

Education Statistics

Metadata

National Bureau of Statistics of the Republic of Moldova (NBS)

1. Contact Information

1.1. Responsible subdivision within NBS

General Division for Social and Demography Statistics

Education, Science and Culture Statistics Section

1.2. Contact person

Larisa Chirita, main consultant

tel.: +373 22 21 08 57; +373 67770862

e-mail: larisa.chirita@statistica.gov.md

Natalia Roșca, senior consultant

tel.: +373 22 73 54 45; +373 67770860

e-mail: natalia.coroi@statistica.gov.md

2. Metadata Update

2.1. Last certification of metadata

28.02.2022

2.2. Last update of metadata

02.03.2021

3. Statistical Presentation

3.1. General description

Statistical surveys in the field of formal education provide the necessary information to describe the operating condition and performance level of the education system, carried out by institutions authorized according the Education Code to organize and develop formal education programs. The results of statistical surveys allow the analysis of developments in the field of education in space and time, providing comparable data at national and international level to users involved in defining, implementing and evaluating educational policies.

3.2. Concepts and definitions

3.2.1. Definitions

Education system – all institutions and organizations (educational, economic, political, scientific, cultural, public) and of communities (family, nation, professional groups, mass-media), which directly or indirectly, explicitly or implicitly, perform educational functions, ensuring the training and professional development process of personality within the formal, non-formal and informal education.

Formal education – set of teaching and pedagogical actions designed institutionally through systemically organized structures by training levels and cycles, within the training process followed with exactness, in time and space.

Levels of education are an ordered set grouping education programmes together in relation to knowledge, skills and competencies, which each programme is designed to impart.

School-age population – represents the population of the age group theoretically corresponding to a given level of education as indicated by theoretical entrance age and duration.

Graduate - is the person who, during the reference study year, has successfully completed an education programme.

The teaching staff – refers to individuals who are employed in the education system and teach within the education and training process (full-time and part-time). Each teacher is registered only once, in the educational institution where he has the basic function.

Gross enrolment ratio – represents the number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education.

Gross enrolment rate in tertiary education – represents the number of students in tertiary education, regardless of age, expressed as a percentage of the population in the 5-year age group immediately following upper secondary education.

Net enrolment rate – represents the total number of students of the official age group for a given level of education, who are enrolled in that level of education, expressed as a percentage of the corresponding population.

Age specific enrolment rate – represents the number of students of a specific age enrolled in educational institutions at all levels of education, expressed as a percentage of the total population of the same age.

Pupil-teacher ratio – refers to average number of pupils per teacher at each level of education (pre-primary, primary, lower and upper secondary education) in a given school year.

Transition rate to lower secondary education – represents the new entrants to the first grade of lower secondary education in a given year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education in the previous study year.

3.2.2. Unit of measure

Data expressed as absolute values: the number of children /pupils /students is presented in persons /thousands of persons.

Relative indicators in %: enrolment rate.

3.2.3. Computation formula

1. Gross enrolment ratio in pre-primary education:

$$GER_{tps} = \frac{P_{tps}}{P_{taps}} * 100$$

where:

GER_{tps} – gross enrolment ratio in pre-primary education, in the year t;

P_{tps} – the total number of pupils enrolled in pre-primary education, regardless of age, during the year t;

P_{taps} – the total population of the age group a, the official age group corresponding to pre-primary education (3-6 years), during the year t;

2. Gross enrolment ratio in primary education:

$$GER_{tpr} = \frac{P_{tpr}}{P_{tapr}} * 100$$

where:

GER_{tpr} – gross enrolment ratio in primary education, during the study year t;

P_{tpr} – the total number of pupils enrolled in primary education, regardless of age, during the study year t;

P_{tapr} – the total population of the age group a, the official age group corresponding to primary education (7-10 years), during the study year t;

3. Gross enrolment ratio in lower secondary education:

$$GER_{ts} = \frac{P_{ts}}{P_{tas}} * 100$$

where:

GER_{ts} – gross enrolment ratio in lower secondary education, during the study year t;

P_{ts} – the total number of pupils enrolled in lower secondary education, regardless of age, during the study year t;

P_{tas} – the total population of the age group a, the official age group corresponding to lower secondary education (11-15 years), during the study year t;

4. Net enrolment rate in pre-primary education:

$$NER_{tps} = \frac{P_{taps}}{P_{ta}} * 100$$

where:

NER_{tps} – net enrolment rate in pre-primary education, during the year t;

P_{taps} – the number of pupils from the age group a, official corresponding to pre-primary education (3-6 years), who are enrolled in pre-primary education, during the year t;

P_{ta} – total population from the age group a, official age group corresponding to pre-primary education (3-6 years), during the year t;

5. Net enrolment rate in primary education:

$$NER_{tpr} = \frac{P_{tapr}}{P_{ta}} * 100$$

where:

NER_{tpr} – net enrolment rate in primary education, during the study year t;

P_{tapr} – the total number of pupils from the age group a, official corresponding to primary education (7-10 years), who are enrolled in primary education, during the study year t;

P_{ta} – total population of the age group a, official age group corresponding to primary education (7-10 years), during the study year t;

6. Net enrolment rate in lower secondary education:

$$NER_{ts} = \frac{P_{tas}}{P_{ta}} * 100$$

where:

NER_{ts} – net enrolment rate in lower secondary education, during the study year t;

P_{tas} – the total number of pupils of the age group a, official corresponding to lower secondary education (11-15 years), who are enrolled in lower secondary education, during the study year t;

P_{ta} – total population of the age group a, official age group corresponding to lower secondary education (11-15 years), during the study year t;

7. Age specific enrolment rate:

$$ER_{ta} = \frac{S_{ta}}{P_{ta}} * 100$$

where:

ER_{ta} – enrolment rate of a particular age/age group a, during the study year t;

S_{ta} – total pupils/students of the age /age group a, enrolled in the education system, regardless of the education level, during the study year t;

P_{ta} – total population of the age /age group, during the study year t ;

For example, the enrolment rate for the age of 7 years is calculated according to the formula:

$$ER_{t7} = \frac{S_{t7}}{P_{t7}} * 100$$

where:

ER_{t7} – enrolment rate specific to 7 years, during the study year t ;

S_{t7} – number of children/pupils aged 7, enrolled in the education system, regardless of the level of education, during the study year t ;

P_{t7} – total population aged 7 years, during the study year t ;

8. Pupil-teacher ratio:

$$NT_h = \frac{N_{th}}{T_{th}} * 100$$

where:

NT_h – number of pupils per one teacher, during the study year t , at the education level h ;

N_{th} – total number of pupils enrolled during the study year t , at the education level h ;

T_{th} – total number of teachers engaged in teaching activity, during the study year t , at the education level h ;

h – refers to a certain level of education according to the ISCED 2011 classification.

This indicator can be calculated for levels 0-3.

9. Transition rate to lower secondary education:

$$TR_{th,h+1} = [(P_{t+1,h+1,1} - R_{t+1,h+1,1}) / E_{th,f}] * 100$$

unde:

$TR_{th,h+1}$ – the transition rate from primary education h to lower secondary education $h + 1$, in the study year t ;

$P_{t+1,h+1,1}$ – the number of pupils admitted to the first grade of lower secondary education $h + 1$ (5th grade) in the study year $t + 1$;

$R_{t+1,h+1,1}$ – the number of pupils who repeat the first grade of lower secondary education $h + 1$ (5th grade) in the study year $t + 1$;

$E_{th,f}$ – the number of pupils enrolled in the final grade of primary education h (4th grade) in the study year t .

Note: Till 2014, for all calculations the *stable population* at the beginning of the year is used, and starting with 2014 – *population with usual residence*.

3.3. Used classifications

The education level: Classification of education programs of the Republic of Moldova (MoldCED), harmonized with the corresponding international standard ISCED-2011.

Economic activity: Classification of Economic Activities in Moldova (CAEM), harmonized with the European Classification NACE Rev.1.1., approved by Moldova-Standard Decree no. 694-ST of 09.02.2000, including the amendment no. 1, approved by Decree no. 1444-ST of 04.01. 2004. Implemented from 01.02.2004. Edition of 2005.

Starting with 2013, the new version of the Classification of Economic Activities in Moldova (CAEM Rev. 2) has been implemented into practice, which is fully harmonized with the Nomenclature of Economic Activities in the European Community (NACE Rev. 2).

Forms of ownership: Classification of Forms of Ownership of Moldova (CFP): approved by Department of Standards, Metrology and Technical Supervision's Decree no. 276 of 04.02.1997.

Administrative-territorial units: Classification of Administrative Territorial Units of the Republic of Moldova (CUATM), approved by Moldova-Standard Decree no. 1398-ST of 03.09.2003.

Implemented from 03.09.2003.
Fields of training and specialties:
Nomenclature for professional training fields and trades / professions, GD no. 425 from 03.07.2015
Nomenclature for professional training fields, specialties and qualifications for post-secondary and post-secondary non-tertiary education, GD no. 853 from 14.12.2015
Nomenclature for professional training fields and specialties of higher education, GD no. 482 from 28.06.2017.
3.4. Scope
3.4.1. Sector coverage
Statistical surveys in the field of formal education cover all units with legal personality, regardless of ownership, which carry out the activity 85 "Education" - as the main activity, according to the Classification of Economic Activities of Moldova (CAEM rev.2).
3.4.2. Statistical population
In the field of formal education, statistical surveys is carried out with an exhaustive character, including all educational units, regardless of the type of property and the legal form of their organization.
3.4.3. Geographical coverage
Statistical researches in the field of education do not include schools located in the left side of Nistru river and in Bender municipality, except for six institutions located in this territory, which are subordinated to the Ministry of Education, Culture and Research of the Republic of Moldova.
3.4.4. Time coverage
Time series for the main indicators are available since 1997.
3.5. Disaggregation level
Data resulting from statistical researches in the field of formal education are disaggregated by : <ul style="list-style-type: none"> ▪ age groups ▪ gender ▪ areas ▪ training level ▪ types of institutions; ▪ economic development regions (North, Center, South, Chisinau m., ATU Gagauzia) ▪ forms of ownership <u>Restrictions:</u> In case when the data at disaggregated level contain confidential information, these are not disseminated and are aggregated until the minimum possible level which ensures data confidentiality protection.
3.6. Dissemination frequency
Annual
3.7. Timeliness
Annual - December
3.8. Revision
The data are final at the first release.
3.9. Period of reference
The study year.

4. Data Collection and Processing
4.1. Data source
4.1.1. Statistical surveys
Statistical surveys are used, targeting the following indicators: <i>Statistical survey no.85-edu "Activity of early education institutions"</i>

- Groups and places at the end of the reporting year;
- Children enrolled by age, by sex, by group, by language of education;
- Personnel by categories, according to the mode of employment and the level of training;
- Management and teaching staff by age group and by sex;
- Management and teaching staff by seniority in pedagogical work;
- Rooms intended for the education process;

Statistical survey No. 1-edu "Activity of primary and secondary general education institutions"

- Pupils enrolled by class, by age and by sex;
- Number of pupils, including girls enrolled in the first grade who attended pre-primary education programs;
- Pupils by teaching language;
- Pupils enrolled by studied foreign languages;
- Graduates by class and age;
- Rooms intended for the education process;
- Computers (PC) used in the education process and in administration, including computers connected to a local network and to the Internet;

Statistical survey No. 83 - edu "The staff in primary and secondary general education institutions"

- Teaching staff by categories, by level of training and seniority in pedagogical work, by age group;
- Newly employed teachers.

Statistical survey No. 2 - edu "Activity of secondary vocational education institutions"

- Pupils enrolled by trade, by age group and sex;
- Graduates by trade, by age group and sex;
- Employed staff by category;

Statistical survey No. 3 - edu "Activity of postsecondary vocational education institutions"

- Pupils enrolled by specialty, by age group and sex;
- Graduates by specialty, by age group and sex;
- Employed staff by category;

Statistical survey No. 4 - edu "Activity of higher education institutions"

- Students enrolled by study programme, by specialty, by age group and sex;
- Graduates by study programme, by specialty, by age group and sex;
- Pedagogical and scientific staff by sex;

4.1.2. Administrative sources

Ministry of Finance data regarding expenditure on education from the national public budget. The annual decisions of the Government of the Republic of Moldova regarding the plans (state order) for the training of workers in trades and specialists.

4.1.3. Estimations

Expenditures by education levels.

4.2. Characteristics of the statistical survey/administrative sources

4.2.1. Objective and background

After the emergence of private and foreign ownership institutions (1995), the collection of disaggregated data by forms of ownership starts, as well as the collection of data concerning paid education. Starting from 2011, indicators that characterize the participation in the education process are calculated: gross and net education enrolment rate, education coverage degree, student / teacher ratio, etc.

In 2002, within the TACIS program, a National Classification of Education Programs MoldCED has been developed, according to ISCED-1997. Starting from 2004, data on the number of pupils in primary and secondary education are available, disaggregated by gender, class and age, as well as on secondary vocational education graduates by gender and specialty.

Until 2008, the process of collecting data on pre-school, primary and secondary education was coordinated by the National Bureau of Statistics and by the Ministry of Education.

On one hand, the Ministry of Education, through local education, youth and sports divisions (departments) collected statistical reports from the education institutions subordinated to it., which were subsequently sent to the National Bureau of Statistics, for centralization.

On the other hand, the National Bureau of Statistics, through territorial statistical structures, collected information related to non-governmental institutions and those subordinated to other ministries.

In case of secondary vocational, secondary specialized and higher education, the collection process has been and continues to be coordinated by the National Bureau of Statistics.

Starting from 2009, statistical information on education (all levels of education) is collected exclusively by the National Bureau of Statistics.

4.2.2. Statistical unit

The Research Unit is the educational unit (institution), which is organized and operates based on the legal framework established by the Education Code of the Republic of Moldova (No. 152 of 17.07.2014).

Educational institutions are submitted to external quality assessment in order to authorize temporary operation and accreditation of study programs and technical vocational and higher education institutions in accordance with national and European regulatory framework (international recommendations) in the field (GD no. 616 of 18.05. 2016).

4.2.3. Circle of units covered in the survey

The number of researched units includes all educational units from each educational level, regardless of the form of ownership, public or private, or the area, urban or rural.

4.2.4. Survey frequency

Annual

4.2.5. Data collection

Data recording in the questionnaires of statistical research in education is carried out by persons appointed by the units (institutions) of education. The questionnaires are filled in according to the appropriate specified methodological indications.

Collection of statistical reports regarding early education, primary, general secondary and secondary vocational education, is performed through territorial education, youth and sports departments / divisions and territorial statistical departments / sections, which subsequently send the statistical reports to the NBS, for processing and generalization.

Statistical reports on the activities of postsecondary vocational education and higher education institutions are collected directly by NBS.

4.3. Processing and compilation of data

4.3.1. Data validation

The data are verified and analyzed in relation to their quality, especially internal and temporal consistency, as well as consistency with other data.

Logical control conditions at questionnaire level are aimed at: monitoring and verifying the logical flow of the questionnaire, correlation between data / answers of various chapters, verifying if data corresponds to certain indicators which fall within the normal limits, eliminating abnormal or illogical answers.

Through **integrity checking conditions** the correlation and verification of identification data of units from the classification with the data filled in is intended, insuring coverage of all reporting units etc.

4.3.2. Compilation/extrapolation of data

Data compilation is performed through centralization of information from questionnaires submitted by education units (institutions).

4.3.3. Adjustments

Not applicable.

4.3.4. Quality assurance

The quality of statistical data is assured by observing the Fundamental Principles of Official Statistics

adopted by the UN General Assembly on 29 January 2014, as well as those set forth in the national Law on Official Statistics no. 93 of 26 May 2017.

In the statistical information production activity NBS gives paramount importance to ensuring high quality data.

For this purpose, several quality assurance measures are taken at each stage of the statistical activity: in the organization of statistical research, collection, processing and development of statistical information. Substantial efforts are being made to ensure the completeness and quality of data submitted by respondents included in statistical researches.

Inaccurate data, inconsistencies and suspicious data are revealed in order to verify and correct them.

4.4. Data accuracy

4.4.1. Non-response rate

Not applicable.

4.4.2. Sampling errors

Not applicable.

5. Comparability and Coherence

5.1. International comparability

The methodology of developing indicators in education is partially harmonized with the methodology developed by UNESCO.

5.2. Comparability over the time

Starting with the academic year 2004/2005, changes were made to statistical reports. A number of indicators which previously were not available were introduced: the number of pupils by grade and age, number of computers, the education profile etc.

5.3. Coherence with other statistics

Not applicable.

6. Institutional Mandate (normative-legal basis)

The NBS activity is based on respecting the Republic of Moldova Constitution, the Law on Official Statistics No. 93 dated 26.05.2017, other legislative and normative acts, NBS management decisions and orders.

The Law on Official Statistics regulates the organization and operation of the unique system of official statistics, establishing the general principles for collecting, processing, centralizing, diminishing, and stocking statistical information (art.1).

Art. 5 of the Law provides that the production of statistical information is based on respecting the following principles: impartiality, objectiveness, relevance, transparency, confidentiality, cost-efficiency etc.

Being the central statistical body, the National Bureau of Statistics is an administrative authority created under the Government for leading and coordinating the activity in the statistics area.

In accordance with Government Decision 935 of 24.09.2018 on the organization and operation of the NBS, the Bureau exercises the following tasks:

- 1) Coordinates the national statistical system on the development and production of official statistics;
- 2) Elaborates and implements strategies for the development of the national statistical system, annual and multiannual statistical programs;
- 3) Elaborates the normative and institutional framework necessary for the achievement of the strategic objectives in its field of activity, as well as the mechanisms for their implementation in practice;
- 4) Performs the management and control of the achievement in quality conditions of the programs and statistical plans adopted at central and regional level;

- 5) Harmonizes and aligns national statistical indicators, methodologies, methods and techniques with international regulations and standards;
- 6) Promotes the statistical culture in the society.

The legislative and normative acts ruling the activity of the NBS are available on its official page www.statistica.gov.md, under About NBS (<http://www.statistica.gov.md/pageview.php?l=en&idc=323&>)

7. Confidentiality

7.1. Principles

According to art. 19 of the Law on Official Statistics No. 93 dated 26.05.2017, producers of official statistics shall take all regulatory, administrative, technical and organizational measures to protect confidential data and prevent their disclosure.

Chapter VII of the above-mentioned law stipulates that the data collected, processed and stored for the production of statistical information are confidential if they allow the direct or indirect identification of the respondents.) The following shall not be considered confidential:

- a) data that can be obtained from publicly accessible sources according to the legislation;
- b) individual data on address, telephone, name, type of activity, number of employees of legal entities and individual entrepreneurs;
- c) data referring to public enterprises, institutions and organizations funded from the budget, submitted at the request of the public administration authorities.

According to the Law on Official Statistics, art. 20, access to confidential information is granted to the persons who, according to their official functions, participate in the production of statistical information shall have access to individual data in so far as individual data are necessary for producing this information.

The same article stipulates that the access to individual data, which do not allow the direct identification of respondents, may be given for scientific survey projects, whose expected results do not refer to identifiable individual units, under the regulation approved by the central statistical authority.

Art. 23 (5) of the Law stipulates that the the statistical information cannot be disseminated to users if it refers to 1-3 statistical units.

7.2. Practical assurance of the confidentiality rules

To ensure the protection of confidential statistical data in compliance with the Law on Official Statistics No. 93 dated 26.05.2017, the National Bureau of Statistics undertakes all the regulatory, administrative, technical, and organizational measures to protect the confidential statistical information and prevent its disclosure.

In compliance with the above-mentioned law, the employees of producers of official statistics, including temporary employees who, according to their official functions, have direct access to individual data shall be obliged to observe the confidentiality of these data during and after termination of employment.

Before being disseminated, the statistical data are verified if they meet the protection requirements set for confidential data. If the statistical data contain confidential information (see p. 7.1), they are not disseminated, but aggregated at the minimum available level which ensures the protection of data confidentiality.

8. Access to Information and Dissemination Format

8.1. Access to information

8.1.1. Calendar of statistical publications

Annually the Advance release calendar is developed by NBS.

8.1.2. Access to the calendar of statistical publications

The press release calendar is posted on the NBS official page www.statistica.gov.md.

8.1.3. Access to statistical data

According to the Law on Official Statistics No. 93 dated 26.05.2017, art. 23:

- a) Producers of official statistics shall be obliged to disseminate the statistical information within the deadlines specified in the programme of statistical works and in the press-release calendar.
- b) The dissemination of statistical information laid down in the programme of statistical works to all categories of users shall be made free of charge and under equal access conditions in terms of volume, quality and time of dissemination

The program of statistical work may be accessed on the web page www.statistica.gov.md, under About NBS / legislative and normative acts (<http://www.statistica.gov.md/pageview.php?l=en&idc=323&>)

The NBS web page www.statistica.gov.md represents the most important information source for ensuring users' access to different statistical information and transparency about the NBS activity.

All the operative information, informative notes, time series, as well as the statistical publications developed by NBS are placed on its official web page.

8.2. Dissemination format

8.2.1. Operative information / Analytical notes

The operative information and analytical notes are published on the official page of NBS: <http://www.statistica.gov.md> under Press Releases, according to the Press Release Calendar.

8.2.2. Publications

The publications issued by NBS containing statistical data on education:

- The publication "Education in Moldova"- annual publication containing detailed information regarding the number of children / pupils / students, teachers, education level, the evolution in time of the main education indicators, as well as some indicators for other countries;
- other statistical publications: Statistical Yearbook, Territorial statistics, Statistical pocket-book "Moldova in figures", Women and Men in Moldova, Moldovan Children, quarterly and annual informational notes, etc.

Access to publications:

- in electronic version on the official website of the NBS www.statistica.gov.md under the Products and services / Publications section, (<http://www.statistica.gov.md/pageview.php?l=en&idc=350&nod=1> &)
- in hard copy - in the NBS library (more details at <http://www.statistica.gov.md/libview.php?l=en&idc=340&id=2400>)
- or can be purchased at the NBS office (more details at www.statistica.gov.md Publications section, <http://www.statistica.gov.md/pageview.php?l=en&idc=350&id=2219>)

8.2.3. Databases/time series

- **Statistical databank**, <http://statbank.statistica.md/> under *Social statistics / Education*

- **NBS official page**: <http://www.statistica.gov.md> under:

- *Press Releases*
- *Statistics by themes / Social statistics / Education and science*
- *Products and Services / Publications.*

8.2.4. Questionnaires/data sent upon request from international organizations

UNESCO annual questionnaires:

1. Pupils and teachers (ISCED 0-4)
2. Expenditures for education (ISCED 0-8)
3. Students and professors (ISCED 5-8)
4. National educational programs

CIS questionnaires

8.2.5. Requests for additional data

NBS also provides users with additional statistical information besides those available in the statistical publications, informational notes, operational information, besides those posted on the official web site, in accordance with the Law on Official Statistics. Request can be sent personally, by post, by e-mail moldstat@statistica.gov.md or via online web form – www.statistica.gov.md heading Products and services / Statistical data request http://www.statistica.gov.md/solicitare_informatii_statistice.php?l=en.

9. Useful References (links)

9.1. Accessibility of documentation on methodology

The methodology is available on the www.statistica.gov.md, heading Metadata (<http://www.statistica.gov.md/pageview.php?l=en&idc=351&nod=1> &).

9.2. Accessibility of documentation on Evaluation Reports

Evaluation Reports are available on the official website of NBS www.statistica.gov.md, heading About NBS / Ratings and opinions on NBS / Evaluation Reports (<http://www.statistica.gov.md/pageview.php?l=en&idc=399&id=2739>).

9.3. Accessibility of information on user surveys

Users surveys' are available on the www.statistica.gov.md, heading About NBS / Evaluation and opinions on the NBS / Surveys (<http://www.statistica.gov.md/pageview.php?l=en&idc=399&id=2740>).

9.4. Other useful references

EUROSTAT database	http://ec.europa.eu/eurostat/data/database
UNdata database	http://data.un.org/Browse.aspx
Statistical database of the UN Economic Commission for Europe	http://w3.unece.org/pxweb/Dialog/
UNESCO database	http://stats.uis.unesco.org/unesco/ReportFolders/ReportFolders.aspx