary schools are funded from the State budget and other local sources (donations, legacies, etc.). Schools are obliged, in accordance with the law, to use the



allocated funds for designated purposes in compliance with the working programme. State secondary schools are financed in a similar manner, while private secondary schools are financed by the founder.

Material and other necessary means to finance the activities of higher education institutions are allocated from the State budget, depending on the annual work programme. Other sources include students' tuition fees, donations, legacies, etc. Higher education institutions generate a considerable amount of funds from scientific and research projects, and cooperation with economic and other associations.

According to national data, in 2003 the education budget represented 3.49% of the GDP. During 1996-2003 the budget for education has been decreased by 0.77% of GDP. In terms of allocations to the different levels, 59.15% of the budget is allocated to primary, 22.66% to secondary, and 12.46% to higher education; 1.92% to pupils' 'standards of living' and 3.38% to students' 'standards of living.' Out of the funds received by schools, about 80% is allocated to salaries, whereas this percentage is above 90% at the higher education level. (MES, 2006; based on 2004 data of the Ministry of Finance).

Concerning the distribution of the national budget for higher education, in 2005 about 90.3% was allocated to salaries and benefits, 9.1% to utilities, and 0.5% to capital maintenance/repairs. (MES, 2006).

The educational process

Pre-primary education

In 2004, preschool education benefited a total of 36,177 children aged up to 7, of whom 20,517 in kindergartens and 15,660 in reception year groups within primary schools. It accounted for approximately 20.4% of the total number of children (177,050 aged up to 6). The percentage of inclusion of children in the year before starting school was 82.2% (MES, 2006). In 2005, there were in total 4,065 kindergarten employees (experts, educators, assistants, care-givers).

According to the new territorial organization (August 2004), in the country there are 84 municipalities and kindergartens are available in 40 of them. The total number of public kindergartens is 51 (with 184 facilities), out of which 17 are in the municipality of Skopje, the capital.

Pre-school education is regulated by the Law on Child Protection and related regulations. According to legislation, care and upbringing of children is a form of child protection that includes care, nutrition, upbringing, health protection and promotion, education, sports and recreational and cultural-entertainment activities, and improvement of the intellectual, emotional, physical, mental and social development of the child until enrolment in primary education. As of September 2005, the reception year became part of the compulsory primary education programme.



Care and upbringing of pre-school children is realized in accordance with special programmes for different age group prepared by the Bureau for Education Development. The Pedagogical Service then submits the programme for approval to the Minister of Labour and Social Policy. There are several types of programmes: full day, half-day, abridged, pilot programmes and programme for out-of-institution activities. Kindergartens can also extend working hours in accordance with the working hours and the needs of the parents. Pre-school education is provided in the Macedonian language and in the languages of the minorities (mainly Albanian, Turkish, and Serbian). Kindergartens also provide care and upbringing for children with special needs according to the level of their disability. Parents usually participate covering 30% of the costs and the rest is subsidized by the State.

Physical and health education, introduction to the environment, speech development, elements of mathematics, art and music education are the main subjects of the programme. Greater attention is paid to children in the reception (preparatory) year, in order to facilitate their successful start in the first grade of primary education.

Based on the National Strategy for Development of Education 2005-2015, a draft programme for pre-school education has been developed. This programme emphasizes the need for increasing access to pre-school education and recognizes and promotes the importance of alternative forms of pre-school education to be implemented at the local level. (MES, 2006).

Primary education

The former eight-year compulsory education programme consisted of two stages: Grades I-IV, or classroom teaching, and Grades V-VIII, or subject teaching. As mentioned, in 2004 a new nine-year primary programme compulsory for all children in the age group 6–15 years has been introduced, consisting of: one preparatory preprimary year, and two four-year cycles (classroom teaching and subject teaching). According to legislative changes introduced in 2007 primary education will last nine years, divided into three three-year cycles.

Upon completion of primary education, pupils should: be able to express themselves and write in their mother tongue; be able to express themselves and write in Macedonian; recognize and accept the universal and specific societal values and be able to live in a pluralistic and democratic society; have developed critical thinking and problem solving skills; possess communication skills; be familiar with other cultures and civilizations, and be fluent in two foreign languages, one of which is English; be aware of the importance of science and technology in modern society; have basic knowledge in different scientific areas; be IT literate; have developed a sense and ability for expression in the area of arts, according to their potentials and predilections; have developed their motor skills through sports, games and activities, understand their responsibility regarding their own health, healthy lifestyle, and safe and healthy environment. (MES, 2006).

The weekly lesson timetable of the former eight-year programme is presented below:



First stage of elementary (basic) education: weekly lesson timetable

Subject	Number of weekly periods in each grade			
	I	II	III	IV
Ma cedonian language	5	5	5	5
Macedonian for pupils of other	_	_	2	2
nationalities (Albanian, Turkish or				
Serbian)				
First foreign language	_	_	_	2
Mathematics	5	5	5	4
Nature and society	2	2	2	_
Nature	_	_	_	2
Society	_	_	_	2
Art education	2	2	2	2
Music	1	1	2	2
Physical and health education	3	3	3	3
Total weekly periods	18	18	19(21)	22(24)
Facultative subjects:			` ′	` ′
Vlachs or Roma language	_	1	2	2
Ecology, handwork	_	_	2	2
Supplementary teaching	2	2	2	4
Free school activities	1	1	1	2

Source: MES, 2001. Each teaching period lasts 40 minutes.



Second stage of elementary (basic) education: weekly lesson timetable

Subject	Number of weekly periods in each grade			
	V	VI	VII	VIII
Macedonian language	4	4	4	4
Macedonian for pupils of other nationalities (Albanian, Turkish or Serbian)	3	3	2	2
First foreign language	3	3	3	3
Second foreign language	_	2	2	2
Mathematics	4	4	4	4
History	2	2	2	2
Geography	1	2	2	2 2
Physics	_	_	2	2
Chemistry	_	_	2 2 2	2 2 2
Biology	1	2	2	2
Art education	2	1	1	1
Music	2	1	1	1
Technical education	2	2	_	_
Physical and health education	2	2	2	2
Total weekly periods Optional subjects:	23(26)	25(28)	27(29)	27(29)
Technical education	_	_	2	2
Computer studies	_	_	2	2
Facultative subjects:				
Vlachs, Roma or other language	2	2	2	2
Computer studies	_	2	_	_
Art education, music, sports, ecology or other subject	1	1	1	1
Supplementary teaching	4	4	4	4
Free school activities	2	2	2	2

Source: MES, 2001. Each teaching period lasts 40 minutes.

Evaluation is a continuous process throughout the entire school year, while final grades are given at the end of the year. Pupils' performance is evaluated for the different subjects established within the curriculum, and their conduct is evaluated as well. School certificates contain marks for each subject separately: 1 is negative, while those from 2 to 5 are positive. Common performance is expressed by an average mark derived from all subjects covered by the curriculum for the relevant level. This mark is expressed via the terms Excellent, Very Good, Fair or Satisfactory.

The new programmes of study are focused on principles, aims, topics, activities and expected results. They introduce a new approach in the planning and organization of the teaching-learning process, adjusted to the developmental and educational needs of pupils in real life, together with their social, economic and cultural needs. The most important change in the development of the programmes has been the shifting of the focus of the educational process from content-based planning and programming towards goal- and content-based programming. The main advantages of this approach are the following: using content matter and methods which connect learning to pupil's experience; flexible organization of the lessons; encouragement of individual activity; and changes in the organization of the



classrooms, which is supposed to promote socialization and cooperation in learning. (MES, 2004).

According to national data, in 2001/02 there were 1,010 primary schools, of which 342 central school and 668 satellite schools in small villages and communities (505 satellite schools offered only Grades I-IV). There were 242,707 pupils enrolled and 12,912 full-time teachers. (MES, 2006).

Secondary education

Upon completion of elementary (basic) education, students can enrol in: four-year secondary education schools (general education, languages, and science and mathematics gymnasia), four-year technical education schools, or four-year specialized schools (art, music, and ballet). Graduates from primary education may opt for vocational education schools offering two-, three-, or four-year courses. At the end of Grade XII students sit the matura examination. There are also final exams at the end of three- and four-year vocational education programmes. According to legislative changes introduced in 2007, in principle secondary education is compulsory.

Gymnasia offer three types of course: general education; science and mathematics; and languages. All of them give access to higher education. The school-leaving examination consists of the defense of a theme prepared by the students in the course of the fourth year, a written exam in the mother tongue and literature, and an oral exam in a given subject (e.g. mathematics, foreign language, etc.) included in the curriculum. Classes are held five days per week for 38 weeks a year (35 weeks in the last year of secondary school). In technical education schools classes may be held for 42 weeks per year. Lessons usually last 45 minutes, while for practical education lessons are 60 minutes long.

Technical and other vocational schools prepare technicians for different occupations and professions. In some fields, such as construction, agriculture, building mechanization, etc., there are programmes with a shorter duration (from several months to three years). The network of schools is well-developed, except for the technical courses, agriculture, economics, medicine, food-stuff, and textiles. The curriculum of four-year vocational education institutions covers general education, vocational-theoretical subjects and practice sessions, with 35-40% of time allocated to general education subjects and 60-65% to vocational education and training. Four-year vocational education and training education ends with a final exam that is both written and practical. The resulting diploma gives students the option of sitting the entrance examinations at the relevant faculties, universities and colleges.

Art schools (music, ballet, applied arts) offer a four-year course. In these schools, students acquire general and vocational education in the relevant field of art. Students enter these schools by sitting an entrance examination, the purpose of which is to test their skills. At the end of the studies, students sit a final examination and, if successful, are entitled to enrol in the university.

As in the case of elementary education, evaluation is a continuous process throughout the entire school year, while final grades are given at the end of the



relevant school year. Students' performance is evaluated for the different subjects established within the curriculum, and their conduct is evaluated as well. In addition, students are also evaluated for other accomplishments achieved in the on-the-job practice (school workshops, enterprises and stores).

Students receive certificates at the end of each school year. In the diploma awarded at the end of secondary education, the type of education and the level of vocational skills are stated. The certificate of completed four-year secondary education provides students with the right to access to higher education.

In 2002/03, there were 37,059 students enrolled in gymnasia, 9,292 students in three-year vocational schools, 46,259 students in four-year vocational schools, and 916 students in art schools.

Assessing learning achievement nationwide

Under the coordination of the Assessment Unit of the Bureau for Education Development, in the period 2000-2004 the country participated in the PISA and TIMSS exercises. (MES, 2004).

Higher education

As mentioned, tertiary-level professional colleges offer two-year courses. Before the implementation of the Bologna process, at the universities most undergraduate programmes lasted four years (five years in the case of professional studies, six years in the case of medicine). Since 2004/05, some faculties started to adopt the two-cycle pattern, and have also introduced short-cycle courses within the first three-year cycle. There are also faculties that continue to offer four- or five-year undergraduate degree programmes. Concerning second-cycle programmes, some faculties started offering master's degree programmes lasting one and a half to two years (six to eight semesters), regardless of the duration of undergraduate programmes. Doctoral degree programmes last three years.

The Law on Amending to the Law on Higher Education adopted in 2003 created a new legal framework for a higher education system based on three cycles of study. The envisaged changes in the duration of undergraduate and postgraduate studies generated many debates and reactions within the universities. The current experience is showing that the '3+2+3' pattern is not so easily accepted by faculties.

In 2003/04 there were three public universities: the St. Cyril and Methodius University (UKIM, Skopje), with more than twenty faculties offering courses in several fields of study; the St. Clement of Ohrid University (UKLO, Bitola); and the State Tetovo University, established in 2004. There were also the private University of South-East Europe in Tetovo and the private Faculty of Social Sciences in Skopje. In the same year, there were more than 37,000 students enrolled at UKIM and over 15,000 students at UKLO; there were 3,867 students enrolled in the private university. In 2004/05, the total enrolment in the Tetovo University was 1,550 students. (*National report of The FY of Macedonia within the framework of the Bologna process*, 2004-2005).



Each university represents a separate legal entity, with its own governing bodies and administration. Governing bodies of higher education institutions include: the Faculty Council, the Academic Council, and the Dean. A faculty is managed by the Dean, whereas at colleges of further education this function is performed by the Director. The governing bodies of the universities are: the Senate, the University Board, and the Rector.

The basic conditions for admission to faculties are: the results achieved in the entrance examination (carrying a maximum of 70 points), and the academic achievement in secondary education (a maximum of 30 points). The entrance examination consists of two parts: a subject-based examination with regard to the selected course of studies; and an examination on general educational content (Macedonian language, literature, history, society and arts).

Special education

Children and young people with physical and mental difficulties (impaired hearing, sight, disability, and insufficient mental development) are educated in separate classes at elementary schools or centres. Children with moderate impairments are mainstreamed into elementary schools. When children who need special education live in settlements far from special schools, they are accommodated in care and training centres. Special elementary schools and centres for special education are established by local self-governments and the State. Their activities are financed by the State and other sources.

Children and young people with developmental disabilities are also offered the opportunity to acquire secondary education or working skills, depending on the extent of their disability.

In 1994, approximately 1,900 pupils attended special elementary and secondary education (in schools and centres). Instruction and other activities in these institutions are organized according to special curricula and syllabi. Their main function is to create prerequisites for the development of children and youths with special needs and to provide them with vocational training.

Private education

In 2002/03 there were five private secondary schools with 848 students enrolled and 119 teachers. In 2003/04 there was also one private university and one private faculty of social sciences.

Means of instruction, equipment and infrastructure

In general, schools dispose of special classrooms equipped with teaching aids for natural sciences, technical and vocational-theoretical subjects, workshops, laboratories, computer laboratories, sports halls and other space in the schoolyard intended for physical education. However, the situation both in terms of space and equipment is not uniform.



There are no specialized producers in the country of school equipment and didactic materials. School equipment and teaching aids are purchased from other producers, and for this reason they are extremely expensive. In spite of the lack of material funds, in the past several years a significant number of elementary and secondary schools and universities have purchased computer equipment. In addition, attention is paid to the professional training of teachers in modern computer equipment.

The situation is also improving with regard to other equipment in schools (chemistry, physics, biology, technical subjects, etc.). However, the introduction of modern teaching technology in education is not systematic and is insufficiently coordinated.

Adult and non-formal education

Adult education is mainly provided through elementary and secondary schools, workers' and adult education centres, afternoon classes, as well as part-time studies at higher education institutions. Different foreign language courses are particularly developed.

Elementary education curricula and syllabi are adapted to the knowledge and experience of the learners. They include subjects and courses offering different vocational qualifications. For example, learners follow training programmes in the area of home economics, agriculture, typewriting, shorthand, computers, services, etc. Studies to complete elementary education may last up to four years; however, adult learners acquire such education within a shorter period by taking exams in ordinary elementary schools.

Adults are also educated in secondary schools, in accordance with the official curricula. They are given the possibility to sit examinations by which they prove their level of knowledge and skills, and thus acquire relevant diplomas with technical or other vocational qualifications. Certificates awarded to adult learners are of the same rank as those of ordinary schools.

Adult education has several functions, the most important being to give adults the opportunity to complete formal elementary education, thus obtaining professional qualifications. Specialized permanent training programmes and re-qualification courses for new employment or change of job are also important. These functions are complemented by the contribution of this type of education to general cultural promotion and to meeting other educational and cultural needs of the citizens. Adult education institutions are established by local government authorities or enterprises and other professional associations.

The recently approved Strategy for Adult Education in the Republic of Macedonia in the context of lifelong learning 2006-2015 is the result of a joint project implemented by the Ministry of Education and Science and the European Training Foundation (ETF). (MES, 2006).



Teaching staff

Teachers are trained at tertiary and higher education level. Pre-school teachers are trained at teacher training colleges (two-year courses). Tutors in boarding schools have the same qualifications as teachers in elementary and secondary education. The majority of elementary school teachers complete a two-year course at teacher training colleges in separate study groups (classroom and subject teaching). Qualifications obtained by subject teachers often provide them with the opportunity to teach two related subjects. It is a government commitment that elementary school teachers also acquire university education. In this respect, changes are being made in curricula and syllabi for teacher education.

Teachers for instruction in the languages of other nationalities are also trained in different study groups at teacher training colleges or other related institutions. Courses for teachers in these languages (mainly Albanian, Turkish and Serbian) are organized at the faculty of philology in Skopje.

According to a new legal obligation introduced in 1995, newly employed teachers and associates have to sit an examination on vocational ability, in accordance with the programme approved by the Minister of Education upon proposal of the Pedagogical Institute. Since 1995/96 the initial education of all teachers (except for the practical classes) has been raised to the university level (four-year programmes). (MES, 2006).

Secondary school teachers of general educational subjects are trained at the faculties of philosophy, philology, natural sciences and mathematics, arts and physical culture; those of vocational-theoretical subjects are trained at technical and other faculties, such as: faculty of electrical engineering, mechanical engineering, technology, economics, law, etc. Teachers who do not have relevant pedagogical education are obliged to sit additional exams. In schools providing practical instruction, the number of instructors with college education is limited.

Special education schools employ teachers with college or university qualifications, as well as teachers with professional qualifications in different subjects and training in special education.

Professional in-service training of for pre-school, primary and secondary school teachers is organized at the following levels: (i) national or regional, most often by the local offices of the Bureau for Education Development, depending on the aim of the in-service training or the number of participants (training in curricula and syllabuses, education technology, projects or didactical and curriculum innovations); (ii) schools and educational institutions as professional organizations of teacher groups (of class-based teaching, subject teaching, general education, a group of vocational subjects) or school teams (mainly within a given project); (iii) professional gatherings, panel discussions, symposiums (individual participation or as school representatives); (iv) pedagogical and professional publications, papers, brochures containing professional information and methodology contributions, through individual of institutional subscription. (MES, 2006).



According to national data, in 2003/04 at the primary level 4,929 teachers had higher education; 8,570 teachers had tertiary-level, postsecondary education; and 820 teachers had completed secondary education. In the same year, at the secondary level 5,712 teachers had higher education; 244 had postsecondary education; and 73 teachers had completed secondary education. Concerning faculty staff, 1,420 were PhD degree holders; 567 were master's degree holders; 177 were specialist's degree holders; and 463 were bachelor's degree holders. (MES, 2004).

As regards teachers' workload, in 2004/05 the situation at the primary level was as follows: 83.3% of the teachers teach 18-24 hours per week; 78.5% of the teachers teach only one subject, 18% two subjects and 3.7% three or more subjects; 91% of the teachers work in one school only, 8% in two and only 1% work in three or more schools. At the secondary level: 20% of the teachers teach 18 hours per week, 71.5% teach 18-24 hours and 8.5% teach more than 24 hours per week; 74.6% of the teachers teach only one subject, 11.8% two subjects and 13.6% three or more subjects; 89.6% of the teachers work in one school only, 9.2% in two and 1.4% in three or more schools. (MES, 2006).

Educational research and information

Educational research is carried out at the faculties and institutes of higher education and at the Pedagogical Institute of Macedonia. In the past years, priority was given to research activities concerning the changes that are to be made in the content and organization of elementary, secondary and higher education. A significant number of teaching and scientific staff from the faculties and institutes, and distinguished teachers and advisors from the Pedagogical Institute of Macedonia, took part in these activities.

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