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# Armenia

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## Principles and general objectives of education

The state policy in the field of education is based on the national school, the main goal of which is the formation of a person with proper professional training and comprehensive development, with good perception of statehood and love for mankind, ready to protect the country. The education system aims at strengthening the spiritual and mental potential of the Armenian people, and preserving and developing national and universal values.

Some of the important principles of state policy in the field of education are:

- humanistic character of education, priority of universal values, free and comprehensive development of the individual, civic perception, national dignity, patriotism;
- accessibility, continuity, succession and conformity of education with the level of learners' development;
- integration in the international educational system;
- supporting the educational process of preserving Armenians in Diaspora;
- secular education in educational institutions.

According to the National Curriculum for General Education of 2006, the main goal of general education is the comprehensive and harmonized development of the mental, spiritual, physical and social abilities of children and learners, and the formation of good habits of conduct and behaviour. The official language of the general education system is Armenian. The general education system aims to preserve and develop the Armenian language, the cultural heritage of the Armenian nation and to protect national identity and integrity. (MES, 2006).

## Laws and other basic regulations concerning education

With the Declaration of Independence adopted on 23 August 1990, the Parliament of the Republic of Armenia initiated new political, economic and social processes. In this stage of public and economic development, ensuring normal activities and progress of all education sub-systems, education institutions and organizations, required a legal basis for operations.

For this purpose legislation has been drafted, including, as a priority, the new laws of the Republic of Armenia on general (primary-secondary) and higher education. Such laws must set out and protect constitutional rights of individuals, establish guarantees for education, and clarify interrelations of state and private forms of education. One of the basic principles of primary-secondary education laws should be to ensure the availability of secondary education for every child, irrespective of family income. The higher education law should clarify the issues of autonomy, licensing and accreditation of higher education institutions. The **Law on Education**



was finally adopted by the National Assembly on 14 April 1999. The Law stipulates the new structure of the education system and also that the state educational policy should be organized on the basis of a national programme for the development of education.

In the year 2000 the government approved the Regulations for educational activities, licensing and state accreditation of middle and higher professional education institutions and their professions. These documents regulate the activities of non-state educational institutions and other educational organizations in order to ensure the quality of the educational services provided. The Regulations stipulate the procedures for licensing and state accreditation issuance, requirements for educational institutions, etc.

The **Law on Higher and Postgraduate Professional Education** was approved by the National Assembly in December 2004. The reforms envisaged in the document are related to the implementation of a two-cycle structure of higher education programmes in accordance with the Bologna process. Another step within the Bologna process has been the establishment of a national system of quality assurance for tertiary education. By the Decree No. 1486-N of 27 November 2008 the government approved the creation of the Armenian National Centre of Quality Assurance (ANQA).

The **Law on Preschool Education** was adopted in 2005 with the purpose of streamlining the legal, organizational and financial foundations for operating and developing pre-schools.

The **Law on Preliminary (Vocational) and Middle Level Professional Education** adopted in July 2005 and the corresponding Strategy were developed with the objective of creating an efficient system of primary and secondary vocational education in order to train qualified specialists in line with the demands of the economy and the labor market. The **Law on State Educational Inspection** was adopted in 2005. This law regulates the development of the educational programme, the application of state educational standards, quality education, training, evaluation, as well as the State Inspectorate of Education tasks and mandate.

The **Law on Education of Persons in Need of Special Education Conditions** was adopted in 2005.

According to Article 39 of the **Constitution** of 1995 (amended and adopted by referendum in November 2005), everyone shall have the right to education. Basic general education shall be compulsory except for the cases prescribed by the law. The law may establish a higher level of compulsory education. Secondary education in state educational institutions is free of charge. The law shall define the principles of autonomy in higher educational institutions. The procedures for the establishment and operation of educational institutions shall be defined by the law. All citizens shall have the right to free higher and professional education in state higher and other professional educational institutions on the basis of competition as prescribed by the law. In cases and in conformity with the procedure prescribed by the law the state shall provide financial and other assistance to institutions implementing higher and other professional education programmes, as well as their students.



## Administration and management of the education system

The principal task of the **Ministry of Education and Science**, as the body responsible for management of the general (primary-secondary) education system, is the implementation of the national education policy, the preparation of legislative bills and draft regulations for State decision-making, and the creation of targeted programmes for resolving different problems within the education system.

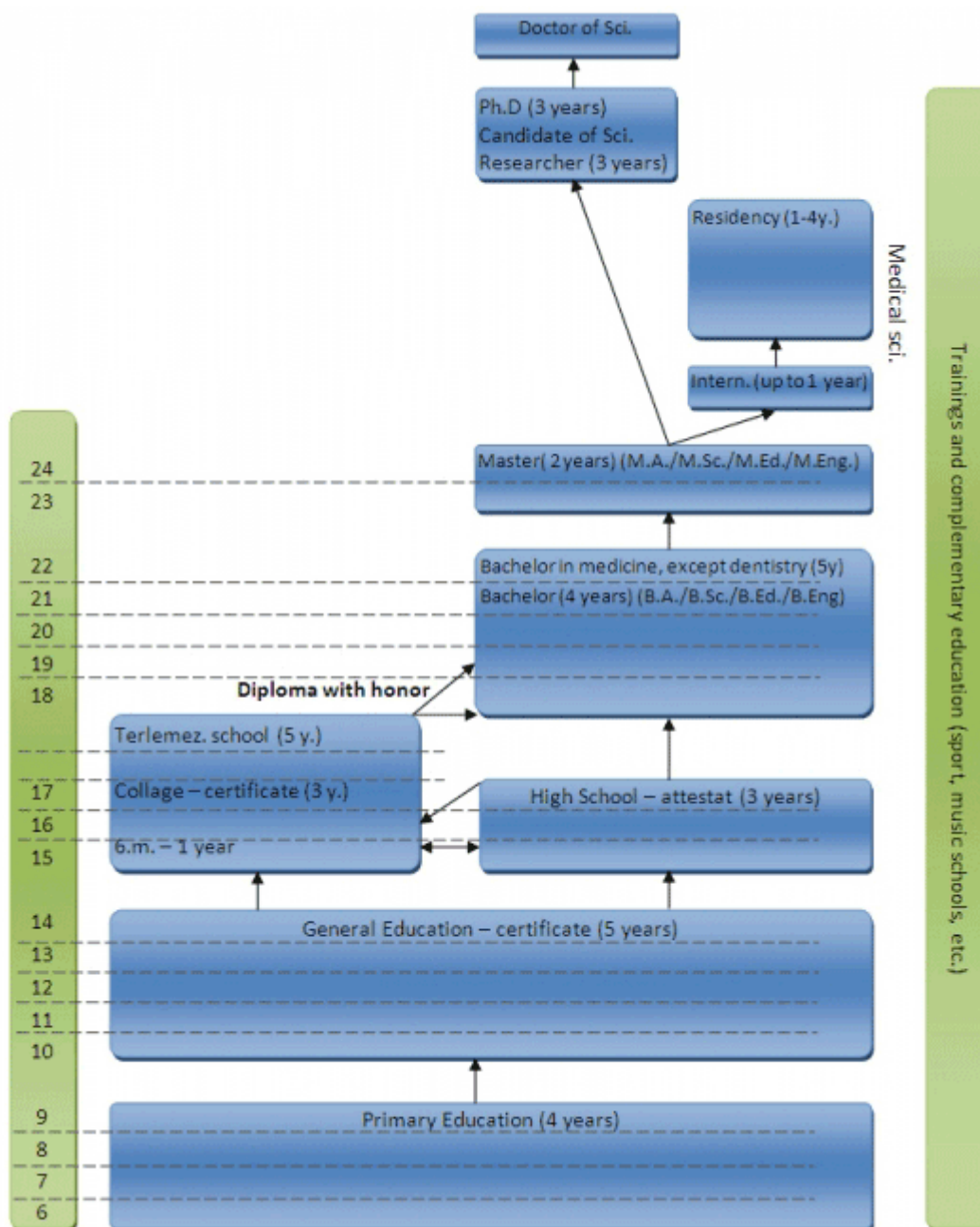
The former centralized education system has been replaced by a decentralized system with emphasis on school self-management. The process of decentralization was initiated in 1996, when People's Education Divisions were dissolved and school management was transferred to the Education Divisions in the ten *marzes* (administrative regions). The capital city, Yerevan, also has the status of a *marz*. Schools are managed by a Council/Board responsible for approving the estimated budget, preparing the financial report and appointing the headmaster.

Following the formation of the country's new administrative-territorial system in 1996, in accordance with the Law on Local Self-Governance, preschool institutions were transferred to the local self-governing bodies/communities supervision. However, local bodies both in managerial, professional and financial terms were not ready to administer and organize the everyday operation of preschool institutions, including adequate implementation of educational, training, managerial and supervisory functions. As a result, the network of preschool institutions underwent significant changes after its transfer to communities. In many rural and even urban communities kindergartens were closed because of decreased social demand, and lack of managerial capacity, resources and financing. (UNESCO, 2007).

The higher education system is under the responsibility of the Ministry of Education, which has mainly organizational, financial, licensing, certification and monitoring functions.

## Structure and organization of the education system

### Armenia: structure of the education system



Source: Website of the National Information Center for Academic Recognition and Mobility, 2011.

### Pre-school education

Preschool education caters to children aged 1-6 and is not compulsory. Preschool establishments include daycare nurseries (for children of 1 to 3 years of age),

kindergartens (for children aged 3 to 6), or a combination of nursery and kindergarten (for children in the age group 1-6).

### Primary education

Prior to 2001, compulsory general education covered a period of eight years, divided into elementary education (grades 1 to 3) and middle (basic) general education, covering grades 4 to 8 (during the period 1995-1999 elementary education consisted of four years). In 2001/02, the compulsory (basic) general education programme was extended to nine years. The new National Curriculum for General Education introduced in 2006/07 is based on a twelve-year general education programme; compulsory education consists of primary education (grades 1 to 4) and lower secondary education (grades 5 to 9). The admission age is 7. The new structure is fully operational since 2007/08.

### Secondary education

Upper general secondary education (high school) lasted two years and, on the basis of the National Curriculum of 2006, now it covers grades 10 to 12. Professional secondary education is offered in vocational schools, technical-professional schools and colleges. Vocational and technical-professional schools require for admission the completion of compulsory general education (now grade 9). The duration of secondary vocational education and training (VET) programmes at middle professional colleges is two to three years after compulsory education, or one to one and a half years after complete general education. Initial VET (craftsmanship VET) lasts two to three years after compulsory education and leads to the qualification of craftsman.

### Higher education

At the post-secondary and higher education levels, junior specialists' courses take two to three years to complete. The overwhelming majority of the students obtain a professional diploma after three years of study. Bachelor's degree programmes normally last four years (five years in the case of medicine) and the first postgraduate degree (master's degree) requires another two years of study (four years in the case of medicine). The degree of 'specialist with diploma' is conferred after five years of study in a given field. A further three years of study after the master's degree are normally required for the degree of 'candidate of science' (*aspirantura*). Doctoral studies (*doctorantura*) in one of the research institutions of the Academy of Science usually last two to three years. The transition to the two-cycle degree system in accordance with the Bologna process has been completed. Almost 95% of students (excluding doctoral level) are studying within the two-cycle system. Two universities started to issue diploma supplement both to bachelor's and master's degree programme students. Starting from 2008 all the educational programmes in Armenia are based on the European Credit Transfer and Accumulation System (ECTS). (MES, 2008).

According to the National Curriculum for General Education of 2010, the school year consists of 30 five- or six-day working weeks in grade 1, 32 weeks in grade 2, and at least 34 weeks in the other grades.

## The educational process

According to the National Curriculum for General Education of 2006, the curriculum defines the main educational policy guidelines, establishes the general principles of the development of the state standards for secondary education, preschool and special education and the subject standards for general education, as well as the main requirements specified for learners and teachers. The main functions of the curriculum are to: ensure uniform policy throughout the education system; ensure continuing improvement in the quality of education provided; regulate the relationships between central and local self-government authorities, educational institutions, society and individuals in the system of general education; ensure the conformity of the education system with the objectives established by the state and society, the needs of individuals and internationally recognized standards; ensure the sustainability of the main educational projects implemented in the Republic of Armenia; and establish a foundation for the development and implementation of professional educational programmes.

The main guidelines for the creation of state standards for general secondary education are the following: (i) general education must comply with the social and public educational order and the long-term development programs of the country; (ii) current international trends must be taken into consideration in the development of general education; (iii) general education should ensure that educational content is systemized, sustainable and relevant; (iv) general education must take into account the age, and the psychological and physical characteristics of learners; and (v) the system must be able to assess both the process and the outcomes of general education. As regards the creation of subjects' standards, State standards must: specify the general content of education according to different educational levels and required skills and knowledge; ensure that the specified abilities and skills can be adequately assessed and measured; ensure the continuous development of subject content, learning materials and required skills throughout successive grade levels; specify subject requirements clearly and provide valid justifications for all innovations; ensure an acceptable level of independent work by learners as part of the process of subject mastery and the utilization of information and communication technologies; take into consideration the factors that contribute to the mastery of other subjects; provide opportunities for cross-disciplinary and inter-disciplinary subject integration; place relevant subject components within the thematic context of learning materials and their comprehensive representation; and ensure a well-planned learning process for all learners.

In the process of education, each teacher and school is free to select any educational technology and teaching and learning methodologies that will achieve the educational outputs specified by the subject standards. In order to meet curriculum requirements each school and teacher shall try to ensure: a physical environment and an atmosphere that will enhance learning efficiency; an integration of learning and teaching aimed at the development of the required knowledge and the formation of the specified abilities, skills and the system of values; an individual approach in order to ensure the maximum educational achievement according to the learner's abilities; the active participation of every learner in the learning process; the introduction of new educational requirements according to the growth of the learner's abilities and the consideration of the learner's personal characteristics as part of the process of learning



and teaching; the identification of cross-subject links wherever relevant and practical; and the continuous assessment of the learner and the learning process. When organizing the learning and teaching process, it is important to take into account the following basic principles: (a) each learner is able to learn if they are provided with effective learning experiences, which are educationally and psychologically appropriate; (b) children differ from one another not by fundamental differences in their abilities to cope with educational programs and requirements, but by their way of thinking, psychological features, and by linguistic perceptions and receptiveness; (c) positive attitudes towards learning are contingent on the content of the learning materials, as well as successful progress in the effective use and mastery of the materials. (MES, 2006).

The content of secondary education, according to the state standards, shall consist of the knowledge specified in conformity with the objectives of general education; educationally and psychologically valuable social experiences; and cultural, moral, aesthetic, national and universal human values. The content of secondary education is organized into the following educational spheres (or learning areas) and components, which are defined by the state standard for secondary education: Armenian language and literature; foreign languages; mathematics; informatics and information and communication technologies (ICT); natural sciences; social sciences; arts; technology (technical knowledge and labour skills); physical education, initial military training (IMT) and health and safety education. Every educational sphere is represented by both compulsory and optional subjects and courses. Every educational sphere specifies the following components of educational content: knowledge system; abilities and skills (cognitive, logical, communicative, cooperative, and creative); the ability to work independently; and value system.

The main goal of assessment is the monitoring of the level of learners' knowledge, abilities and skills, the testing of the individual and, on the basis of the results, the improvement of the learning process and the progress of the individual. Assessment should also contribute to the self-understanding and self-development of all learners. The new assessment system will be based on the principles of fairness, objectivity, reliability, unbiased attitudes, validity, justification, accessibility and transparency, and must ensure accurate correlation with internationally accepted assessment criteria. (*Ibid.*).

## Pre-primary education

Preschool education aims at fostering conditions for the maintenance of children's health, developing children's intellectual, spiritual and physical abilities and providing a sound basis for educating a generation with national awareness and self-esteem. The objectives of preschool education are the following:

- creating the foundation for children's physical, moral and intellectual development;
- enabling children to communicate in the mother tongue and learn foreign languages;
- developing elementary competencies in mathematics and elementary norms of ethics;





- providing basic knowledge of the natural environment, ecology, history of the nation and national culture;
- instilling love and respect for the Motherland;
- preparing children for school.

On the basis of the National Curriculum for General Education of 2006, the main guidelines for the creation of state standards in preschool education are as follows: early child development characteristics must be taken into account, thus ensuring the individual nature of teaching and learning activities; standards must demonstrate clear understanding of the specified and expected learning requirements established for children, thus ensuring the free expression of thought and speech; planned teaching and learning activities must demonstrate a comprehensive, multi-faceted and harmonized approach to learning, with extensive use of games and role playing; there must be an emphasis on child-centered teaching and learning techniques as part of an understanding of the physical environment; state standards must achieve mastery of the various forms of speech development, native language communication, logical thinking, independent activities in teaching and learning programmes and physical, moral and aesthetic, patriotic, environmental and employment education; social behaviour, good manners, creative abilities and general skills, competencies and healthy habits must be developed; the active role of the family in the teaching and learning process and the involvement of the parents must be encouraged; and there must be a smooth transition to primary education. (MES, 2006).

The network of preschool education operates mainly through State funding. Parents are requested to pay for part of the services provided and payment levels are determined by the local authorities. Some preschool institutions are funded by communities and managed by local self-governing bodies.

In 1998, the Open Society Institute Armenia started the *Step by Step Programme* for children aged 0-10 years and their families, advocating child-centered teaching and learning methodology. The Programme operates in 209 kindergartens in different regions of the country. In the course of the project, six preschool training centers were functioning in four regions of the country during 2003. With participation of international experts, training courses for kindergarten and school administrative employees were organized. In 2003, the Education for Parents component of the programme was launched designed to organize education of preschool age-group children at home. The programme works with the families whose children cannot afford to attend kindergartens.

Preschool institutions include: nurseries for 2-3-year-olds, nursery-kindergartens for children aged 2-6, and kindergartens for children aged 3-6. There is a trend towards the creation of kindergarten-elementary schools. In 1998, the total number of preschools was 986 (1,334 in 1989). In the same year, the enrolment rate of children aged 3-6 years was 21% (40% in 1988). The teacher-children ratio was 1:8 (Government of Armenia, 1999).

In 2006, 615 community-based and eight preschools under the jurisdiction of different agencies were functioning in the country. In the same year, 47,308 children attended preschools while the actual places were 67,437 and 2,270 groups were



formed. Thus, the average number of children per group was about 21. The country average enrolment of the children in preschool institutions (for 1-6 years old children) was 21.6%. The enrollment rate is significantly different in urban and rural areas. The enrolment of children in preschool institutions in urban areas was 28.5%, whereas in rural areas it was only 14.6%. The enrolment of 6 years old children in preschool institutions was the highest among other preschool age groups (37% in 2006). Preschool institutions are not evenly distributed across the country. Many communities do not have any preschool institution or service. Also, the attendance of children in urban areas in average is 3.5 times higher than in rural areas. Furthermore, in rural areas very often preschools operate seasonal. One third of the operating preschools in Armenia are located in Yerevan, the enrolment being almost the half (47.4%) of all preschool age children. (UNESCO, 2007).

According to the National Statistical Service, in 2009/10 there were 622 preschool establishments in the country, of which 403 in urban areas. The total enrolment was about 53,900 children (of whom some 44,400 in urban areas), representing 24.3% of preschool age children (1-6 years old). (NSS, 2010).

### **Basic education (primary and middle school education)**

As mentioned, prior to 2001 compulsory general education covered a period of eight years, divided into elementary education (grades 1 to 3) and middle (basic) general education, covering grades 4 to 8. In 2001/02, the compulsory (basic) general education programme was extended to nine years. The new National Curriculum for General Education introduced in 2006/07 is based on a twelve-year general education programme; compulsory education consists of primary education (grades 1 to 4) and lower secondary education (grades 5 to 9). The admission age is 7. The new structure is fully operational since 2007/08.

On the basis of the National Curriculum for General Education of 2006, the main purpose of primary school is to establish the foundation for the learner's mental, spiritual, and physical abilities, linguistic thinking, literacy, logic and the baseline skills for future learning. The primary school will ensure the necessary conditions for learning and the necessary level of knowledge in order to continue learning in the middle school.

The main purpose of middle school is to provide knowledge about human beings, nature and society, to develop specified competencies and skills and moral and spiritual values and the ability to apply these in life so that the learner can either continue education in high school or proceed to an institution of professional education or enter the world of work. (MES, 2006).

The weekly lesson timetable for primary and middle school is shown in the table below:

### Armenia. Basic school (primary and middle school): weekly lesson timetable

Subject	Number of weekly periods in each grade								
	Primary school				Middle school				
	1	2	3	4	5	6	7	8	9
<i>National component:</i>									
Armenian language & literature	7	8	8	8	7	6	5	5	5
Foreign languages	–	2	4	5	5	5	5	5	5
Mathematics	4	4	4	4	5	5	5	5	5
Informatics and ICT	–	–	–	–	–	1	1	1	1
Me and the surrounding world (or life skills)	–	1	1	2	–	–	–	–	–
Natural sciences	–	–	–	–	2	3			
Physics, chemistry and biology (taught separately)	–	–	–	–	–	–	5	6	6
Nationhood	–	–	–	–	1	–	–	–	–
History of the Armenian church	–	–	–	–	1	–	–	–	–
Social sciences	–	–	–	–	–	3	4	6	6
Arts and technology	6	4	3	3	–	–	–	–	–
Arts	–	–	–	–	2	1	1	–	–
Technology	–	–	–	–	1	1	2	–	–
Physical education and safe life style	3	2	2	2	2	2	2	2	2
Initial military training	–	–	–	–	–	–	–	–	1
<i>School component:</i>									
Additional subjects	–	1	2	2	2	3	3	3	3
<b>Total weekly periods (min.)</b>	<b>20</b>	<b>22</b>	<b>24</b>	<b>26</b>	<b>28</b>	<b>30</b>	<b>33</b>	<b>33</b>	<b>34</b>
Elective subjects	1	1	1	1	2	2	3	3	3

Source: Ministry of Education and Science, *National curriculum for general education*, 2010. Each teaching period lasts 45 minutes.

Notes: 'Armenian language and literature' in grades 7-9 are taught separately. 'Foreign languages' includes Russian and another language; in grade 2 only one foreign language is taught. 'Mathematics' in grades 7-9 encompasses the subjects 'Algebra' and 'Geometry'. 'Me and the surrounding world' (or 'life skills') in grades 2-4 is an integrated subject including natural and social sciences. 'Natural sciences' in grades 5-6 is an integrated subject including contents of physical geography, astronomy, ecology, biology, chemistry and physics. 'Physics' in grades 7-9 also includes contents of astronomy. 'Nationhood', part of the social sciences area, is an integrated subject. 'Social sciences' in grade 6-9 encompasses the subjects 'Armenian history', 'History of the Armenian' and 'World history'; in grades 7-9 it encompasses the subjects 'Armenian geography' and 'General geography'; and in grades 8-9 it includes the integrated subject 'Sociology' which combines contents philosophy, economics, law, ethics and aesthetics. 'Physical education and safe life style' includes 'Physical culture' in grades 1-9 and the course 'Healthy life style' in grades 8-9.

In accordance with the National Curriculum 2006, the baseline teaching plan consists of three components: nationally-based, school-based and elective. The nationally-based component includes the learning areas and the number of hours/teaching periods allocated to them for each grade level. The school-based component includes the number of hours/periods which are to be utilized by schools,



on the basis of a list of subjects provided and approved by the Ministry of Education and Science, taking into account local conditions and community needs. The elective component provides the possibility for additional tuition-based education, which is selected by the learner (or parent or legal guardian) on a voluntary basis, using a curriculum approved by the school. The elective component must not duplicate either nationally-based or school-based syllabuses. The nationally-based and the school-based components are compulsory and are financed through the national budget. (MES, 2006).

As stipulated in the National Curriculum 2006, internal assessment is applied during a lesson through questions, testing and checking of assignments, and as part of the daily interaction between learners and teachers. In this way every learner's knowledge and skills may be assessed, as well as their behavioural characteristics. External assessment is carried out by institutions operating outside the school. Positive final outcomes of external assessment serve as a basis for issuing a final school certificate to the graduate, to award a qualification or to participate in competition for enrolment into specialized higher educational institutions. External assessment identifies the complete outcomes of the learning process, as well as the proficiency level of individual subjects in individual schools, *marzes* or the whole country (national assessment). To assess the learning outcomes of basic and secondary school graduates, the Ministry will establish compulsory procedures for the final assessment. The assessment will be undertaken in either written or verbal form, through interviews, assignment performance testing, practical work, questionnaires, tests, examinations, and other means. The results of assessment will be expressed through a 10-level marking scheme. Marks between 4 (satisfactory) and 10 (exceptional) will be considered as 'passing' scores. The effectiveness of the educational process will also be measured through other forms of qualitative assessment, references and tests. During the final examinations of basic and secondary schools, other assessment schemes may be applied if the Ministry so decides. The equivalence of alternative assessments will be defined by the Ministry. There will be no testing and assessment scores applied to first grade pupils. Current assessments will be provided through the reference letter, while the annual final assessment will be provided by an individual report on the development and progress of each learner. The form, procedures and specified information provided to parents will be defined by the Ministry. Score-based and test-based assessments will be introduced from the second grade. Each primary school graduate at the end of the school year will be provided with a specially designed report form, which will identify the knowledge, abilities and skills acquired during primary schooling and an assessment of mental ability. This assessment will be provided for information purposes only and will not be used for promotion or selection purposes. (*Ibid.*).

Special general education institutions in Armenia provide education to the children with special educational needs (including children deprived of parent care) and they implement general or special education programmes (through daycare or boarding regime). In 2006, there were 37 state special education schools, among which 29 were for children having mental or physical development problems, and eight were designed for gifted children. The total number of children enrolled in the boarding institutions was 9,736. The number of boarding institutions was reduced by 21.2% as compared with the 1991 data (47 institutions), but the enrolment (8,500 students) have increased by 14.5%. (UNESCO, 2007).



In 2006 there were 1,426 state general education schools operating in the Republic, among which ten were primary schools, 151 were basic and 1,217 were secondary schools. There were also 34 colleges and 14 vocational schools. Most schools are secondary and offer grades 1 to 12. The number of students enrolled in the general schools was 465,403 in 2006. The number of students in schools has been decreasing since independence due to migration and low birth rate. Enrolment of students in general schools in 2006/07 academic year has decreased by 20.2 % compared with 1991 (583,797 students enrolled). The enrolment rate for the 7-9 year old children in primary school was 93.6%, in basic school it was 98%, and in high school it was 85.6%. The average enrolment rate for all secondary education (primary and secondary, grades 1-10) was 92.4%. A total of 43,113 teachers were working in the general schools in 2006. The number of teaching staff has also decreased as compared to the previous years. The main cause of decrease is both the reduction of number of students and the optimization programme held by the government in 2003-2005 with the purpose to increase the efficiency of the system. Along with the state schools, in 2006 there were also 41 non-state/private schools and the total number of enrolled students was 6,541. The number of teachers in those schools was 998. (*Ibid.*).

According to the National Statistical Service, in 2009/10 there were 1,457 general education schools (of which 872 in rural areas), including 13 primary schools, 313 basic schools, 52 high schools, 28 gymnasiums, 1,051 comprehensive secondary schools, and 26 special education schools. The total enrolment was about 392,900 students, including some 2,800 students in special education schools. The total number of teachers was about 41,500. In 2009/10, there were 102 specialized secondary schools (NSS, 2010).

### Senior secondary education

As mentioned, upper general secondary education (high school) lasted two years and, in accordance with the National Curriculum of 2006, now it covers grades 10 to 12. Professional secondary education is offered in vocational schools, technical-professional schools and colleges. Vocational and technical-professional schools require for admission the completion of compulsory general education (now grade 9). The duration of secondary vocational education and training (VET) programmes at middle professional colleges is two to three years after compulsory education, or one to one and a half years after complete general education. Initial VET (craftsmanship VET) lasts two to three years after compulsory education and leads to the qualification of craftsman.

On the basis of the National Curriculum for General Education of 2006, the main purpose of high school is to ensure the knowledge, competencies and skills to enable learners to lead independent lives and be able to move on to further professional education.

As a result of the consistent and purposeful implementation of general education, it is expected that the general education graduate shall:

- understand his/her homeland, be a patriot and fully master the national language of the Republic of Armenia;

- know about the political, legal, and economic foundations of the country and its achievements in science, arts and sports;
- understand the role of the Armenian people and the Armenian state in world civilization, have a national mentality and self-consciousness, be the carrier, the preserver and the communicator of national traditions, and be committed to the solution of national and state problems;
- have acquired the knowledge defined by the state education standards, and an ability to apply acquired knowledge creatively in real life;
- be an independent thinker and problem solver;
- demonstrate qualities of understanding and cooperation with friends in the same age group, as well as with parents, and all other members of society including both the old and the young;
- appreciate both rights and responsibilities and be law-abiding, honest, humane, responsible, an initiator and an active citizen with an interest in social affairs;
- be conscious of the importance of the environment and be an advocate for the protection of nature and the environment;
- understand the achievements of world civilization, and respect universal human values;
- be able to communicate in at least two foreign languages and use modern information and communication technologies;
- know the rules of a healthy life style and safe living and be able to apply them in life;
- understand the importance of, and be prepared to participate in, family life;
- be able to assess personal capacities realistically, have confidence in personal abilities, be willing to participate in self-education and be committed to lifelong learning;
- be able to achieve a profession and a job compatible with personal preferences, interests, skills and abilities and be able to manage household affairs independently. (MES, 2006).

In the higher grades of middle school and in the general stream of high school, the learning areas are mostly represented by individual subjects. In the specialized streams of high schools there is a compulsory national curriculum component based on the specialized teaching of individual subjects and disciplines. It is intended that the baseline teaching plans for high schools will ensure: a general educational background for every learner; a sound foundation for further education and employment; a harmonious and holistic education covering all learning areas in the general stream; an efficient process for subject selection and the allocation of subject time for all subjects in specialized streams. For high school, the following general streams are recommended: knowledge of Armenia, linguistics, law, social science, economics, physics-mathematics, information technologies, natural sciences, arts, crafts, agriculture, defence and sports. Every high school, according to individual conditions and requirements, may choose one or more subjects from the recommended streams. Outside the recommended list, new streams can only be approved according to the procedures defined by the Ministry of Education. (*Ibid.*).

The weekly lesson timetables for upper general secondary education (high school) and the specialized stream are presented in the tables below:

**Armenia. High school (upper secondary education): weekly lesson timetable**

Subject	Number of weekly periods in each grade		
	10	11	12
<i>National component:</i>			
Armenian language & literature	5	5	5
Foreign languages	5	5	5
Algebra & elements of mathematical analysis	2	2	2
Geometry	2	2	2
Informatics and ICT	1	1	1
Natural sciences	7	7	7
Social sciences	5	5	5
Physical education and safe life style	2	2	2
Initial military training	1	1	1
<i>School component:</i>			
Additional subjects	4	4	4
<b>Total weekly periods (min.)</b>	<b>34</b>	<b>34</b>	<b>34</b>
Electives subjects	3	3	3

*Source:* Ministry of Education and Science, *National curriculum for general education*, 2010. Each teaching period lasts 45 minutes.

*Notes:* 'Armenian language' and 'literature' are taught separately. One of the foreign languages is Russian. 'Natural sciences' encompasses physics, chemistry and biology (taught separately) and also includes the thematic course 'Natural resources and environmental protection'. 'Social sciences' encompasses the subjects 'Armenian history' and 'World history' as well as the integrated subject 'Sociology', which includes contents of philosophy, political science, geography, economics, law, psychology, ethics and aesthetics.

### Armenia. High school (specialized stream): weekly lesson timetable

Subject	Number of weekly periods in each grade		
	10	11	12
<i>National component:</i>			
Armenian language & literature	4	4	4
Foreign languages	4	4	4
Mathematics	3	3	3
Natural sciences	3	3	3
Social sciences	4	4	4
Physical education and safe life style	2	2	2
Initial military training	1	1	1
<i>National component (specialized):</i>			
Subjects of the specialized stream	11	11	11
<i>School component:</i>			
Additional subjects	2	2	2
<b>Total weekly periods (min.)</b>	<b>34</b>	<b>34</b>	<b>34</b>
Electives subjects	3	3	3

*Source:* Ministry of Education and Science, *National curriculum for general education*, 2010. Each teaching period lasts 45 minutes.

*Notes:* 'Armenian language' and 'literature' are taught separately. One of the foreign languages is Russian. 'Mathematics' includes the subjects 'Geometry' and 'Algebra and elements of mathematical analysis'. 'Natural sciences' includes the subjects physics, chemistry and biology (taught separately) in the corresponding specialized streams, while it is an integrated subject in the other streams. 'Social sciences' includes the subjects 'Armenian history', 'World history', 'Sociology' and 'Economic geography' in the corresponding specialized streams, while it is an integrated subject in the other streams.

The aim of preliminary professional (vocational) education is to train the students for jobs requiring primary professional qualification, on the basis of basic (nine-year programme) or complete secondary education (eleven/twelve years of schooling). Preliminary professional education is provided in upper secondary vocational schools, technical colleges, educational centers, and professional schools of other types. The duration of the preliminary professional education varies from one to three years, depending on the previous education level of the student (basic or complete secondary) and on the profession chosen by the student. The preliminary professional education network has undergone considerable changes since 1991 in terms of specialties. This process was closely linked with the economic and labour market changes in the country. The professions related to the spheres of services, trade, and food industry are now prevailing in the list of professions, while the number of students in the industrial or constructional professions has drastically decreased. The aim of middle level professional education is to train specialists with middle professional qualifications and provision of deeper and expanded professional knowledge on the basis of basic or complete secondary education. Middle professional education is provided in middle professional education institutions (vocational colleges). Depending on the level of previous education of the students





and the chosen profession the length of programmes can vary from one year and 10 months up to four years and 10 months. As of result of reforms in recent years a new list of middle level professions and specializations was approved comprising 28 profession groups and 257 specializations. In 2006, there were 27 vocational schools with a total enrolment of 6,500 students, and 80 middle level vocational institutions with some 28,000 students enrolled. (UNESCO, 2007).

According to the National Statistical Service, in 2009/10 there were 102 specialized secondary schools with a total enrolment of about 29,900 students and 2,834 regular teachers. (NSS, 2010).

## Assessing learning achievement nationwide

In 2004, the government established the Assessment and Testing Center and developed a new Concept Note on Knowledge Assessment. The first pilot tests were developed by working groups created for designing both an implementation strategy for the new system of assessment of learners' achievement and the school graduation and university admission examination tests in different subject areas.

Learning outcomes are as of yet not systematically monitored nationally, although the 2009 examination system is set to provide more insight on this issue. Armenia participated in TIMSS (Trends in International Mathematics and Science Study) 2003. The results showed that Armenia scored just slightly above the international average in mathematics and ranked eighth out of 13 participating countries in the region. In science, Armenia scored second to last in the region just ahead of FYR Macedonia and well below the international average. Girls scored higher on TIMSS in both mathematics and science. (*Source*: UNICEF). Overall, about 150 schools and 11,759 students took part in TIMSS 2003.

## Teaching staff

In 1990, there were approximately 51,000 teachers in primary-secondary schools, of whom 40,000 were women. In 1993, the number was 58,000 teachers (43,000 women). Eighty-three percent of the teachers and 88% of the specialists teaching in technical-professional and secondary-professional schools had higher education diplomas. More than 60% of teaching staff in Armenia's institutions of higher education have postgraduate degrees or similar academic qualifications.

The average salaries of teachers have increased considerably with a view to reducing the turnaround of competent human resources, providing adequate quality of education, and improving the social situation of teachers. The average monthly wages of teachers were increased by 20% in 2003, by 65.3% in 2005 and by 27% in 2007. The average salary of administrative staff of public educational institutions has increased as well.

Special attention is being paid to teacher training and upgrading methodology and technical facilities in schools. In 2004, about 28,000 teachers attended training courses, and 70% of them were from the regions outside of Yerevan.



Pedagogical qualification in Armenia is awarded based on middle and higher professional education. Six out of all state higher education institutions are preparing specialists with pedagogical qualification. Besides, 27 colleges out of 82 also prepare graduates with the qualification of pedagogue. Annually about 4,400 students are admitted to higher education institutions with pedagogical professions, and about 1,200 students to colleges. The programmes, curricula and teaching plans in pedagogical universities are not aligned with the quality and content of ongoing reforms in the general education sector; they do not meet the current teachers' requirements, mostly in terms of using teaching new methods and modern technologies in the teaching process. The activities implemented under the reforms proceeding from the Bologna process are delayed in the pedagogical universities compared to other higher education institutions, particularly the transition to the two-cycle degree system and the introduction of European Credit Transfer System. The professional qualifications of some lecturers are low, and the practical training of pedagogical university students in schools is poorly organized because of the insufficient duration of the practice and lack of monitoring and mentoring staff in the field schools. The qualifications system needs improvement; the graduates receive a graduating certificate with corresponding qualification without any preliminary probation experience. In the result, teachers start their working activity with very little practical experience in schools.

In 2006, a total of 43,113 teachers were working in general education schools. The number of teaching staff has decreased as compared to the previous years. In terms of qualifications, 74.4% of teachers had higher pedagogical education, 5.8% had higher but not pedagogical/specialized education, 11.2% were graduates of pedagogical colleges (vocational education), 4.7% were graduates of non-pedagogical colleges, and 3.9 % of the teachers had incomplete higher education. The age distribution of teachers in 2006 was as follows: 15.2 % of the teachers were under the age of 30; 24.3% were 30-40 years old; and the majority of teachers (58.2%) were 40-60 years old. Since January 2005 teachers teaching load was increased from 18 to 22 teaching hours per week. With the account of out-of-class activities (lesson preparation, notebook checking, etc.) the teacher's load became 27 hours per week. (UNESCO, 2007).

In-service training and teachers' professional development (TPD) is conducted through the National Institute of Education and its regional branches, as well as in 52 school centers that have been refurbished and fully equipped to ensure proper organization of training seminars with the use of new modern training technologies. There are four types of training seminars that are provided to teachers in the framework of the TPD process. Firstly, the provision of basic information and knowledge on the new National Curriculum, subject syllabi, standards and cooperative learning methods; almost 40,000 teachers have already received this training. Secondly, teacher training in cooperative learning methods; about 1,500 teachers and 800 teacher trainers have already been trained in using cooperative methods of teaching; Thirdly, small group learning in mathematics; this is an advanced course for mathematics teachers, allowing better use of cooperative and group learning methods in teaching mathematics. And finally, the provision of basic computer literacy training to teachers; a total of 4,537 teachers have received training in basic computer literacy. (*Ibid.*).



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## Web resources

Armenian National Center of Quality Assurance: <http://www.anqa.am/am/> [In Armenian. Last checked: August 2011.]

Ministry of Education and Science: <http://www.edu.am/> [In Armenian. Last checked: August 2011.]

National Center for Vocational Education and Training Development: <http://www.mkuzak.am/> [In Armenian and English. Last checked: August 2011.]

National Information Center for Academic Recognition and Mobility: <http://www.armenic.am/> [In Armenian and English. Last checked: August 2011.]



National Institute of Education: <http://www.aniedu.am/> [In Armenian. Last checked: August 2011.]

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