



World Data on Education Données mondiales de l'éducation Datos Mundiales de Educación

VII Ed. 2010/11



Republic of Moldova

Revised version, December 2011.

Principles and general objectives of education

According to the Law on Education (last amended in 2010) the education system and the state educational policy are based on the principles of humanism, accessibility, adaptability, creativity and diversity. Education is a national priority and is democratic, open, flexible and based on the national culture and universal values. The main objectives of education are to: contribute to the harmonious development of the individual and of his/her intellectual and physical capacities and skills; develop skills and attitudes needed for socialization and professional achievements; foster the respect for human rights and freedoms; prepare students for a responsible life in a spirit of understanding, peace, tolerance, gender equality and friendship among all peoples, nations and religions; foster the respect for parents, for the national identity, language and cultural values as well as for those of other peoples; and raise responsibility towards the environment.

The State guarantees the right to education, regardless of nationality, gender, age, origin and social status, political affiliation or religious beliefs.

Laws and other basic regulations concerning education

The **Conceptual Framework for the Development of the Education System** adopted by the Parliament on 15 September 1994 and the **Law on Education No. 547** of July 1995 (last amended in 2010), are the main legislative instruments governing education in the country. Several amendments, normative and regulatory acts have also been adopted.

The **Law No. 1275** of July 1997 and **Law No. 423** of June 1999 regulates the evaluation and accreditation process of educational institutions in the Republic of Moldova. In February 2005 the President of the Republic approved the **Strategic Directions concerning the Modernization of the Education System**. By **Law No. 71** of May 2005 regarding amendments to the Law on Education, a new two-cycle structure of the higher education system has been adopted in line with the Bologna process.

According to Article 35 of the **Constitution**, adopted on 29 July 1994, the right of access to education is put into effect through the compulsory comprehensive public school system, lyceum (public secondary school) and vocational education, as well as the higher education system, and other forms of instruction and training. State public education is free and the admission to lyceums, vocational and higher education institutions is based on personal merit.

Article 9 of the Law on Education stipulates that compulsory education covers nine years (general secondary education, grades 1-9). Article 17 specifies that one year of pre-primary education (preparatory groups) is compulsory for children aged 5 years.



Administration and management of the education system

The **Ministry of Education** (formerly, the Ministry of Education and Youth) is responsible for the administration of the education system at national level. The Ministry develops strategies, promotes educational policies and supervises the educational process at all levels.

In the regions and municipalities, the **Directorate of Education** is the local administrative body. Directorates of Education are in charge of school inspection. Methodological and medical-psycho-pedagogical centres, subordinated to the Directorate of Education, exist in every region and municipality.

The **National Council for Curriculum and Evaluation**, established in 1997, designs, implements and evaluates curriculum policies and processes. It coordinates the educational reform in view of adjusting actions on horizontal and vertical directions and improving curriculum reform, teacher training, evaluation methods, and financial mechanisms.

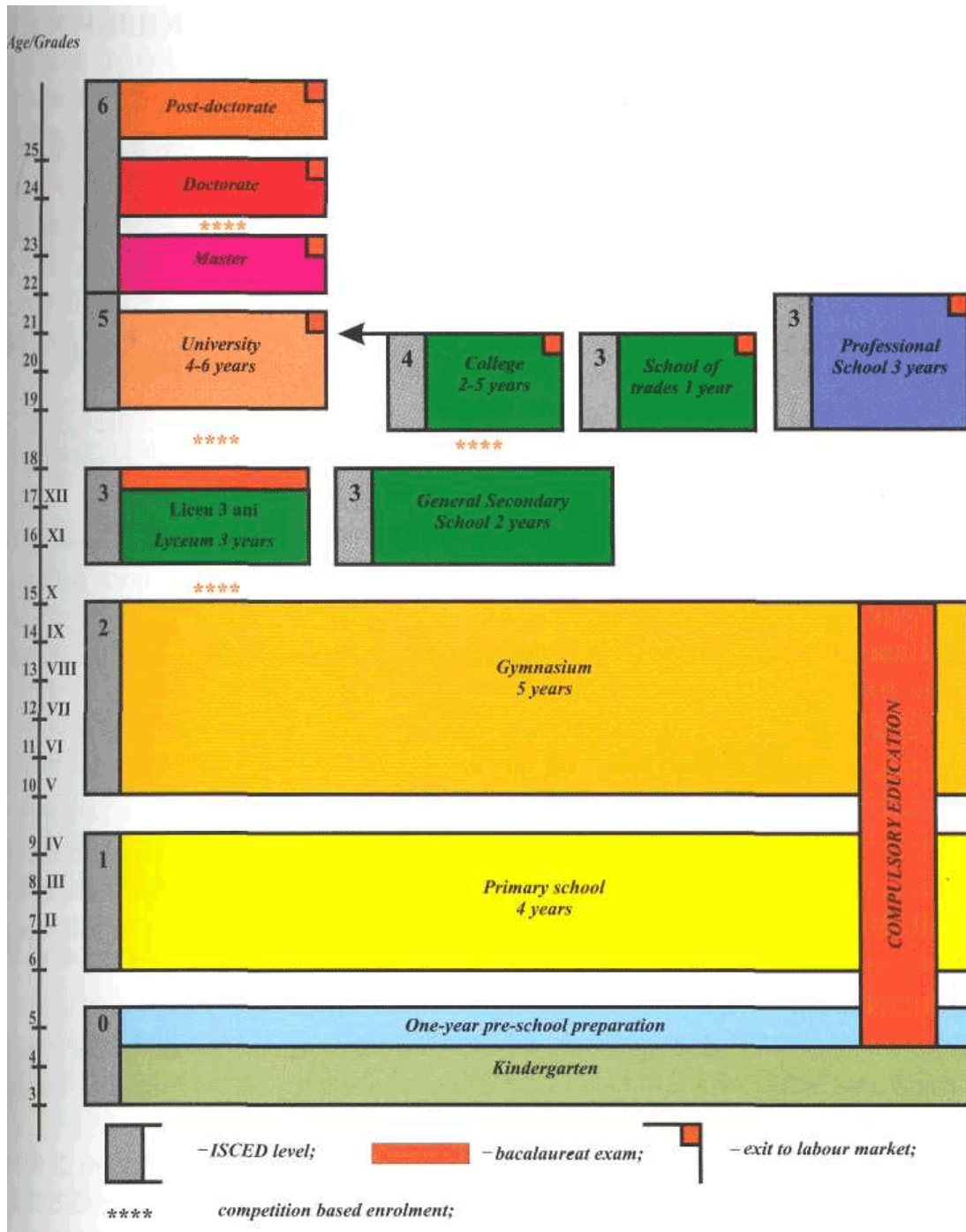
The **Institute of Educational Sciences** is a research and postgraduate education institution that has an autonomous status under the Ministry of Education. The Institute coordinates in-service training and professional development of teachers at the national level and collaborates with other in-service teacher training centres across the country.

In addition to the Ministry of Education, other five ministries supervise several specialized higher education institutions. Private higher education institutions are authorized by the Licensing Chamber, a central public authority that issues licences and coordinates with the Ministry of Education.

The **Ministry of Labour and Social Protection** is in charge of the organization of training and retraining programmes for unemployed adults.

Structure and organization of the education system

Moldova: structure of the education system



Source: Ministry of Education and Youth, 2008.

Pre-school education

Preschool education caters to children between 3 and 6(7) years of age. Attendance is free in public institutions; parents only contribute for food at 50% of the real cost. On



the basis of Article 17 of the Law on Education, one year of pre-primary education (preparatory groups) is compulsory for children aged 5.

Primary education

Primary education, or the first stage of basic education, is compulsory. It covers grades 1-4 and is organized as a full-time programme offered in primary schools and general secondary schools. The entry age is 6/7 years. Children may attend school in their sixth birthday if they have reached the appropriate stage of development.

Secondary education

General secondary education is divided into two cycles: lower secondary (gymnasium) and upper secondary education (lyceum). Lower secondary education, or the second stage of basic education, is compulsory and lasts five years (grades 5 to 9). At the end of gymnasium education students sit the graduation exam and if successful receive the certificate of gymnasium studies. Graduates from gymnasia sit an entrance exam to be admitted to general upper secondary schools and lyceums. Upper secondary education lasts three years (grades 10 to 12), leading to the *atestat de maturitate* after two years of study (general secondary school) or to the baccalaureate diploma for students who have passed the national examination at the end of grade 12 (lyceum). Technical and vocational secondary education is provided in trade and vocational education schools. Industrial trade schools are for grade 11 graduates who do not wish to continue their studies. The duration of vocational education courses ranges from six months to one and a half years, leading to a certificate. Professional education schools offer training programmes at three levels. First-level programmes last two years, leading to the certificate of qualified worker; second-level programmes provide more specialized training and also last two years. The duration of programmes at the third level leading to the technician diploma is one year. The duration of studies in teacher training colleges is four years (which can include lyceum studies) for gymnasium graduates and two years for graduates from lyceums.

Higher education

Higher education institutions (universities, academies and institutes) provide education in the form of full-time, extra-mural and evening courses. The duration of long-cycle programmes is four to six years in universities, academies and higher education institutes. Extra-mural and evening courses are usually longer (one additional year). Doctoral programmes normally last three years. One or two additional years of study are required for the degree of doctor abilitat. According to the 2005 amendments to the Law on Education in line with the implementation of the Bologna process, first-cycle programmes last three to four years; second-cycle programmes lead to the award of a master's degree after one to two years of study. By 2009, the two-cycle system has been fully implemented. Doctoral degree programmes take three to four years to complete.

The (draft) Education Code stipulates that in general education the school year consists of 34 five-day working weeks. Article 16 of the Law on Education specifies that at the pre-university level the school year consists of 35 weeks.

The educational process

The (draft) Education Code specifies that the National Education Standards represent the expected minimal levels of knowledge, skills and attitudes that students need to achieve at the end of primary, gymnasium and lyceum education, based on the values of the national education system. In all types of institutions the educational process shall be provided in accordance with the National Education Standards. The Standards are a normative document that also serves for the evaluation of student learning, the recognition and validation of graduation documents, as well as a reference for curriculum developers and authors of the school textbooks. At the general education level, the standards have the following functions: ensure the quality of education; serve as evaluation and accreditation criteria; ensure coordination of the educational process; ensure the recognition and validation of graduation documents. The National Education Standards shall be developed and approved by the Ministry of Education, also taking into account European standards.

The National Curriculum is the normative framework that organizes the teaching and learning process in accordance with the national education vision at all levels and for each subject and learning area. It is developed on the basis of the National Education Standards and approved by the Ministry of Education. The general education curriculum includes the Basic Curriculum, the Framework Plans for primary, gymnasium and lyceum education, the compulsory and elective subjects considered within the Framework Plan, the textbooks and methodological guidelines, and the evaluation strategies. The basic curriculum defines the general objectives of education, the interdisciplinary objectives, the objectives by stages and levels, the objectives of curricular areas, the general objectives of the school subjects, the educational framework plan and the curricular standards. The curriculum by school subjects (i.e. syllabus) correlates with the regulatory elements of the basic curriculum. The curriculum of a school subject includes: the conceptual framework of the subject, general objectives or framework objectives, reference objectives, learning activities, recommended content, methodological suggestions, and suggestions concerning assessment and evaluation of student learning. The Framework Plan specifies the compulsory (i.e. core curriculum) and elective subjects as well as the maximum and minimum number of lessons for each of them (ensuring at the same time the school's freedom to develop its own timetable and to decide upon the optional curriculum). The proportion of electives increases in the final grades of the gymnasium and lyceum education. The Framework Plan is mandatory for all educational institutions and it ensures curricular consistency between educational levels and stages and provides the opportunity to balance the share of school subjects and to integrate the school subjects vertically and horizontally. The Framework Plans for general education are developed and approved by the Ministry of Education in coordination with the National Curriculum Council and the Ministry of Health.

The Framework Plan proposes approximately 70 optional subjects that can be selected in addition to the invariant core, provided that the maximum number of lessons per week in each grade is not exceeded. The optional subjects are oriented towards creating capacities that cannot be developed through the study of only one subject. These subjects are expected to expand knowledge areas, create new situations to deepen knowledge in the curricular areas, meet students' interests and needs, and ensure the gradual orientation of teachers to implement an interdisciplinary approach

in the teaching and learning process. Timetable schemes from each school, developed on the basis of the Framework Plan, are defined by the School Council based on evaluation of their human and material resources and in consultation with teachers, taking into account teachers', parents' and students' preferences. The timetable scheme must contain at least one optional subject. (MOEY & UNICEF, 2008).

The reform of the primary education curriculum started in 1996. In 2003 the implemented curriculum was further revised and improved. The implementation of the new curriculum for the first level of gymnasium took place during 1997-2003, and in 2006 the gymnasium curriculum was further improved. In the framework of the project financed by the World Bank, the lyceum curriculum was revised and has been implemented since September 2006. (MOEY, 2008).

Pre-primary education

Preschool education caters to children between 3 and 6(7) years of age. Attendance is free in public institutions; parents only contribute for food at 50% of the real cost. On the basis of Article 17 of the Law on Education, one year of pre-primary education (preparatory groups) is compulsory for children aged 5. The aim of preschool education is to prepare children for their social and school integration through the development of their creative abilities, and physical, physiological, and intellectual potential. (MOEY, 2008).

The country has a long tradition of preschool education. Until 1990, the pre-primary programme was implemented on the basis of the Programme-type of education and training for children in kindergartens, aimed at children between 1 and 6(7) years of age and edited in Moscow. A new programme, named Programme for child education and training in kindergarten was published in 1990. It consisted of an adaptation of the former programme to the new situation of the country.

The preschool education system went through significant changes during the 1990s. As a result of the difficult economic situation, preschool institutions and the enrolment rate significantly decreased, the alimentation for the children worsened, and teaching materials became obsolete. The administrative-territorial reform transferred the responsibility for financing social institutions to municipalities, which are not able to bear the costs for maintaining preschools. At the same time, parents are not able to pay their contributions for food in the kindergartens. During the period of 1992-1998, 29% of kindergartens were closed, the number of children in kindergartens decreased by 41%, and the number of personnel by 43%. This process mainly affected rural areas.

About 57% of preschool age children are enrolled in the pre-primary preparatory year, which is compulsory for children aged 5. Classes are organized according to the age of children: nursery group, for children aged 1–3 years; small group, for 3–4-year-olds; medium group, for 4–5-year-olds; large group, for 5–6-year-olds; and preparatory group, for children aged 6/7 years.

Measures oriented towards the redressing of the situation were undertaken in recent years, and some flexible regimes of kindergarten activity have been organized. Instead of a programme lasting ten to twelve hours per day, programmes lasting four,



six or nine hours have been introduced. New types of institutions have been established and the number of private institutions is growing.

In 1995, the Conceptual framework for the development of preschool education in the Republic of Moldova and the curriculum for children education in preschool institutions of different types were adopted and implemented. These documents underlined the necessity to consider the child as the centre of the educational process, which implies adopting an individualized approach and creating adequate conditions for the harmonious personal development of children.

In the domain of preschool education, with technical assistance from UNICEF, the World Bank and other partners, the government has developed new policies on early education (a new curriculum focused on children's individual needs, standards for early development of children under 7 years old, professional standards for educators) as well as teaching and methodological materials, which would include vulnerable groups. According to the Ministry of Education, in 2008/09 some 89% of preschool institutions were applying the new early education policies and were using the teaching materials that have been distributed to all preschool education institutions in the country. About 60% of preschool institutions have developed professional development plans in compliance with the new professional standards for educators. Around 4,500 managers of preschool education institutions, teaching staff and representatives of local public authorities have been trained to apply different approaches focused on the needs of children as well as to promote the principles of early education at a local level. Although the number of preschool institutions rose from 2000 to 2009, the preschool system is unable to meet increasing demands. Kindergartens in villages are the most affected, since many of them lack the resources to meet the system's requirements. As a result of the implementation of a pilot project by UNICEF and UNESCO, the Ministry of Education institutionalized and started to replicate alternative arrangements for early education services (community centers in communities lacking kindergartens). The draft of the new Education Code developed in 2009 contained provisions on community centers which were to provide official early education services in parallel with kindergartens and crèches, especially in those 230 communities without preschool education institutions. (GOM & UN, 2010).

The National Bureau of Statistics reports that in 2009/10 there were 1,362 public preschool education institutions with 125,981 children enrolled. About 99,600 children were enrolled in preschool institutions using Moldovan as language of instruction, and 26,200 in preschools using Russian. The total number of staff was 11,696 (including 1,318 administrators, 8,978 educators, and 1,099 music instructors) and the children-teacher ratio was 11:1. In terms of the qualifications of educators, 2,911 had higher education and 5,623 had secondary specialized education (teacher training college). (NBS, 2010).

In 2009, the enrolment ratio in preschool education of 3-6-year-old children was estimated at 75.5% (91.9% in urban areas and 66.1% in rural areas; 76% for boys and 74.9% for girls). (GOM & UN, 2010).



Primary education

As mentioned, primary education is the first stage of compulsory basic education and covers grades 1 to 4. It is organized as a full-time programme offered in primary schools and general secondary schools. Classes are held five days per week. The entry age is 6/7 years. Children may attend school in their sixth birthday if they have reached the appropriate stage of development. The aim of primary education is to ensure that children develop an independent and creative personality as well as the necessary learning abilities, basic competencies and skills (including literacy, numeracy and communication skills) to continue their education at the gymnasium level. The programme is provided in primary schools, kindergarten-primary schools, schools offering grades 1-9 or grades 1-12 (the latter mainly in rural areas). (MOEY, 2008).

The new curriculum was developed according to the guidelines of the General Education Reform Project, financed by the Government and the World Bank. It is based on the Conceptual Framework for the Development of the Education System and the Law on Education. In contrast to the previous programmes, the new curriculum is based on objectives in terms of knowledge, abilities and attitudes that pupils should acquire through active methods of teaching. It stresses the importance of an appropriate development of the cognitive, affective and psychomotor abilities of pupils.

The weekly lesson timetable of basic education (including lower secondary) implemented in 2003 is shown in the table below:

Basic education (primary and lower secondary education): weekly lesson timetable

| Curricular area/discipline | Number of weekly periods in each grade | | | | | | | | |
|------------------------------------|----------------------------------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|-----------|
| | First stage | | | | Second stage | | | | |
| | I | II | III | IV | V | VI | VII | VIII | IX |
| <u>Language and communication:</u> | | | | | | | | | |
| Romanian language and literature | 8 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | 5 |
| Foreign language | – | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Russian language | – | – | – | – | 2 | 2 | 2 | 2 | 2 |
| Elective subjects | 0–2 | 0–2 | 0–2 | 0–2 | 0–1 | 0–1 | 0–2 | 0–2 | 0–2 |
| <u>Mathematics and sciences:</u> | | | | | | | | | |
| Mathematics | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Sciences | – | 1 | 1 | 1 | 1 | – | – | – | – |
| Biology | – | – | – | – | – | 1 | 2 | 2 | 2 |
| Physics | – | – | – | – | – | 1 | 2 | 2 | 2 |
| Chemistry | – | – | – | – | – | – | 1 | 2 | 2 |
| Computer studies | – | – | – | – | – | – | 1 | 1 | 1 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–2 | 0–2 | 0–2 | 0–2 | 0–2 |
| <u>Humanities:</u> | | | | | | | | | |
| Geography | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Romanian history | – | – | – | 1 | 1 | 1 | 1 | 1 | 1 |
| Universal history | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Moral and spiritual education | 1 | 1 | 1 | 1 | – | – | – | – | – |
| Civic education | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| <u>Arts:</u> | | | | | | | | | |
| Music education | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | – |
| Plastic arts | 1 | 1 | 1 | 1 | 1 | 1 | 1 | – | – |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| <u>Technology:</u> | | | | | | | | | |
| Technology | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| <u>Sports:</u> | | | | | | | | | |
| Physical education | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| Total weekly periods (min.) | 19 | 21 | 21 | 22 | 25 | 26 | 29 | 29 | 28 |
| Total weekly periods (max.) | 21 | 23 | 23 | 24 | 27 | 28 | 31 | 32 | 32 |

Source: Ministry of Education, 2003. Each teaching period lasts about 45 minutes.

The new weekly lesson timetable of basic education for 2011/12 is presented below:

Moldova. Basic education: weekly lesson timetable

| Curricular area/discipline | Number of weekly periods in each grade | | | | | | | | |
|------------------------------------|----------------------------------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|-----------|
| | First stage | | | | Second stage | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| <i>Language and communication:</i> | | | | | | | | | |
| Romanian language and literature | 8 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | 5 |
| Foreign language | – | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Russian language | – | – | – | – | 2 | 2 | 2 | 2 | 2 |
| Elective subjects | 0–2 | 0–2 | 0–2 | 0–2 | 0–1 | 0–1 | 0–2 | 0–2 | 0–2 |
| <i>Mathematics and sciences:</i> | | | | | | | | | |
| Mathematics | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Sciences | – | 1 | 1 | 1 | 1 | – | – | – | – |
| Biology | – | – | – | – | – | 1 | 2 | 2 | 2 |
| Physics | – | – | – | – | – | 1 | 2 | 2 | 2 |
| Chemistry | – | – | – | – | – | – | 1 | 2 | 2 |
| Computer studies | – | – | – | – | – | – | 1 | 1 | 1 |
| Elective subjects | 0–1 | 0–2 | 0–2 | 0–2 | 0–2 | 0–2 | 0–2 | 0–2 | 0–2 |
| <i>Humanities:</i> | | | | | | | | | |
| History | – | – | – | 1 | 2 | 2 | 2 | 2 | 2 |
| Geography | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Moral and spiritual education | 1 | 1 | 1 | 1 | – | – | – | – | – |
| Civic education | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| <i>Arts:</i> | | | | | | | | | |
| Music education | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | – |
| Plastic arts | 1 | 1 | 1 | 1 | 1 | 1 | 1 | – | – |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| <i>Technology:</i> | | | | | | | | | |
| Technology | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| <i>Sports:</i> | | | | | | | | | |
| Physical education | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| Total weekly periods (min.) | 18 | 20 | 20 | 21 | 24 | 25 | 28 | 28 | 27 |
| Total weekly periods (max.) | 20 | 22 | 22 | 23 | 26 | 27 | 30 | 30 | 29 |

Source: Ministry of Education, *Curricula Națională. Planul-Cadru pentru învățământul primar, gimnazial și liceal anul de studii 2011-2012*, Chisinau 2011. Each teaching period lasts about 45 minutes.

A considerable proportion of the schools is in an inadequate physical condition, lacking central heating and a proper sanitary infrastructure. According to the data for 2008, around 41% of school buildings require capital renovation and



wheelchair ramps can be built in for children with walking difficulties in only 11.2% of them. (GOM & UN, 2010).

The National Bureau of Statistics reports that in 2009/10 there were 91 primary schools, 708 gymnasia (including one private establishment), 492 lyceums, and 179 secondary schools. In the same year, the total enrolment was 141,197 pupils in grades 1-4 and 207,542 in grades 5-9. In addition there were 35 special education schools with 3,550 students enrolled. The total number of staff (primary and secondary education) was about 37,000. (NBS, 2010).

In 2009, the enrolment ratio for general compulsory education was estimated at 90.7%. The gross enrolment ratio at the primary level was estimated at 93.5% (102.4% in urban areas and 88.9% in rural areas); the enrolment ratios of girls and boys were 93.3% and 93.7% respectively. (GOM & UN, 2010).

Secondary education

As mentioned, general secondary education is divided into two cycles: lower secondary (gymnasium) and upper secondary education (lyceum). Lower secondary education, or the second stage of basic education, is compulsory and lasts five years (grades 5 to 9). Gymnasium graduates have to sit an entrance examination to be admitted to general upper secondary schools and lyceums. Gymnasium education shall ensure the development of skills and intellectual abilities of students and prepare them for lyceum education, professional orientation or technical and vocational education. Lyceum education shall provide students with the basic theoretical knowledge and a broad general cultural background needed to continue their studies at the higher education level or in technical and vocational education institutions. (MOEY, 2008).

Upper secondary education lasts three years (grades 10 to 12), leading to the *atestat de maturitate* after two years of study (general secondary school) or to the baccalaureate diploma for students who have passed the national examination at the end of grade 12 (lyceum).

Until recent years gymnasia were provided with textbooks published in Romania but a process of local development of textbooks has been set up. The new curriculum for gymnasia is based on the following main principles: (i) development of students' personality according to their potential and the demands of a democratic society (principle of equality of chances); (ii) lifelong learning and interdisciplinary approach; (iii) educational standards adapted to the physiological, psychological and cognitive characteristics of students (principle of functionality); (iv) educational establishments should be free to develop their own educational plans (principle of flexibility).

As regards upper secondary education, the weekly lesson timetable implemented in 2003 is shown in the table below:

Upper secondary education (lyceum, humanities and science streams): weekly lesson timetable

| Curricular area/discipline | Number of weekly periods in each grade | | | | | |
|------------------------------------|----------------------------------------|-----------|-----------|-----------|-----------|-----------|
| | Humanities | | | Science | | |
| | X | XI | XII | X | XI | XII |
| Language and communication: | 12 | 12 | 12 | 7 | 7 | 6 |
| Romanian language & literature | 5 | 5 | 5 | 4 | 4 | 4 |
| Foreign language I | 3 | 3 | 3 | 3 | 3 | 2 |
| Foreign language II | 2 | 2 | 2 | – | – | – |
| Universal literature | 1 | 1 | 1 | – | – | – |
| Latin | 1 | 1 | 1 | – | – | – |
| Elective subjects | 0–2 | 0–2 | 0–2 | 0–1 | 0–1 | 0–1 |
| Humanities: | 6 | 6 | 5 | 5 | 5 | 4 |
| Romanian history | 1–2 | 1–2 | 1–2 | 1 | 1 | 1 |
| Universal history | 2–1 | 2–1 | 2–1 | 1 | 1 | 1 |
| Geography | 2 | 2 | 1 | 2 | 2 | 1 |
| We and the law | 1 | 1 | 1 | 1 | 1 | 1 |
| Elective subjects | 0–2 | 0–2 | 0–2 | 0–1 | 0–1 | 0–1 |
| Mathematics and sciences: | 7 | 7 | 7 | 13 | 14 | 15 |
| Mathematics | 3 | 3 | 3 | 5 | 5 | 5 |
| Physics | 2 | 2 | 1 | 4 | 3 | 3 |
| Astronomy | – | – | 1 | – | – | 1 |
| Chemistry | 1 | 1 | 1 | 2 | 3 | 3 |
| Biology | 1 | 1 | 1 | 2 | 3 | 3 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–2 | 0–2 | 0–2 |
| Technology: | 1 | 1 | 1 | 2 | 2 | 2 |
| Computer studies | 1 | 1 | 1 | 2 | 2 | 2 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–2 | 0–2 | 0–2 |
| Sports: | 2 | 2 | 2 | 2 | 2 | 2 |
| Physical education | 2 | 2 | 2 | 2 | 2 | 2 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| Total weekly periods (min.) | 28 | 28 | 27 | 29 | 30 | 29 |
| Total weekly periods (max.) | 33 | 33 | 33 | 34 | 34 | 34 |

Source: Ministry of Education, 2003. Each teaching period lasts about 45 minutes.

The weekly lesson timetable of the lyceum (humanities and science streams) implemented in 2011/12 is presented below:

Moldova. Upper secondary education (lyceum, humanities and science streams): weekly lesson timetable

| Curricular area/discipline | Number of weekly periods in each grade | | | | | |
|------------------------------------|----------------------------------------|-----------|-----------|-----------|-----------|-----------|
| | Humanities | | | Science | | |
| | 10 | 11 | 12 | 10 | 11 | 12 |
| <i>Language and communication:</i> | 11 | 12 | 12 | 7 | 7 | 7 |
| Romanian language & literature | 5 | 5 | 5 | 4 | 4 | 4 |
| Foreign language I | 3 | 3 | 3 | 3 | 3 | 3 |
| Foreign language II | 2 | 2 | 2 | – | – | – |
| Universal literature | 1 | 2 | 2 | – | – | – |
| Elective subjects | 0–2 | 0–2 | 0–2 | 0–1 | 0–1 | 0–1 |
| <i>Humanities:</i> | 6 | 6 | 5 | 5 | 5 | 4 |
| History | 3 | 3 | 3 | 2 | 2 | 2 |
| Geography | 2 | 2 | 1 | 2 | 2 | 1 |
| Civic education | 1 | 1 | 1 | 1 | 1 | 1 |
| Elective subjects | 0–2 | 0–2 | 0–2 | 0–1 | 0–1 | 0–1 |
| <i>Mathematics and sciences:</i> | 7 | 7 | 7 | 13 | 13 | 15 |
| Mathematics | 3 | 3 | 3 | 5 | 5 | 5 |
| Physics, Astronomy | 2 | 2 | 2 | 3 | 3 | 4 |
| Chemistry | 1 | 1 | 1 | 3 | 2 | 3 |
| Biology | 1 | 1 | 1 | 2 | 3 | 3 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–2 | 0–2 | 0–2 |
| <i>Technology:</i> | 1 | 1 | 1 | 2 | 2 | 2 |
| Computer studies | 1 | 1 | 1 | 2 | 2 | 2 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–2 | 0–2 | 0–2 |
| <i>Sports:</i> | 2 | 2 | 2 | 2 | 2 | 2 |
| Physical education | 2 | 2 | 2 | 2 | 2 | 2 |
| Elective subjects | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 | 0–1 |
| Total weekly periods (min.) | 27 | 28 | 27 | 29 | 29 | 30 |
| Total weekly periods (max.) | 30 | 30 | 30 | 31 | 31 | 32 |

Source: Ministry of Education, *Curricula Națională. Planul-Cadru pentru învățământul primar, gimnazial și liceal anul de studii 2011-2012*, Chisinau 2011. Each teaching period lasts about 45 minutes.

Technical and vocational secondary education is provided in trade schools and vocational education schools. Trade schools are for gymnasium, lyceum and general secondary school graduates who do not wish to continue their studies. The duration of courses ranges from six months to one and a half years, leading to a certificate. Vocational education schools offer training programmes at three levels. The first level lasts two years, leading to the certificate of qualified worker. Holders of the certificate may continue their studies at the second level or enrol in grade 11 (lyceum). The second level provides more specialized training and also lasts two years. Holders of the second-level certificate may continue their studies at the third level or enrol in the



last year of lyceum education (grade 12). The third level lasts one year, leading to the diploma of technician.

In 1997/98, the secondary vocational education and training (VET) system consisted of 79 educational establishments, including: 52 vocational education schools, 17 trade schools, six VET schools for delinquent juveniles, two municipal trade schools in Chisinau, and two trade schools for students with hearing and sight problems. Training was offered in 149 specialties (trades) and there were about 33,000 students enrolled. Teaching staff included 470 specialized subject teachers, 725 general secondary education teachers, 1,790 foremen/instructors and 324 pedagogues.

The National Bureau of Statistics reports that in 2009/10 the total enrolment in grades 10-11(12) of secondary schools, gymnasia and lyceums was 62,757 students. In the same year, there were 75 secondary vocational education schools, including 23 trade schools. The total enrolment was 22,161 students, of whom 2,536 in trade schools and 19,625 in vocational education schools. The total number of pedagogical staff within secondary vocational education was 2,234; in terms of qualifications, about 60% had a higher education degree, 33% had secondary specialized education (college), and 7% had secondary vocational education. In 2009/10 there were 47 postsecondary colleges with a total enrolment of 32,249 students and 2,502 pedagogical staff. (NBS, 2010).

In 2009, the gross enrolment ratio for the gymnasium was estimated at 88.8%. (GOM & UN, 2010).

Assessing learning achievement nationwide

The Republic of Moldova participated in the Trends in International Mathematics and Science Study (TIMSS) in 2003, and in the Progress in International Reading Literacy Study (PIRLS) in 2001 and 2006. The country scored second to last in mathematics in the CEE/CIS (Central and Eastern Europe/Commonwealth of Independent States) region, just above the former Yugoslav Republic of Macedonia; in science, it scored fifth from the bottom. In both science and mathematics, the country scored well below the international and regional averages. In reading, the Republic of Moldova scored third from last in the region, above the former Yugoslav Republic of Macedonia and Romania, and on par with the PIRLS scale average. Over time, between tests, the country's average scores increased slightly in both reading and science. (UNICEF, 2010).

According to the PIRLS 2006 results, only 3% of Moldovan pupils attain the 'advanced level' reading performance, 20% attain 'high level' performance, 41% attain 'intermediary level', and 24% attain the 'low level' performance. Nine percent of pupils score below the 'low level' performance. A similar situation is also acknowledged in case of TIMSS 2003. Twelve per cent of grade 4 pupils and 23% of grade 8 pupils fall below the standard for the 'low level' reference point in mathematics, while in sciences the share of these pupils is 14% and 17% respectively. In TIMSS 2003, at the primary level girls obtained 11 and 13 more points, respectively, than boys. In lower secondary education, girls scored ten points higher in mathematics and nine points higher in sciences. A similar situation was found in the



PIRLS 2006 results; the average score for boys was 493 points, while girls scored 507 points. (MOEY & UNICEF, 2008).

Teaching staff

Pre-service teacher education is provided by tertiary-level professional colleges (preschool and primary school teachers) and universities. College education leads to the award of a diploma of specialized studies with the qualification of a middle-level specialist in the respective specialty. College graduates can be employed in preschools and primary schools. They can also continue their studies at the higher education level. The duration of programmes at teacher training colleges is two years for graduates from secondary school or lyceum, and four years for gymnasium graduates. Students who have completed gymnasium education can enrol in a programme which in addition to a specialization also provides lyceum education and leads to the baccalaureate diploma. At the university level, the duration of long-cycle programmes was four to five years (one year less for those college graduates who continue their studies in a specialty related to the programme followed in the college).

Pre-service teacher education programmes are designed under the Framework Curriculum for Higher Education which comprises core subjects, academic subjects, and specialized subjects. Courses also include teaching practice; institutions establish contracts local education departments or pre-university educational establishments. These contracts set the conditions for conducting classroom practice, the rights and duties of prospective teachers, the role of the tutor, and the responsibilities of the school administration.

In April 2003, the approval of the Concept of Training of Pre-university Education Teaching Staff by Resolution No. 6 of the Ministry of Education provided for the decentralization of the system giving more autonomy to educational institutions, municipalities and local education departments.

In-service training is compulsory at least once every five years. It is aimed at improving the level of qualifications of teachers, in line with the curricular and methodological innovations introduced. In-service teacher training is subject to the Regulation on In-Service Training, approved in November 2004. The national system of in-service training encompasses all the bodies, organizations, institutions and legal entities organizing professional development activities. The government defines strategies and national programmes, and delivers in-service training courses in accordance with the national development policy. Central authorities are also responsible for developing legal, methodological, and organizational frameworks as well as programmes, curricula, certification and evaluation procedures. Coordination schemes involve the Ministry of Education, the Ministry of Economy, the Ministry of Labour and Social Protection, as well as other ministries within their sphere of competence.

In-service teacher training activities include: training courses organized by employers or in vocational training institutions; professional development or re-qualification courses and programmes; specialization courses; seminars and



workshops; distance-learning courses; as well as other types of training courses. (Eugen, 2006).

Data for 2006/07 show that about 81% of teaching staff at the pre-university level have a university degree; however, the proportion of teachers with a first pedagogical degree and a high pedagogical degree is rather low (6.6%). About 40% of teachers graduated from a college or university about 20-30 years ago, this percentage being higher in rural areas. Only about 50% of the graduates from pedagogical faculties and colleges enter the teaching profession. (MOEY & UNICEF, 2008).

In 2009, the average salary in the education system represented only 77.7% of the national average salary. This explains the lack of staff, especially in rural communities lacking adequate infrastructure for life and work. Moreover, the postponement of the increase of salaries in education and the implementation of this increase gradually in the period 2009-2011, as proposed in the Economy Stabilization and Recovery Program will probably reduce even more the attractiveness of the education system for potential teaching staff in the short term. (GOM & UN, 2010).

References

- C. Eugen et al. "National Report: Moldova." In: P. Zgaga (ed.), *The prospects of teacher education in South East Europe*. South East European Educational Cooperation Network (SEE-ECN), Center for Educational Policy Studies, University of Ljubljana (Slovenia). 2006.
- EURYDICE. *Focus on the structure of higher education in Europe 2006/07. National trends in the Bologna Process*. EURYDICE, European Unit, Brussels, March 2007.
- Government of the Republic of Moldova; United Nations Agencies in Moldova. *The Second Millennium Development Goals Report. Republic of Moldova*. Chisinau, September 2010.
- Ministry of Education and Science. *Education for All 2000 Assessment: country report of the Republic of Moldova*. (Under the coordination of M. Paiu). Chisinau, 1999.
- Ministry of Education. *National curriculum. School year 2003–2004*. Chisinau, 2003.
- Ministry of Education, *Curricula Națională. Planul-Cadru pentru învățământul primar, gimnazial și liceal anul de studii 2011-2012*, Chisinau 2011.
- Ministry of Education and Science. *National report: education system in the Republic of Moldova*. Presented at the 46th session of the International Conference on Education, Geneva, 2001.
- Ministry of Education and Youth. *National education system in the Republic of Moldova*. Presented at the 48th session of the International Conference on Education, Geneva, 2008.



Ministry of Education and Youth; UNICEF. *Baseline study on basic education in the Republic of Moldova from the perspective of Child-Friendly Schools*. Chisinau, 2008.

National Bureau of Statistics. *Statistical Yearbook 2010*. Chisinau, 2010.

UNICEF. *Education in the Republic of Moldova. Country profile*. 2010.

Web resources

Ministry of Education: <http://www.edu.md/> [In Romanian, Russian and English. Last checked: December 2011.]

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