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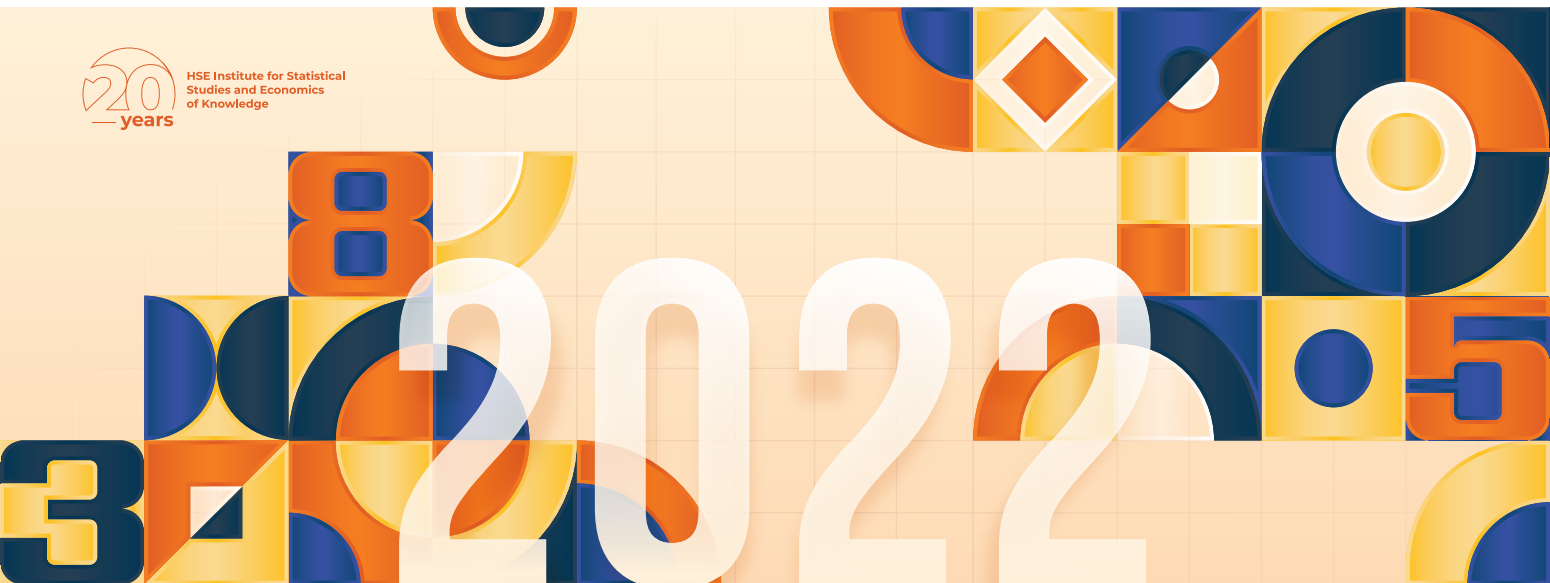
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INDICATORS OF EDUCATION IN THE RUSSIAN FEDERATION

DATA BOOK



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INDICATORS OF EDUCATION IN THE RUSSIAN FEDERATION

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This data book was prepared by Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics (HSE ISSEK) and contains the most recent statistical data representing the level and dynamics of the main education indicators for the Russian Federation. The publication includes information on institutions implementing educational programmes. Some sections are dedicated to transition of students in education, participation of the population in lifelong learning and give assessment on the relationship between education and the labour market, digitalisation of education, education funding, student demographics, teaching staff, learning environment, and education and training of individuals with limited health capacities. The data book also focuses on international comparisons.

The data book contains information provided by the Federal State Statistics Service (Rosstat), Ministry of Science and Higher Education of the Russian Federation, Ministry of Education of the Russian Federation, Federal Treasury, Organisation for Economic Co-operation and Development (OECD), International Association for the Evaluation of Educational Achievement (IEA), as well as results of methodological and analytical studies of HSE ISSEK.

In some cases, the presented data specify those published earlier.

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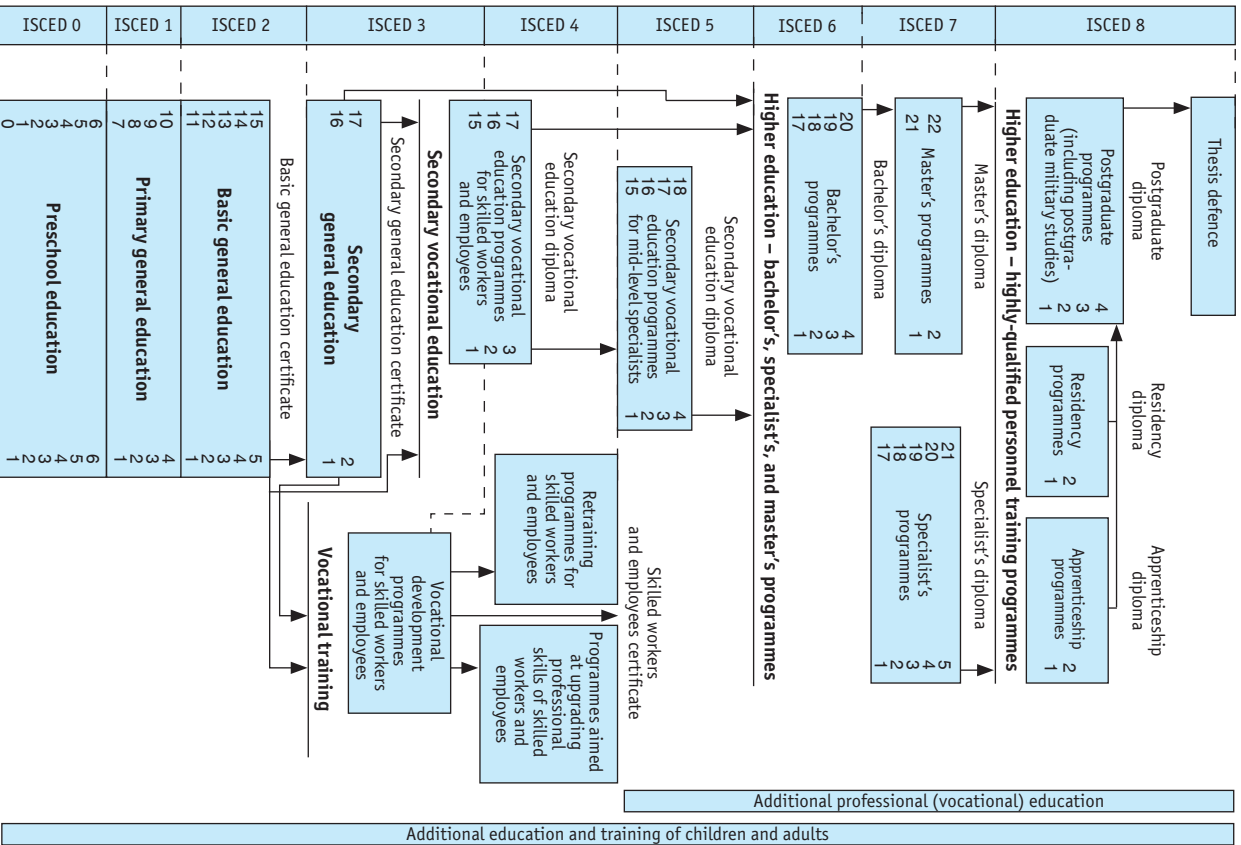
Symbols used in tables are:

- ... data not available and not included in the totals,
- data not applicable,
- 0.0 insignificant value.

In some tables, the sum of the breakdown may not add
to the total because of rounding.

EDUCATION SYSTEM IN THE RUSSIAN FEDERATION

Candidate of Sciences diploma



International Standard Classification of Education (ISCED 2011)

Theoretical age, years / Theoretical duration of the programme, years

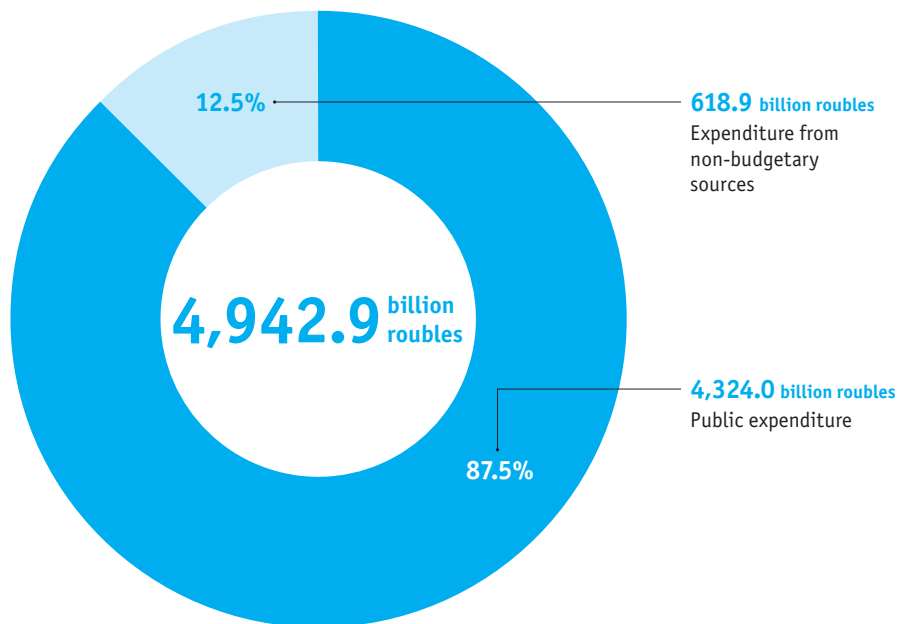
Federal Law 'On Education in the Russian Federation'



INFOGRAPHICS: 2020

Funding

Expenditure on education in the Russian Federation



As % to 2010 (at constant prices)



115 ▲
Total

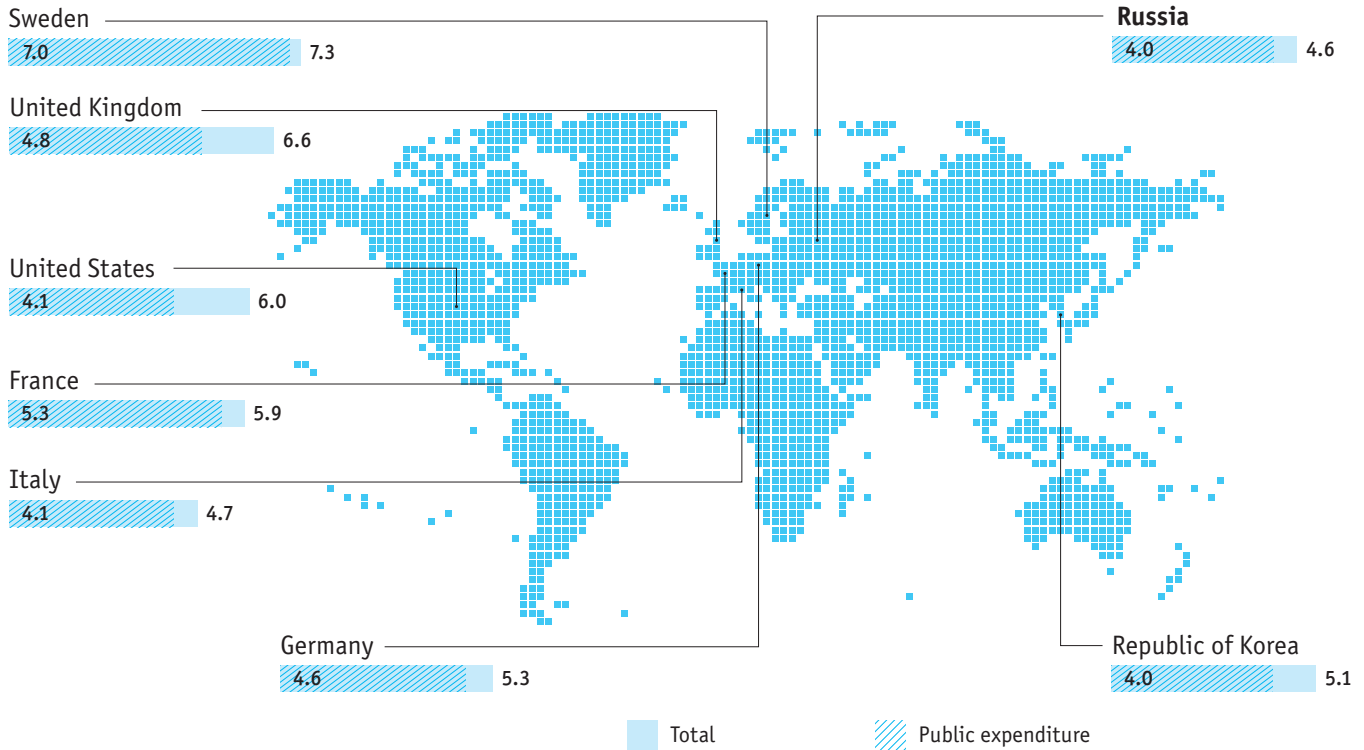


120 ▲
Public expenditure



89 ▼
Expenditure from non-budgetary sources

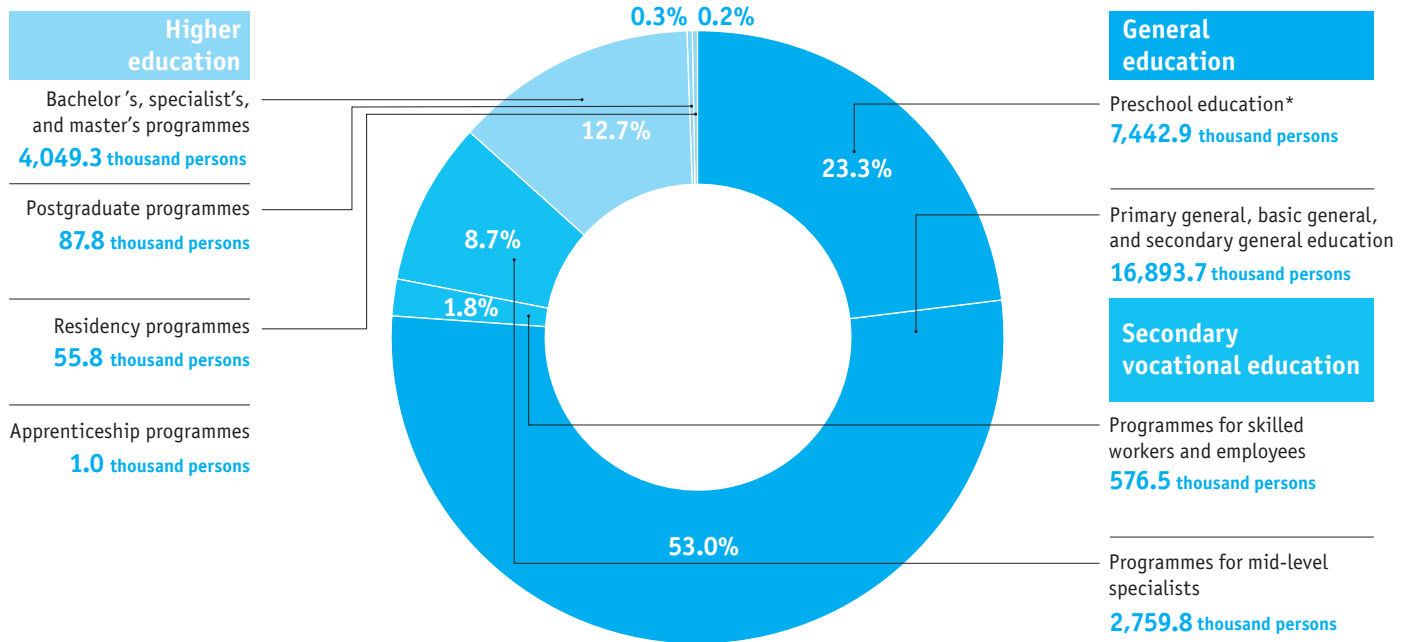
Expenditure on education as % to GDP by country*



* For countries other than Russia, 2018.

Enrolment in main educational programmes

Enrolment, total – 31.9 million persons



* Including child care.

Graduates, total – 3.8 million persons

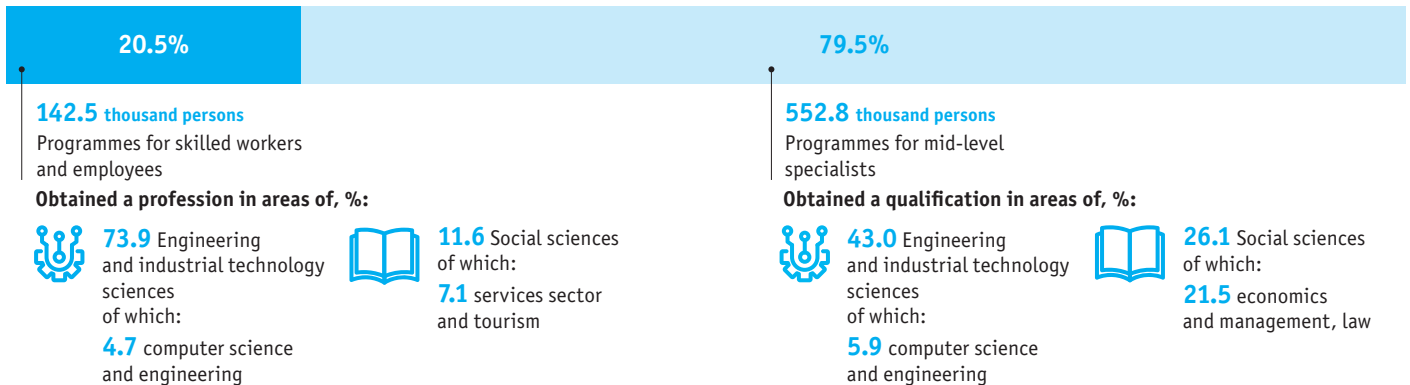


Basic general and secondary general education



Secondary vocational education

695.3 thousand persons





Higher education

Bachelor's, specialist's, and master's programmes

849.4 thousand persons



Obtained a qualification in areas of, %:



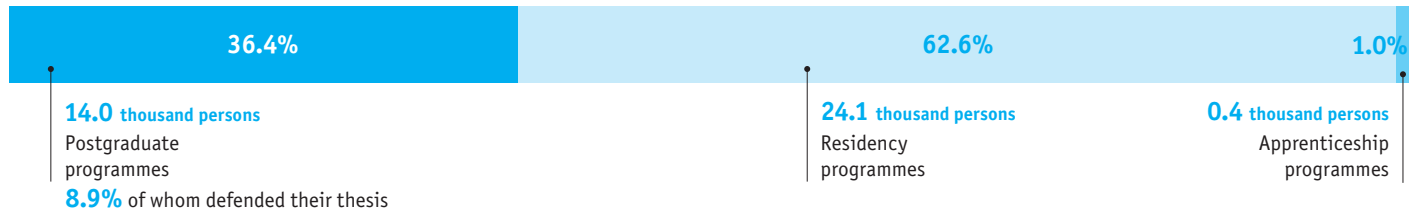
28.4 Engineering and industrial technology sciences
of which:
3.6 computer science and engineering



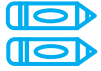
41.2 Social sciences
of which:
34.8 economics and management, law

Highly-qualified personnel training

38.5 thousand persons



Personnel*



Preschool education

Educators**

543.2 thousand persons

Educational attainment, %

Higher

52.4

of which pedagogical

49.7

Secondary vocational – programmes for mid-level specialists

47.0

of which pedagogical

45.1

Age, %

Under 35

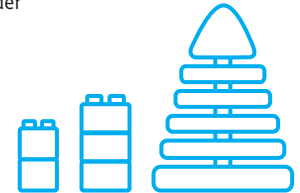
25.4

1 educator per

14 children

60 and older

6.9



Primary general, basic general, and secondary general education

Teachers

1,087.3 thousand persons

Educational attainment, %

Higher

87.0

of which pedagogical

84.3

Secondary vocational – programmes for mid-level specialists

12.3

of which pedagogical

11.5

Age, %

Under 35

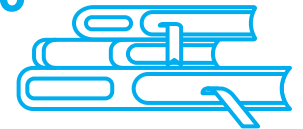
23.1

1 teacher per

19 children

60 and older

13.6



* Excluding part-timers and independent contractors.

** Including senior educators.



Secondary vocational education

Programmes for skilled workers and employees

Teachers

21.5 thousand persons

Educational attainment, %

Higher

90.4

of which pedagogical

65.6

Secondary vocational –
programmes for mid-level
specialists

4.9

of which pedagogical

2.2

Age, %

Under 35

23.4

60 and older

18.2



**1 teacher
and industrial training
instructor per**

14 students

Industrial training instructors

15.6 thousand persons

Educational attainment, %

Higher

46.5

of which pedagogical

22.6

Secondary vocational –
programmes for mid-level
specialists

38.5

of which pedagogical

12.9

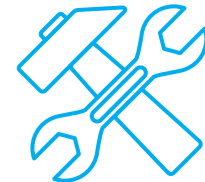
Age, %

Under 35

20.0

60 and older

20.9



Programmes for mid-level specialists

Teachers

108.5 thousand persons

Educational attainment, %

Higher

94.1

of which pedagogical

61.5

Secondary vocational – programmes for mid-level specialists

3.0

of which pedagogical

1.1

Age, %

Under 35

21.9

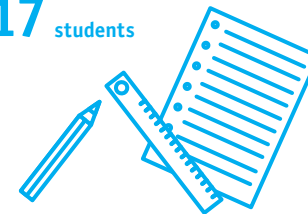
60 and older

22.2



1 teacher and industrial training instructor per

17 students



Industrial training instructors

5.1 thousand persons

Educational attainment, %

Higher

54.1

of which pedagogical

22.8

Secondary vocational – programmes for mid-level specialists

37.1

of which pedagogical

8.5

Under 35

23.0

60 and older

21.7



Higher education

Bachelor's, specialist's, and master's programmes

Teaching staff

220.9 thousand persons

Have a scientific degree, %

Doctor of Sciences

15.7

Candidate of Sciences

58.2

Age, %

Under 35

13.5

60 and older

29.3

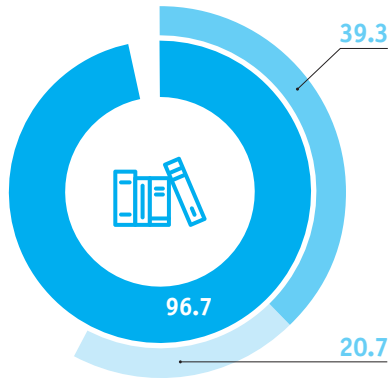
1 teaching staff member per

12 students

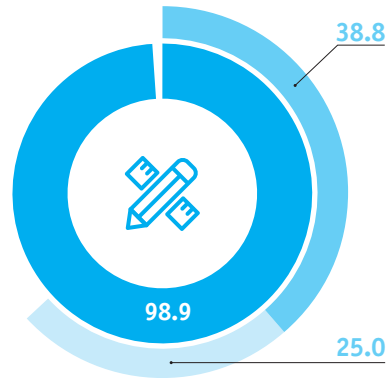
Digitalisation of education

Educational institutions by maximum top access speed, %

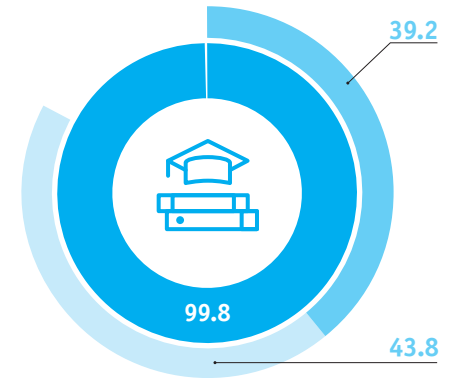
Educational institutions implementing primary general, basic general, and secondary general education programmes



Educational institutions implementing secondary vocational education programmes



Higher education institutions



■ 256–511 kbit/s and higher, including:

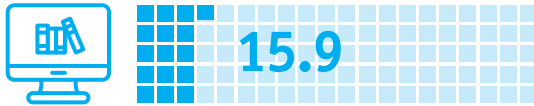
■ 30.0–99.9 Mbit/s

■ over 100 Mbit/s

Personal computers used for educational purposes per 100 students of educational institutions, psc.

Educational institutions implementing primary general, basic general, and secondary general education programmes

Total



With Internet access

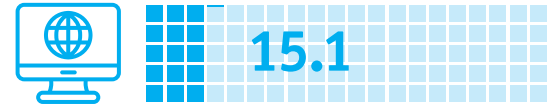


Educational institutions implementing secondary vocational education programmes

Total

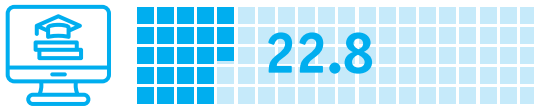


With Internet access

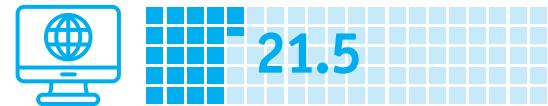


Higher education institutions

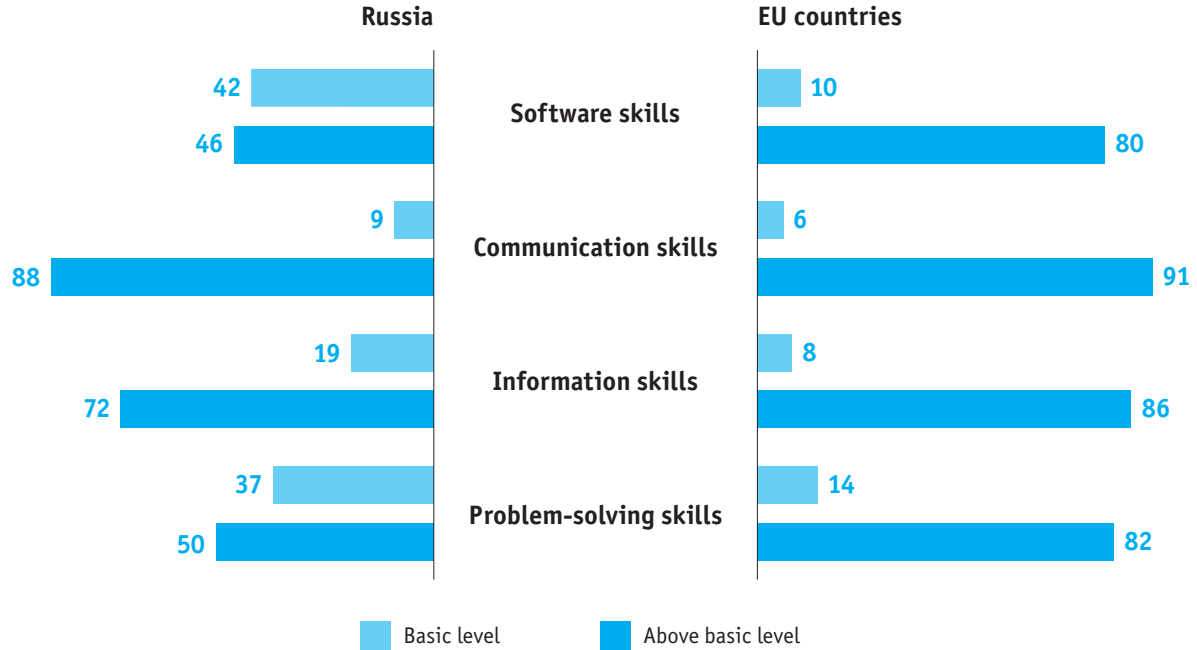
Total



With Internet access



Students' digital literacy in Russia and EU countries, %*



* Within the last 3 months; for EU countries, the data refer to 2019 for students aged 15 and older.

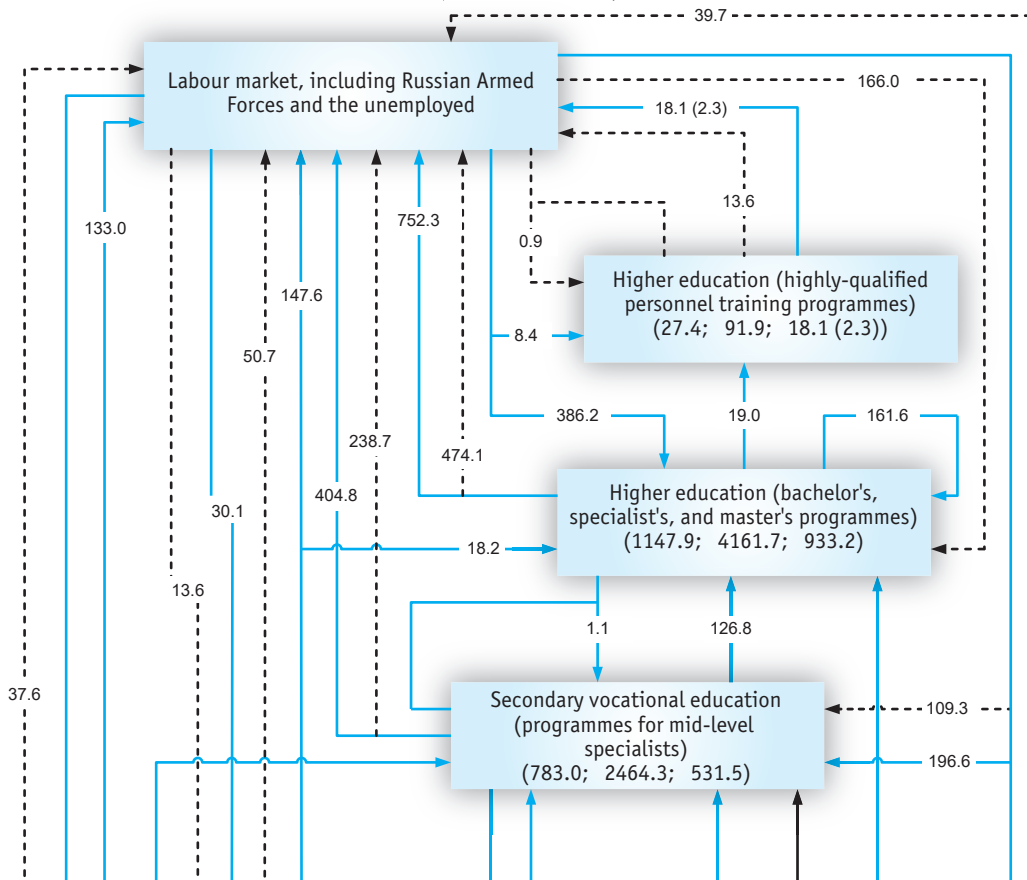
A decorative header featuring a light blue grid background. In the corners, there are various blue geometric shapes including circles, squares, and diamonds, some with white outlines or gradients. A large, bold blue number '1' is centered in the upper half of the page.

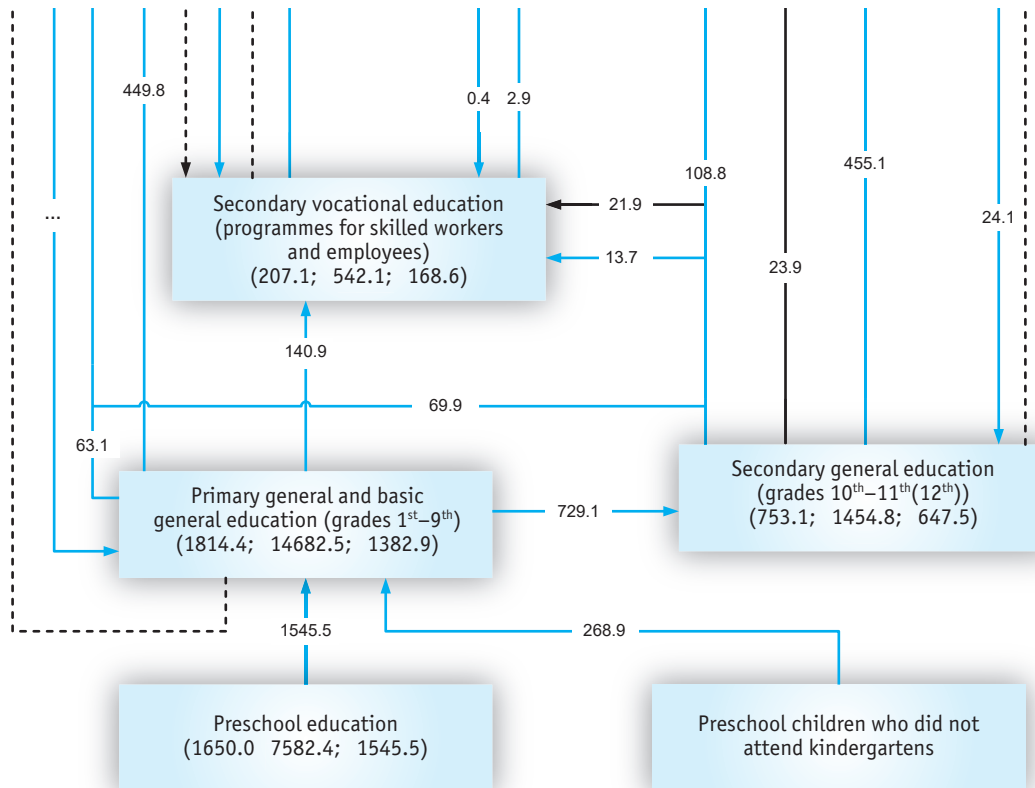
1

**TRANSITION OF STUDENTS
IN EDUCATION**

1.1. STUDENT TRANSITION MAP: 2018

(thousand persons)



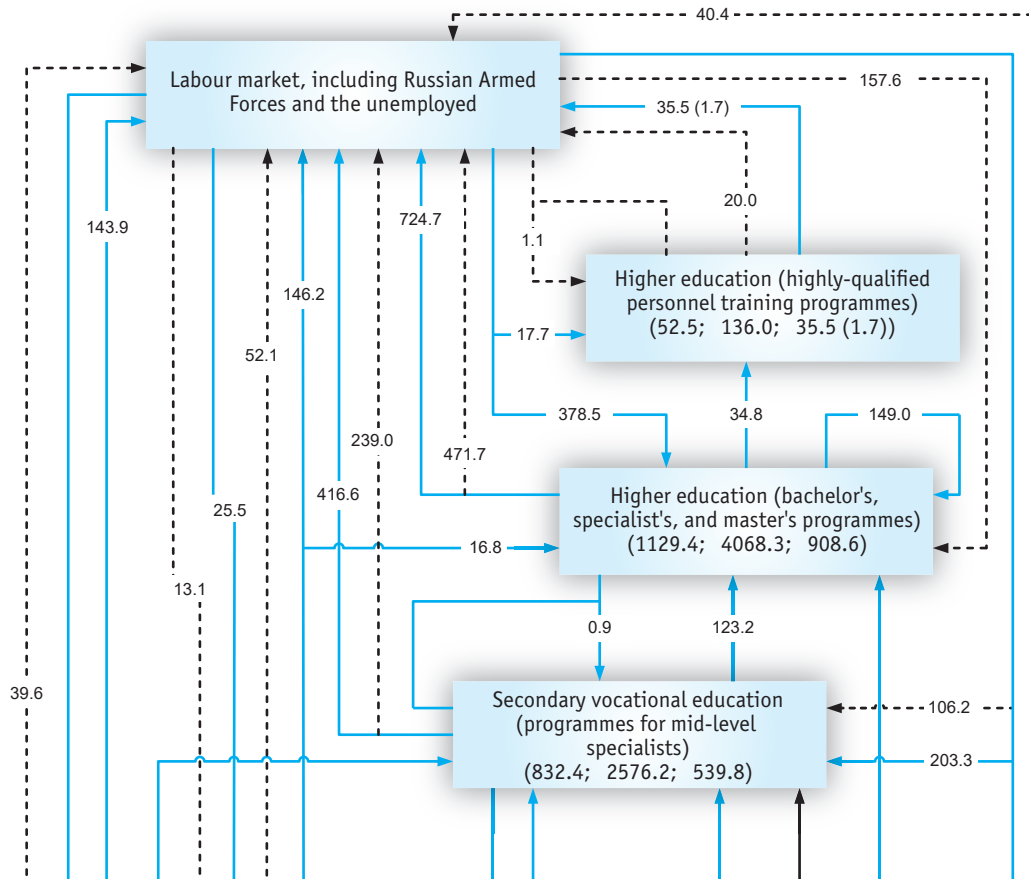


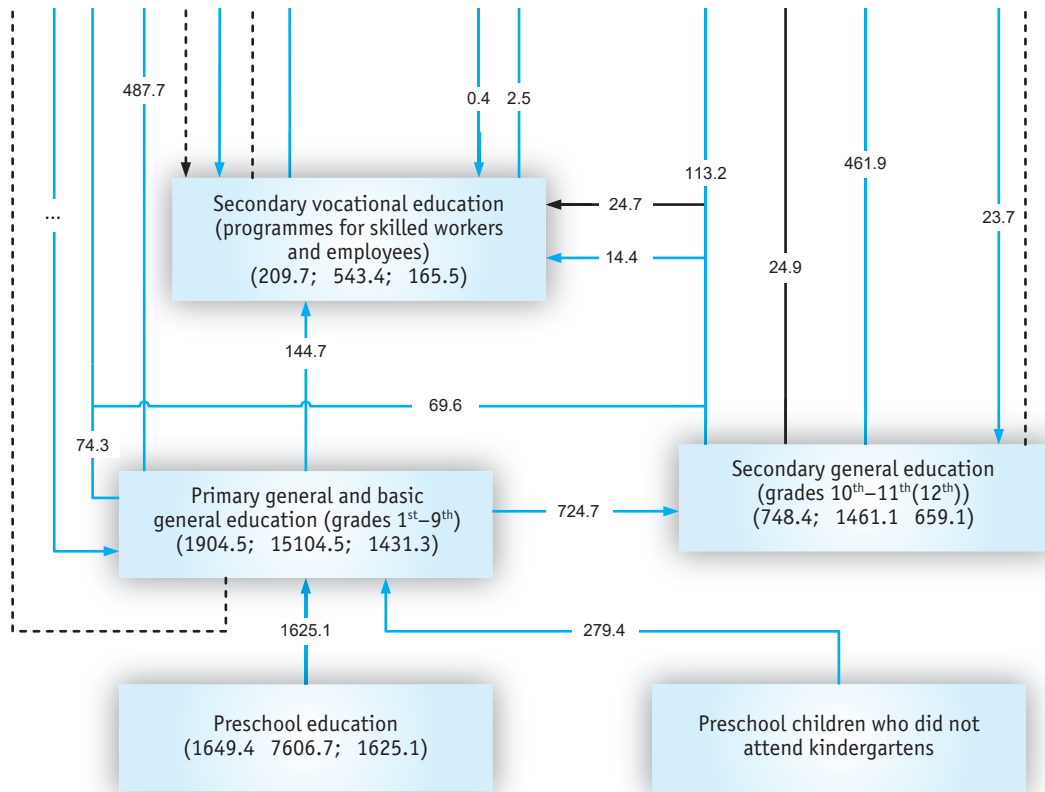
— Graduates of an educational level (or those who came from the labour market) as inflow within programmes of a different educational level

— Dropouts without a certificate/diploma of an educational level as inflow within programmes of a different educational level

- - - Dropouts without a certificate/diploma of an educational level (or those who came from the labour market) as inflow within programmes of a different educational level (or those who left to join the labour market)

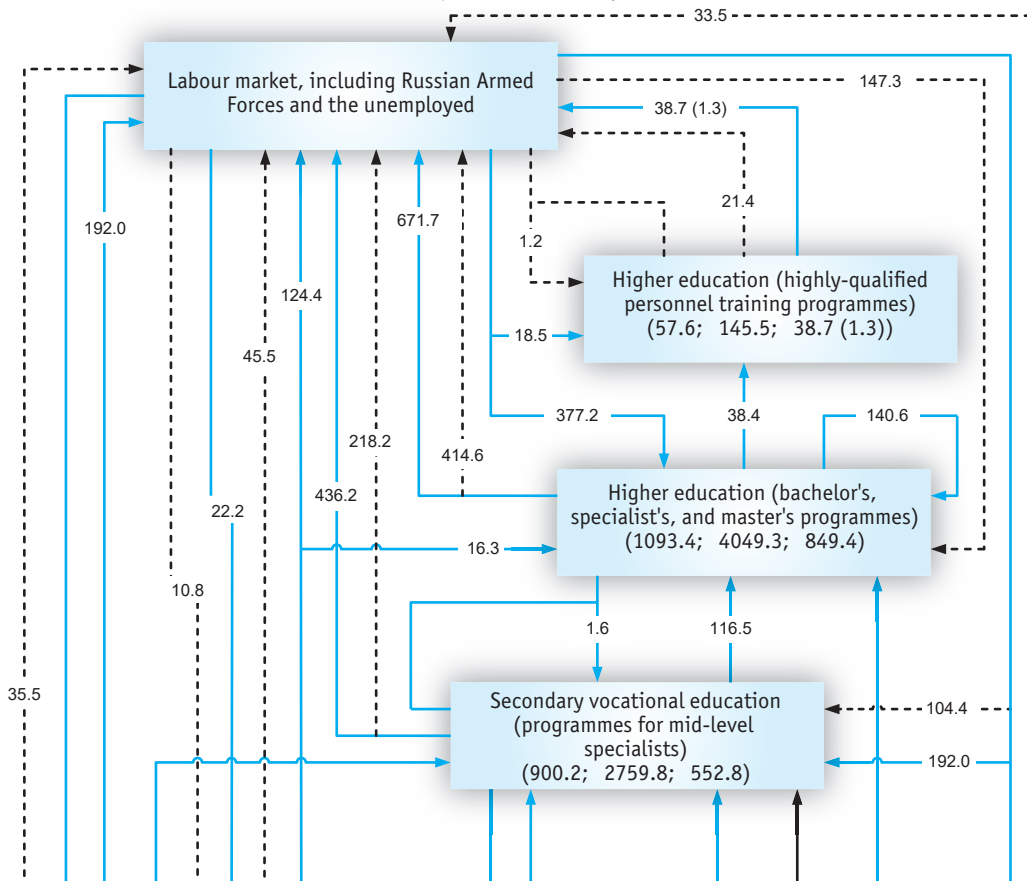
1.2. STUDENT TRANSITION MAP: 2019
(thousand persons)

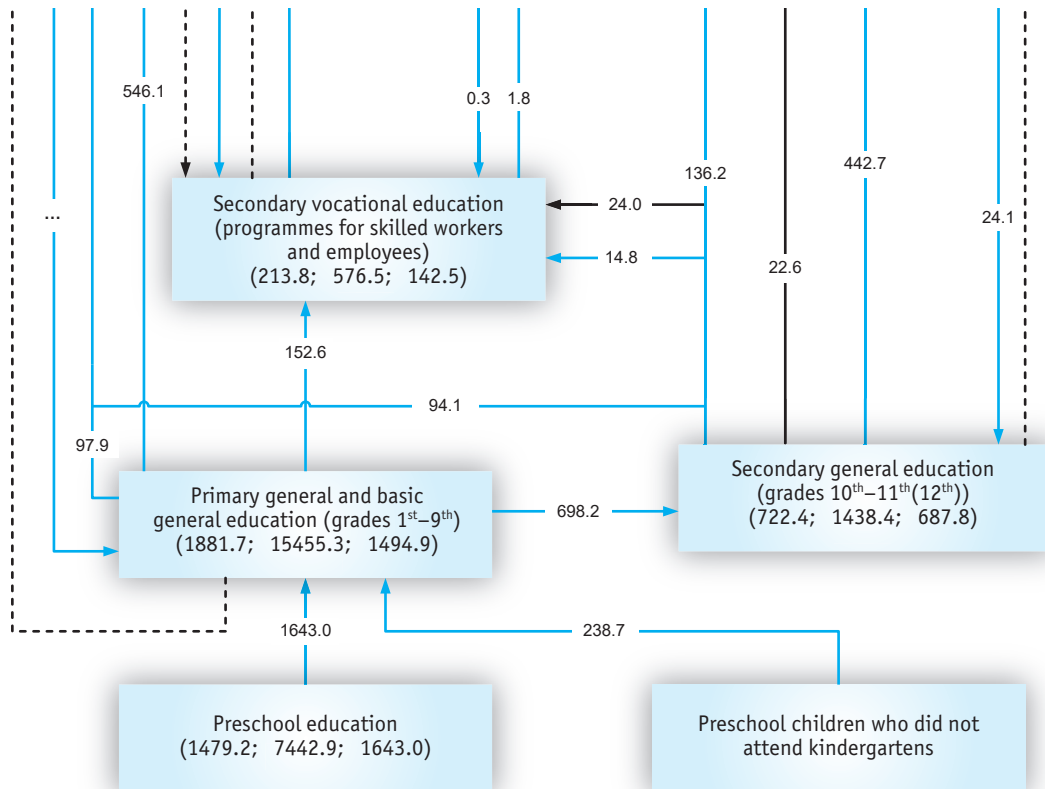




1.3. STUDENT TRANSITION MAP: 2020

(thousand persons)



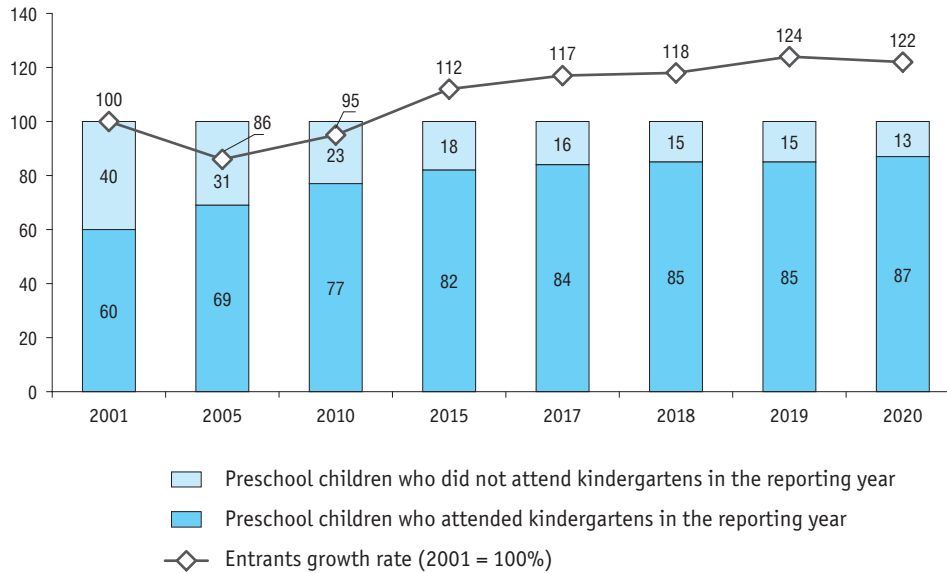


— Graduates of an educational level (or those who came from the labour market) as inflow within programmes of a different educational level

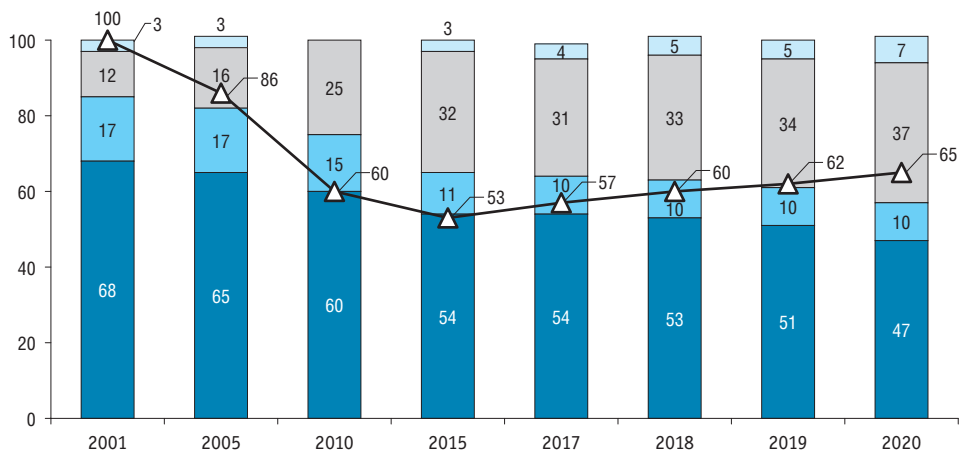
— Dropouts without a certificate/diploma of an educational level as inflow within programmes of a different educational level

- - - Dropouts without a certificate/diploma of an educational level (or those who came from the labour market) as inflow within programmes of a different educational level (or those who left to join the labour market)

1.4. PERCENTAGE DISTRIBUTION OF ENTRANTS TO PRIMARY GENERAL AND BASIC GENERAL EDUCATION PROGRAMMES

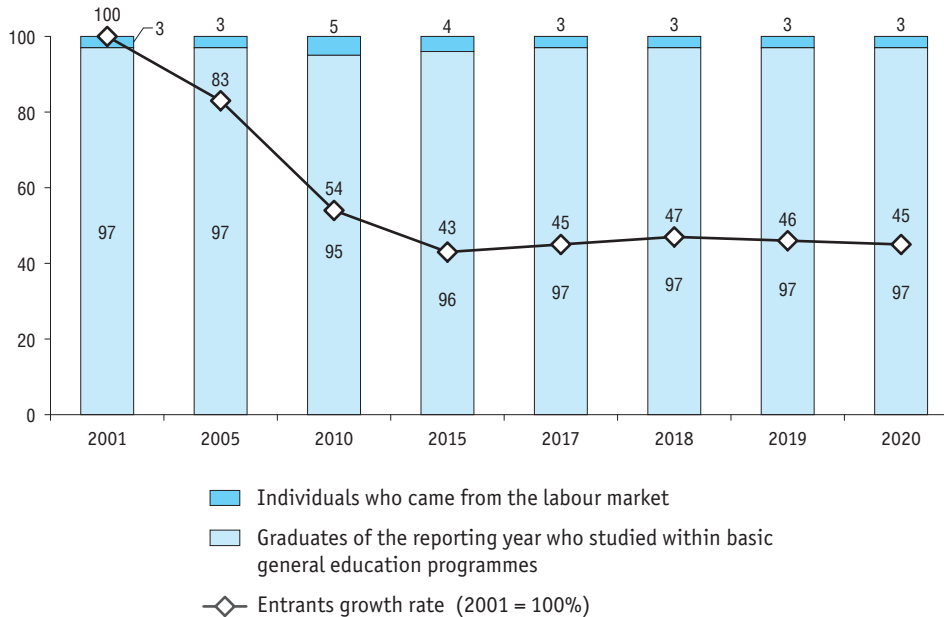


1.5. PERCENTAGE DISTRIBUTION OF GRADUATES OF BASIC GENERAL EDUCATION PROGRAMMES

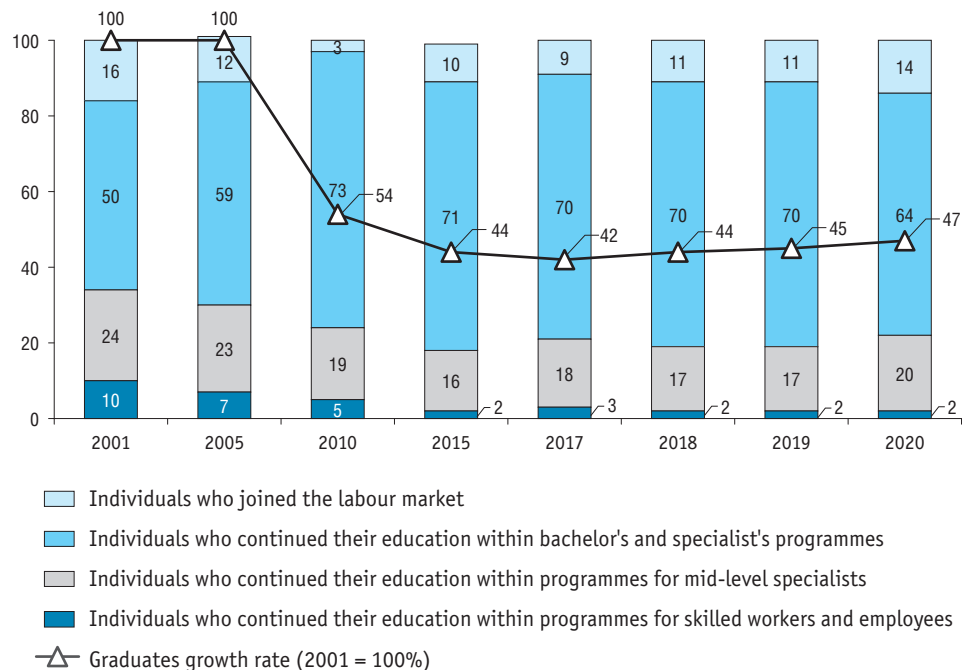


- Individuals who joined the labour market
- Individuals who continued their education within programmes for mid-level specialists
- Individuals who continued their education within programmes for skilled workers and employees
- Individuals who continued their education within secondary general education programmes
- Graduates growth rate (2001 = 100%)

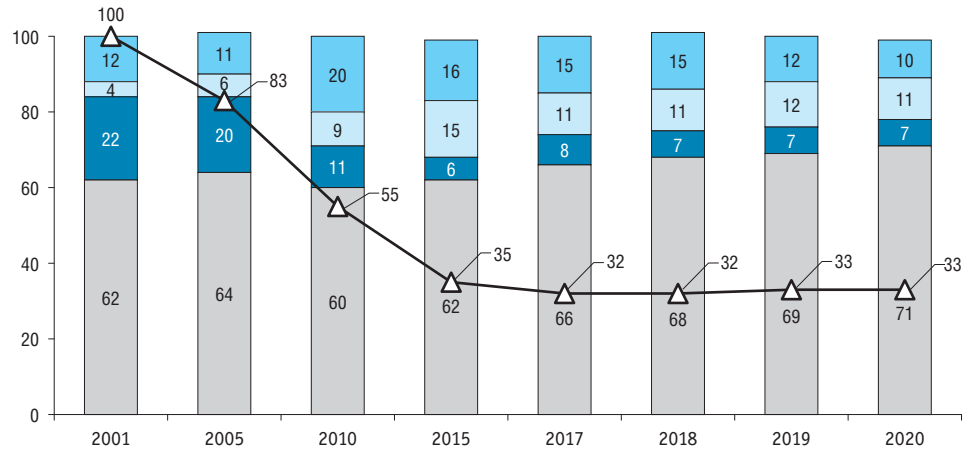
1.6. PERCENTAGE DISTRIBUTION OF ENTRANTS TO SECONDARY GENERAL EDUCATION PROGRAMMES



1.7. PERCENTAGE DISTRIBUTION OF GRADUATES OF SECONDARY GENERAL EDUCATION PROGRAMMES

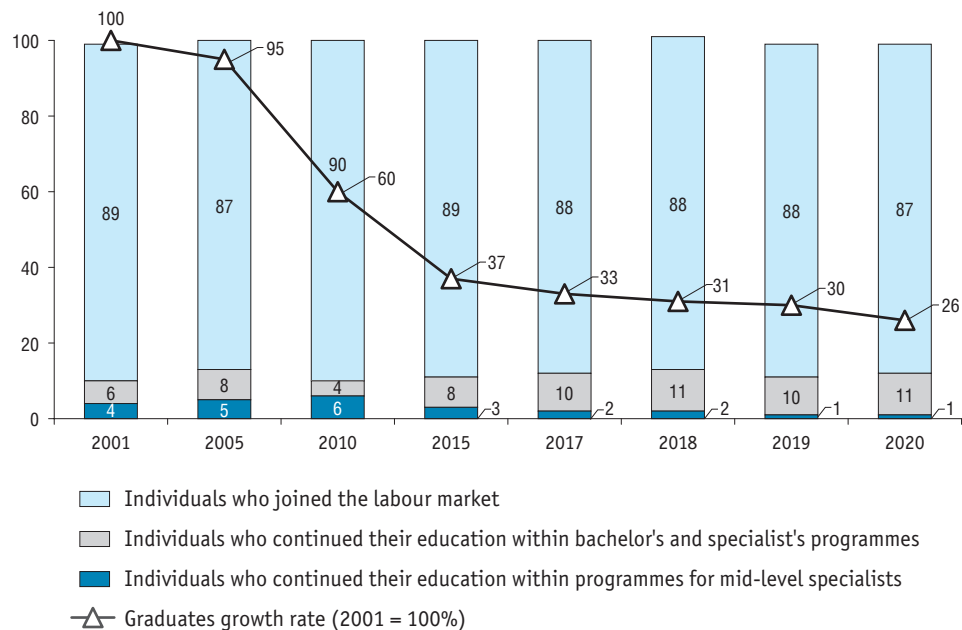


1.8. PERCENTAGE DISTRIBUTION OF ENTRANTS TO PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES

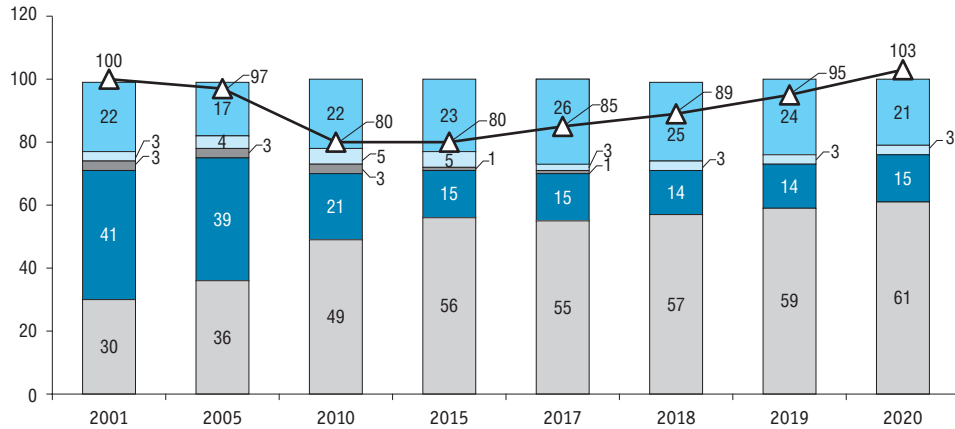


- Individuals with basic general or secondary general education who came from the labour market
- Individuals with basic general education who dropped out of secondary general education programmes in the reporting year
- Graduates of the reporting year within secondary general education programmes
- Graduates of the reporting year within basic general education programmes
- ▲ Entrants growth rate (2001 = 100%)

1.9. PERCENTAGE DISTRIBUTION OF GRADUATES OF PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES

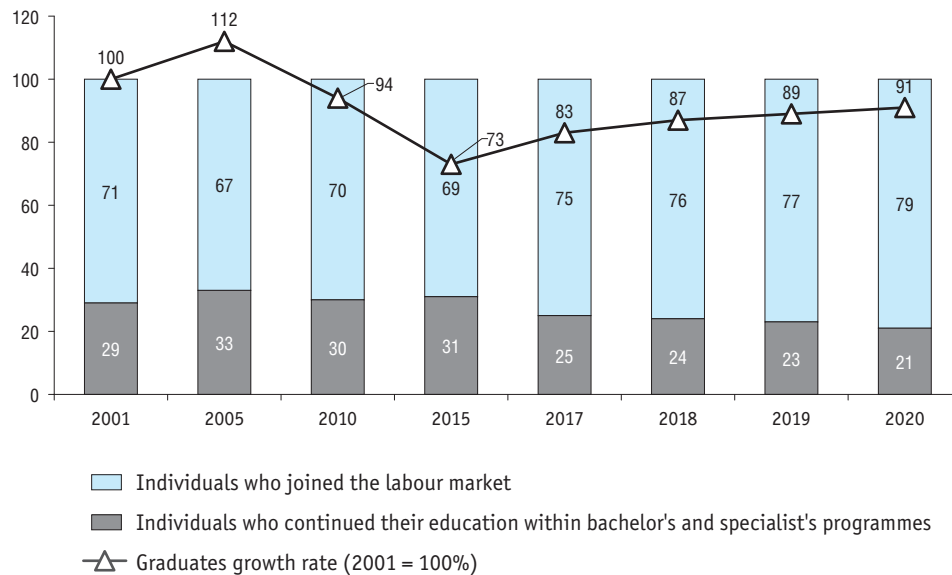


1.10. PERCENTAGE DISTRIBUTION OF ENTRANTS TO PROGRAMMES FOR MID-LEVEL SPECIALISTS

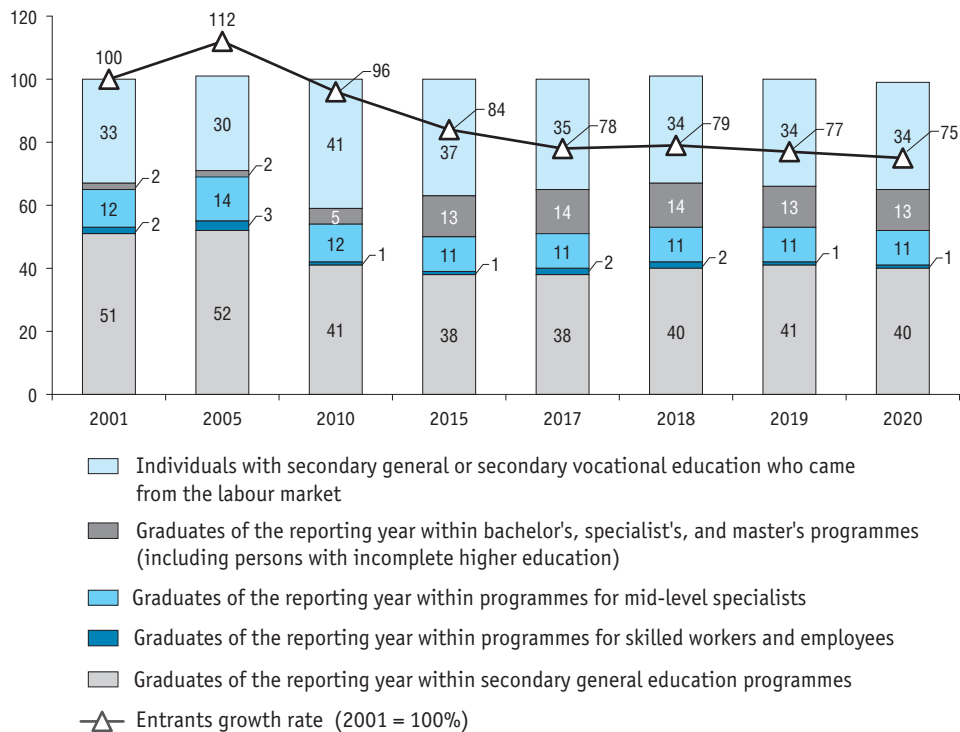


- Individuals with basic general or secondary general education who came from the labour market
- Individuals with basic general education who dropped out of secondary general education programmes in the reporting year
- Graduates of the reporting year within programmes for skilled workers and employees
- Graduates of the reporting year within secondary general education programmes
- Graduates of the reporting year within basic general education programmes
- Entrants growth rate (2001 = 100%)

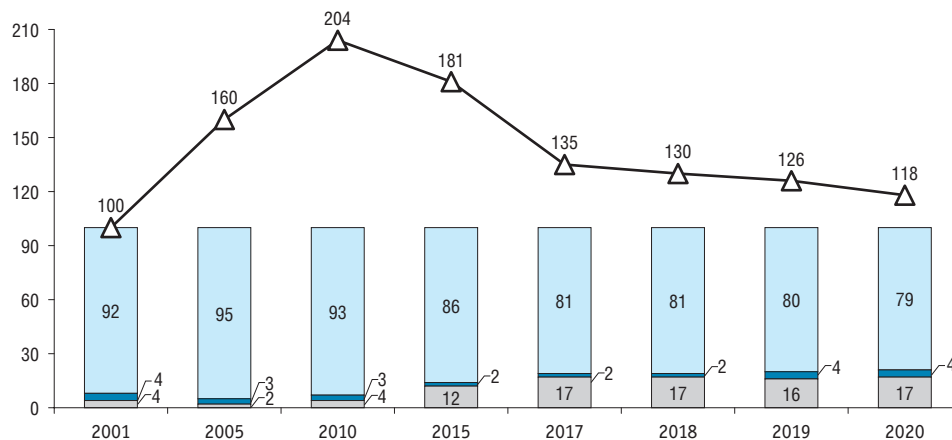
1.11. PERCENTAGE DISTRIBUTION OF GRADUATES OF PROGRAMMES FOR MID-LEVEL SPECIALISTS



1.12. PERCENTAGE DISTRIBUTION OF ENTRANTS TO BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES

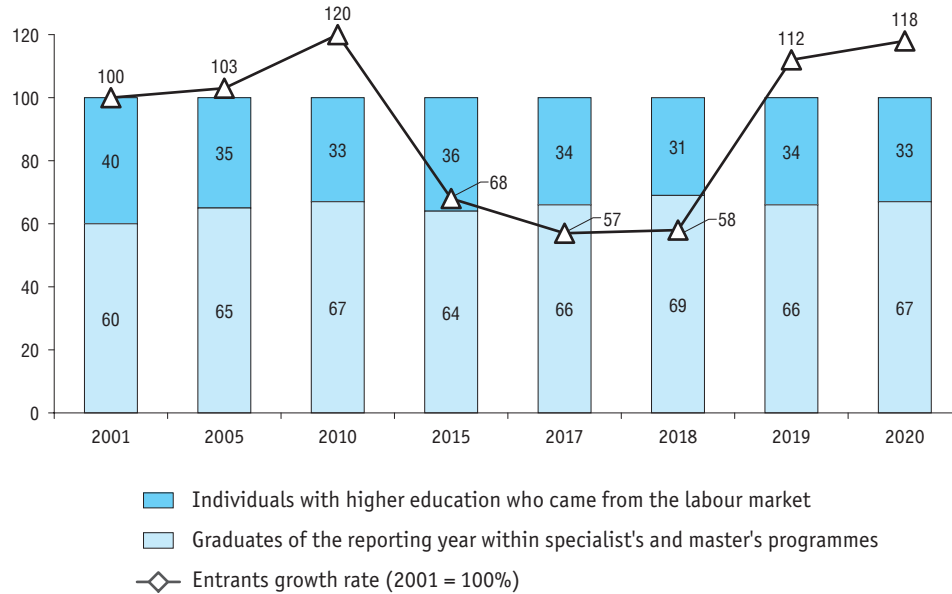


1.13. PERCENTAGE DISTRIBUTION OF GRADUATES OF BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES



- Individuals who joined the labour market
- Individuals who continued their education within postgraduate, residency, and apprenticeship programmes
- Individuals who continued their education within bachelor's, specialist's, and master's programmes
- Graduates growth rate (2001 = 100%)

1.14. PERCENTAGE DISTRIBUTION OF ENTRANTS TO POSTGRADUATE, RESIDENCY, APPRENTICESHIP, AND POSTDOCTORAL PROGRAMMES



TECHNICAL NOTES

The estimation of student flows reflecting the transition of students between main programmes within the education system of the Russian Federation is based on the unique methodology developed by HSE experts. The federal statistical data for the education sector serve as the source data for the estimation.

Student transition maps (figures 1.1–1.3) illustrate student flows: the transitions from a lower educational level to a higher one (within the reporting year), transitions of young adults from an educational institution to the labour market, transitions back to the education system after some time. The composite term ‘labour market’ includes both employed and unemployed individuals, as well as those serving in the Russian Armed Forces. The flows, illustrating transitions between the labour market and educational programmes, were estimated using the balancing method.

Apart from the flows illustrating entrants and graduates by educational attainment, student transition maps also show the number of new entrants (inflow) and dropouts. The entrants indicator includes individuals who have successfully passed the entrance procedure and the graduates indicator – those who have successfully completed their studies and have received the corresponding document (certificate or diploma) confirming the degree or qualification. Individuals reinstated at the educational institution or transferred from another educational programme or another institution, etc., are included in the inflow; individuals who dropped their studies without receiving the corresponding document are included in the number of dropouts.

There are several categories of student flows on the maps. The first category shows the graduates of the reporting year within a programme of an educational level (or individuals who came from the labour market), as the entrants of one of the next educational levels. The second category shows dropouts of an educational level in the reporting year without a diploma or a certificate, as the inflow within programmes of a different educational level. Lastly, the third category includes dropouts of an educational level in the reporting year without a diploma or a certificate (or individuals who came from the labour market), as the inflow within programmes of a different educational level (or individuals who dropped out to join the labour market).

On the transition maps for each educational level, you shall find statistical data on the number of entrants, enrolment, and graduates. The total sums of the flows denoting entrants and graduates within programmes of an educational level do not always precisely correspond to the data in parentheses on the entrants and graduates because of the statistical measurement margin of error, resulting from the fact that the data were taken from different statistical sources.

Percentage distribution charts of entrants and graduates (figures 1.4–1.14) show the demand proportions by educational level and the trends in percentage distributions illustrate the changes in educational tracks of students, and, therefore, indirectly allow to notice the changes in their preferences and priorities.

Below you shall find the main technical notes concerning the interpretation of statistical indicators from Chapter 1.

- **Preschool education:** the number of students (enrolment) within 1st grade programmes implemented at preschool education institutions is excluded from the calculation.
- **Primary general and basic general education:**
 - the number of entrants and the total enrolment of students exclude the number of students (enrolment) in reception (preparatory) classes at general education institutions;
 - the number of entrants and the total enrolment include students with mental deficiency (mental development disorders) within general education programmes;
 - the number of graduates also include the number of individuals who received a certificate of education (including individuals with limited health capacities who completed their studies in corresponding classes or institutions (for example, when reaching a certain age), but who could not receive basic or secondary general education due to their health conditions (mental deficiency, multiple special needs) and who are subject to graduation with a certificate of education).
- **Secondary vocational education – programmes for skilled workers and employees:** in order to provide compatibility of timelines and exclude data – included in 2001–2015 as part of the federal statistical monitoring of educational institutions implementing primary vocational education – about programmes that do not fall under the criteria

of programmes for skilled workers and employees, the estimation of indicators includes only programmes implemented on the basis of basic general and secondary general education. Thus, the data about young adult students who do not receive secondary (general) education, driver training, retraining of machine operators, training in special vocational schools and vocational schools of the Russian Federal Penitentiary Service, the data about training under contracts (on a contractual basis) are not taken into account. Within the framework of Federal Law No. 273-FL of December 29, 2012 (as amended on July 2, 2021) 'On Education in the Russian Federation', such training refers to main vocational training programmes after which individuals who have successfully passed the qualification exam are issued a certificate of obtaining a profession (job title). At the same time, vocational training is not associated with an increase in the educational level of the student.

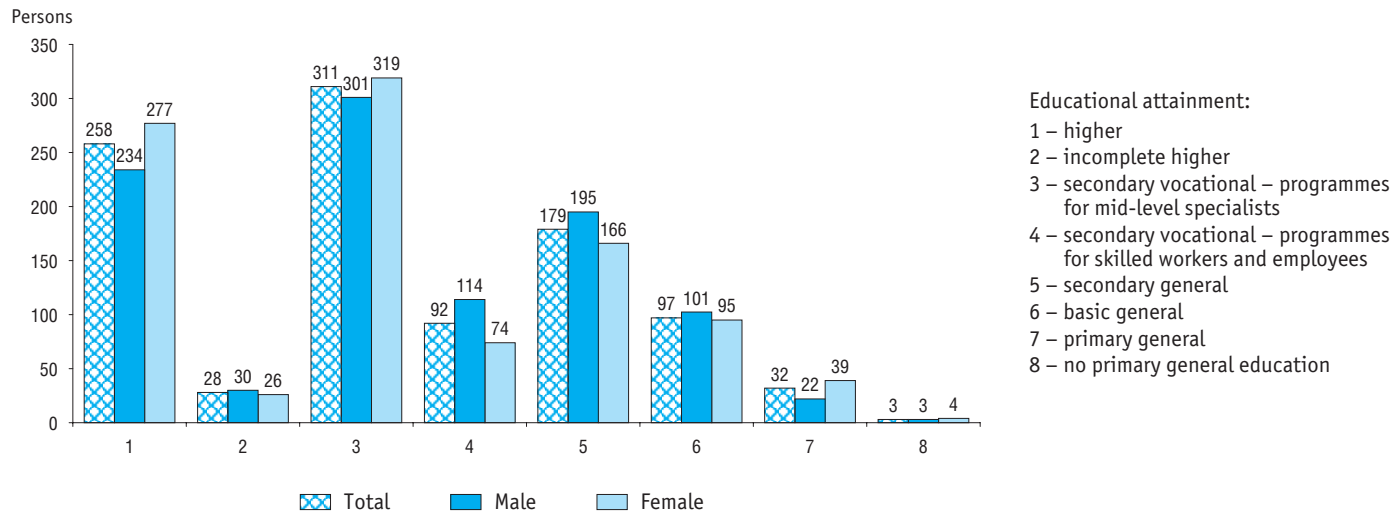
- **Higher education – bachelor's, specialist's and master's programmes:** until 2012, the number of graduates includes individuals who graduated with a diploma of incomplete higher education.
- Higher education – highly qualified personnel training programmes: since 2019, includes the data on residency and apprenticeship programmes; postdoctoral programmes are also included; there are two figures for the graduates' indicators – the total number of graduates and the number of graduates who defended their thesis (in parentheses), excluding defences by applicants.

A large, bold blue number '2' is centered on a light blue background with a faint grid. The top corners of the slide feature decorative geometric patterns in shades of blue, including circles, squares, and diamonds.

2

EDUCATIONAL POTENTIAL OF THE POPULATION

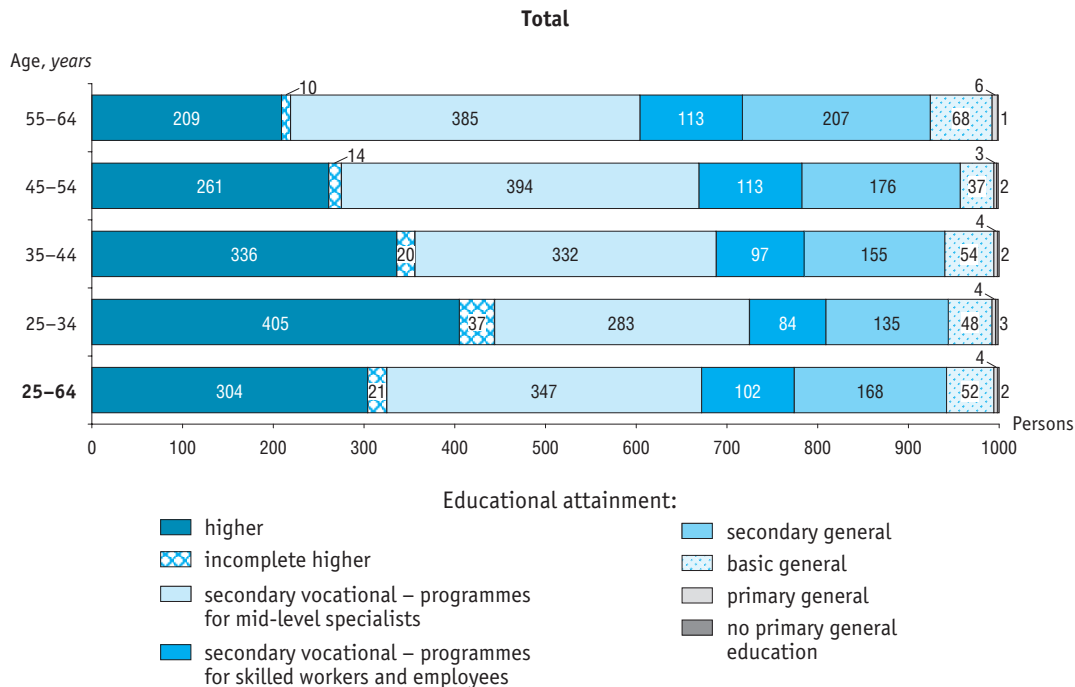
2.1. EDUCATIONAL ATTAINMENT OF POPULATION AGED 15 AND OVER BY GENDER: 2015*

(per 1,000 inhabitants in this age group who indicated their educational attainment)

* According to the 2015 microcensus of the Russia's population.

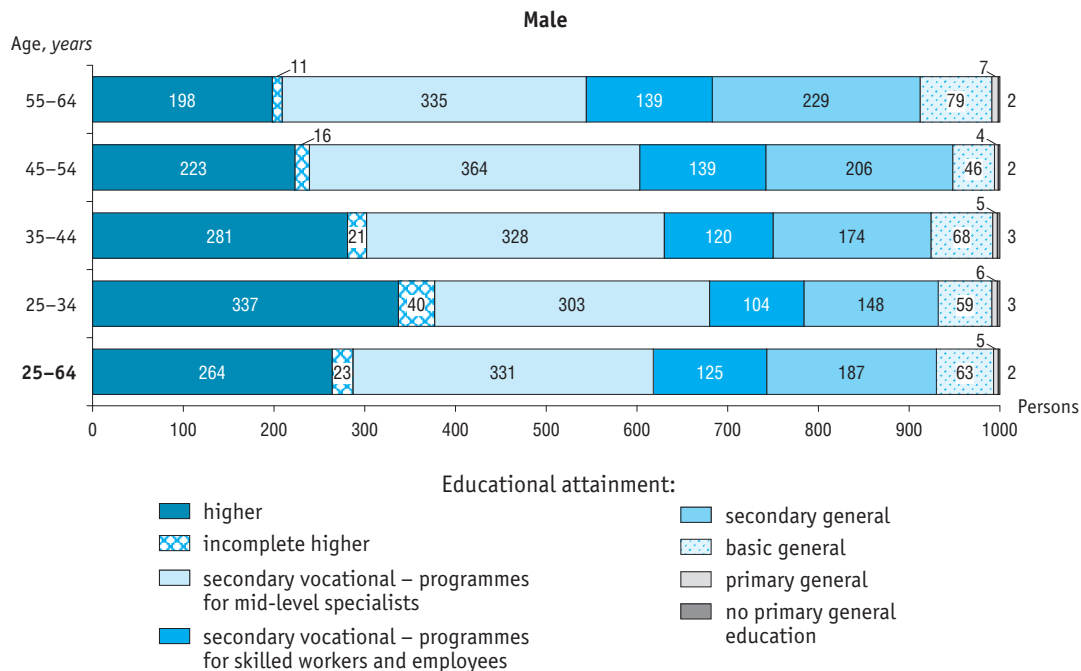
2.2. EDUCATIONAL ATTAINMENT OF POPULATION AGED 25–64 BY AGE AND GENDER: 2015*

(per 1,000 inhabitants in each age group who indicated their educational attainment)



* According to the 2015 microcensus of the Russia's population.

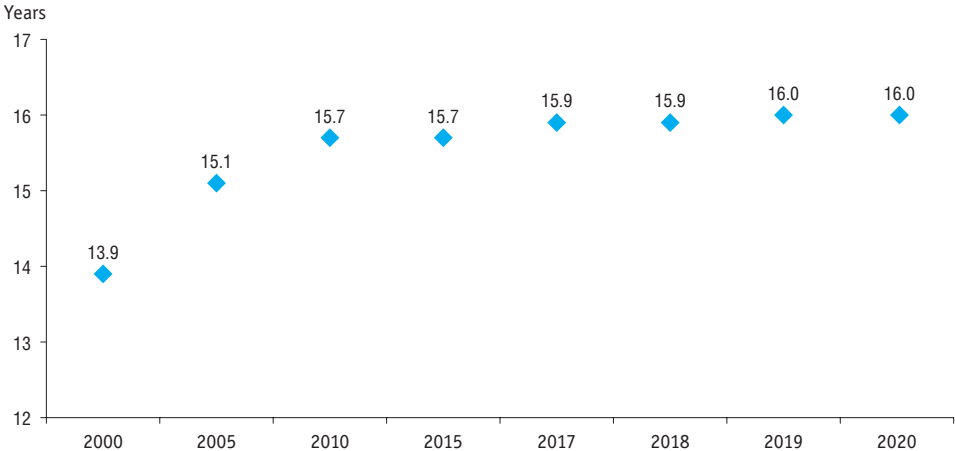
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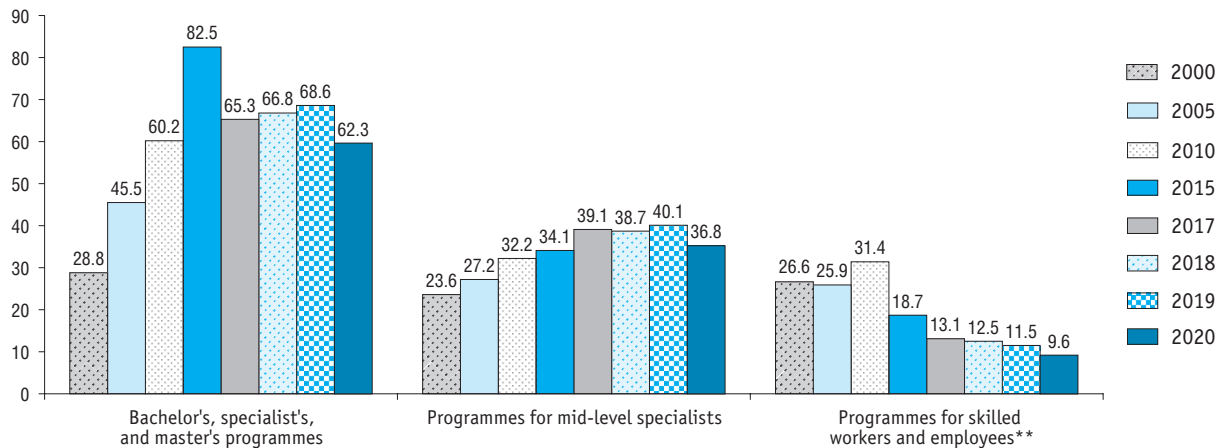


2.3. EDUCATION EXPECTANCY OF CHILDREN AGED 6



2.4. GRADUATION RATES AT PROFESSIONAL (VOCATIONAL) EDUCATION INSTITUTIONS

(graduates who participated in professional (vocational) education programmes as a percentage of the total population at the age theoretically corresponding to completion of education at a certain level*)

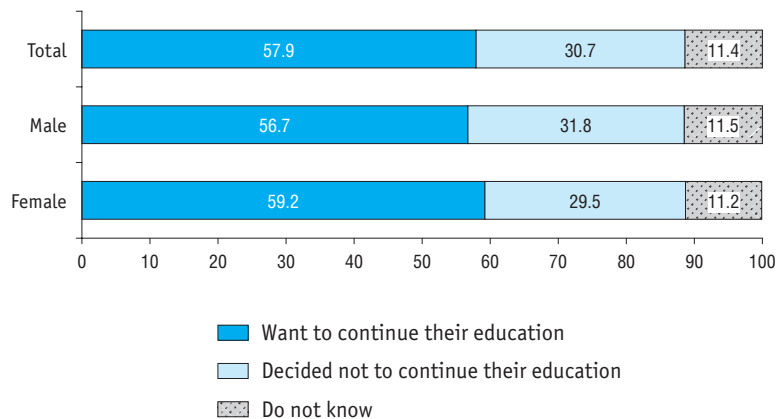


* 22 years – for graduates of bachelor's, specialist's, and master's programmes; 18 years – for graduates of programmes for mid-level specialists; and 17 years – for graduates of programmes for skilled workers and employees.

** Excluding graduates of vocational education institutions of the Russian Federal Penitentiary Service.

2.5. WILLINGNESS OF THE POPULATION TO CONTINUE THEIR EDUCATION: 2020*

*(as a percentage of respondents aged 15–55 (females)/15–60 (males) enrolled in educational institutions** and of young adults under 24 who opted out of education by corresponding educational attainment)*



* Here and below (tables 2.6 and 2.8; figure 2.7), according to the Comprehensive Monitoring of Living Conditions.

** Excluding respondents enrolled in highly-qualified personnel training programme.

2.6. EDUCATIONAL STRATEGIES OF THE POPULATION: 2020

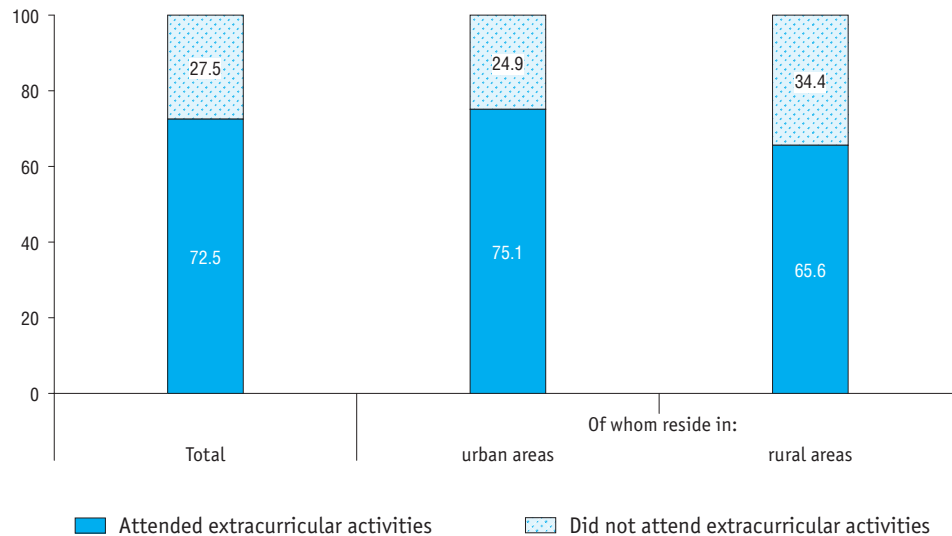
(as a percentage of respondents aged 15–55 (females)/15–60 (males) enrolled in educational institutions* and of young adults under 24 who are willing to continue their education in each group)

	Total	Of whom want to continue their education			
		in a vocational education institution implementing secondary vocational education programmes		in higher education institutions	in educational institutions implementing postgraduate, postdoctoral, residency, and apprenticeship programmes
		for skilled workers and employees	for mid-level specialists		
Total	100	5.0	13.8	73.8	7.4
Male	100	6.2	14.8	72.5	6.6
Female	100	3.8	12.7	75.3	8.3

* Excluding respondents enrolled in highly-qualified personnel training programmes.

2.7. PARTICIPATION OF INDIVIDUALS AGED 15 AND OVER ENROLLED IN GENERAL EDUCATION INSTITUTIONS IN EXTRACURRICULAR ACTIVITIES: 2020

(as a percentage of respondents aged 15 and over enrolled in general education institutions)



2.8. PARTICIPATION OF POPULATION AGED 15 AND OVER ENROLLED IN GENERAL EDUCATION INSTITUTIONS IN EXTRACURRICULAR ACTIVITIES BY TYPE OF ACTIVITY AND INSTITUTION: 2020

(as a percentage of all respondents who were enrolled in general education institutions and attended extracurricular activities)

	Total	Of whom reside in	
		urban areas	rural areas
Tutoring sessions to improve academic performance	36.5	41.1	24.4
Sports school or sports club	31.2	30.7	32.5
Elective classes or special programme classes	25.7	24.4	29.1
Foreign language courses	9.9	12.9	2.1
Children's creativity centre, technical clubs, etc.	4.6	4.6	4.6
Music school	4.5	4.8	3.9
Computer science and programming classes, technology study and design	2.8	3.0	2.4
Additional education centre	2.7	3.0	1.9
On-the-job training centres	0.2	0.2	0.3

TECHNICAL NOTES

The main source of data on educational attainment of the population is the census. A **census** is a process of collecting demographic, economic, and social data characterising each inhabitant of a country or a territory at a certain period of time. A microcensus was conducted from October 1, 2015 till October 31, 2015 in all Russian regions. It covered 2,154.2 thousand people (1.5% of the population as of January 1, 2016).

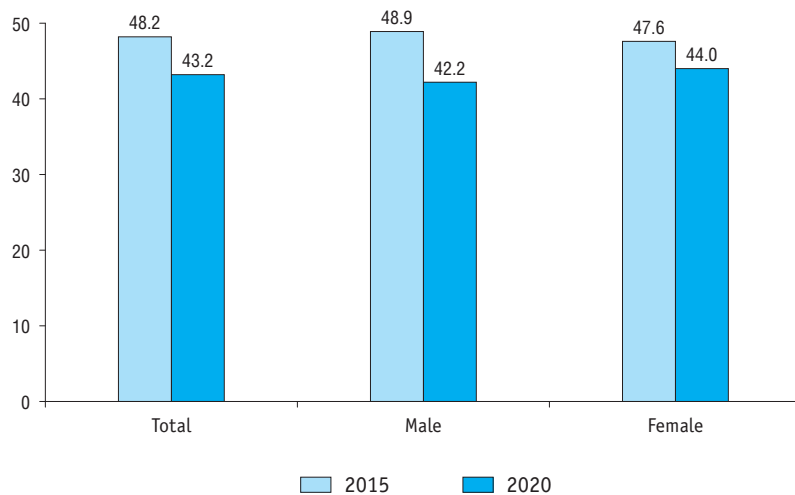
Education expectancy of children aged 6 is the number of years which a six-year-old individual may spend on going through all levels of education given the existing level of education coverage and his or her potential education track. It is calculated by adding education coverage rates of children of a respective age for each year of their lives, starting with the age of six.

Comprehensive monitoring of living conditions is conducted by the Rosstat in furtherance of Decree of the Government of the Russian Federation no. 946 'On the Organisation of a National Statistical System for Observing Socio-Demographic Issues and Monitoring Mortality, Morbidity and Disability Rates and the Resulting Economic Losses' of November 27, 2010. The monitoring is carried out on the basis of a sampling method in all Russian regions, covering 60 thousand households. Population data in 2020 was gathered over a period from October 14, 2020 till November 2, 2020. The results of the monitoring will apply to all private households and all the people living in them by way of using weighting factors calculated as inversely proportional to selection probabilities.



3

PARTICIPATION OF THE POPULATION IN LIFELONG LEARNING

3.1. PARTICIPATION OF POPULATION AGED 25–64 IN LIFELONG LEARNING BY GENDER**(as a percentage of population aged 25–64 in each group; on average per year)*

* Here and below in this section, according to the data from a representative statistical monitoring on the participation of the population in lifelong learning.

3.2. PARTICIPATION OF POPULATION AGED 25–64 IN LIFELONG LEARNING BY GENDER, RESIDENCE, AND AGE: 2020

(as a percentage of population aged 25–64 in each group; on average per year)

	Total	Of whom participated in lifelong learning by type		
		formal	non-formal	informal
Participated in lifelong learning – total	43.2	1.6	26.1	27.8
Male	42.2	1.7	27.9	24.0
Female	44.0	1.5	24.4	31.2
Urban areas	46.0	1.7	27.9	29.8
Rural areas	34.2	1.5	20.3	21.3
Age, years:				
25–29	56.9	7.1	33.7	37.9
30–39	50.2	1.9	31.1	32.6
40–49	44.5	0.7	29.1	26.9
50–59	35.7	0.2	21.3	22.0
60–64	24.2	0.0	9.4	18.6

3.3. PARTICIPATION OF POPULATION AGED 25–64 IN LIFELONG LEARNING BY EDUCATIONAL ATTAINMENT: 2020

(as a percentage of population aged 25–64 in each group; on average per year)

	Total	Of whom by educational attainment					
		higher	secondary vocational – programmes for mid-level specialists	secondary vocational – programmes for skilled workers and employees	secondary general	basic general	no basic general education
Participated in lifelong learning – total	43.2	56.2	44.3	36.8	30.7	21.8	16.6
Of whom by type:							
formal	1.6	1.7	1.7	1.0	2.4	0.5	...
non-formal	26.1	34.1	27.2	23.2	17.0	11.6	9.2
informal	27.8	39.6	27.8	20.5	18.1	13.2	9.1

3.4. PARTICIPATION OF POPULATION AGED 25–64 IN LIFELONG LEARNING BY GENDER: 2020

(as a percentage of population aged 25–64 in each group; on average per year)

	Total	Male	Female
Participated in lifelong learning – total	43.2	42.2	44.0
Of whom by type:			
formal education	1.6	1.7	1.5
higher education – postgraduate, residency and apprenticeship programmes	0.1	0.1	0.1
higher education – bachelor's, specialist's, and master's programmes	1.1	1.2	1.0
secondary vocational education	0.4	0.5	0.4
basic general or secondary general education	...	...	...
non-formal education	26.1	27.9	24.4
vocational training	3.0	3.0	3.0
additional professional (vocational) education programmes	3.3	2.3	4.3
additional general development programmes	19.1	22.1	16.5
other	0.6	0.6	0.7
informal	27.8	24.0	31.2
studied a foreign language	1.2	1.0	1.4
gained knowledge and skills on how to use a computer	5.6	5.5	5.7
gained knowledge and skills on how to use new household appliances (mobile phone, smart home, etc.)	5.2	6.0	4.5
studied legal matters	4.6	4.7	4.5
studied financial awareness and budget planning, use of housing and communal services, public services, etc.	4.8	3.5	5.9
studied issues of health, healthy lifestyle	9.1	4.9	12.9
visited museums and exhibitions, historical, cultural, and natural objects and other attractions	4.5	3.2	5.8
attended musical, literary, artistic educational events	2.8	1.7	3.9
mastered needlework and artistic creativity (playing musical instruments, singing, drawing, dancing, etc.)	2.5	0.7	4.0
other	7.9	7.6	8.1

3.5. PARTICIPATION OF FEMALES WITH CHILDREN UNDER 18 IN LIFELONG LEARNING BY AGE OF THE YOUNGEST CHILD: 2020

(as a percentage of females with children under 18 in each group; on average per year)

	Total	Of whom participated in lifelong learning by type		
		formal	non-formal	informal
Females with children under 18 – total	49.3	2.6	27.3	34.6
Of whom by age of the youngest child, years:				
0–2	45.5	4.9	15.7	35.1
3–6	54.2	3.7	30.8	38.4
7–10	51.6	2.4	30.1	35.5
11–14	48.2	1.0	29.8	32.7
15–17	45.9	0.8	28.4	31.0

3.6. PARTICIPATION OF POPULATION AGED 25–64 IN LIFELONG LEARNING BY LABOUR FORCE STATUS: 2020

(as a percentage of population aged 25–64 in each group; on average per year)

	Total	Of whom participated in lifelong learning by type		
		formal	non-formal	informal
Participated in lifelong learning – total	43.2	1.6	26.1	27.8
Of whom:				
employed	49.1	1.7	32.3	30.1
unemployed	31.5	2.2	10.8	25.1
individuals not included in the labour force	21.8	1.1	4.2	18.9

3.7. PARTICIPATION OF EMPLOYED POPULATION AGED 25–64 IN LIFELONG LEARNING BY TYPE OF ECONOMIC ACTIVITY: 2020

(as a percentage of population aged 25–64 in each group; on average per year)

	Total	Of whom participated in lifelong learning by type		
		formal	non-formal	informal
Participated in lifelong learning – total	49.1	1.7	32.3	30.1
Agriculture, forestry and fishing	33.8	1.0	20.1	20.0
Mining and quarrying	63.2	2.8	56.8	19.8
Manufacturing	49.5	1.4	34.6	26.4
Electricity, gas, steam and air-conditioning supply	55.1	1.9	43.6	25.1
Water supply, sewerage, waste management and remediation activities	40.6	1.8	28.9	19.3
Construction	43.8	1.2	29.7	24.0
Wholesale and retail trade; repair of motor vehicles and motorcycles	40.5	1.4	21.0	28.3
Transportation and storage	42.2	1.8	29.2	22.7
Accommodation and food service activities	43.2	1.6	24.0	29.0
Information and communication	61.6	2.1	36.9	45.7
Financial and insurance activities	58.1	1.3	37.2	40.2
Real estate activities	43.4	1.0	26.5	26.8
Professional, scientific and technical activities	59.2	1.6	33.9	44.4
Administrative and support service activities	49.0	1.5	35.6	26.4
Public administration and defence; compulsory social security	57.1	3.0	40.7	33.4
Education	59.3	2.5	39.5	41.3
Human health and social work activities	55.7	1.5	39.6	34.6
Art, entertainment and recreation	54.0	2.1	29.7	41.8
Other service activities	52.1	1.8	30.3	39.9
Other types of economic activity	6.1	...	2.1	6.1

3.8. OBJECTIVES OF POPULATION AGED 25–64 FOR OBTAINING ADDITIONAL EDUCATION: 2020

(as a percentage of population aged 25–64 who obtained additional education; on average per year)

	Total	Of whom additional education by type			
		vocational training	additional professional (vocational) education programmes	additional general development programmes	other
Obtained additional education – total*	100	100	100	100	100
Of whom by objectives:					
finding a job, getting a new job	4.9	7.8	2.5	4.7	8.9
salary raise	7.1	11.8	15.7	5.0	4.9
promotion	8.5	11.7	20.5	6.0	6.6
achieving higher work results	27.6	28.0	49.1	24.2	14.0
gaining new knowledge	44.9	42.9	56.7	43.5	33.2
expanding circle of friends, making new acquaintances, establishing new contacts	5.5	5.5	5.6	5.3	9.1
broadening horizons, raising cultural level, developing everyday skills, etc.	8.9	10.1	8.0	8.5	21.1
other	26.0	21.5	7.6	29.8	28.3

* Here and below in table 3.9, the total amount is not equal to 100% due to respondents who chose more than one answer to the question 'What is the objective of your last training?'.

3.9. OBTAINING ADDITIONAL EDUCATION BY POPULATION AGED 25–64 BY OBJECTIVE, RESIDENCE, AND AGE: 2020

(as a percentage of population aged 25–64 who obtained additional education; on average per year)

	Total	Of whom by objectives							
		finding a job, getting a new job	salary raise	promotion	achieving higher work results	gaining new knowledge	expanding circle of friends, making new acquaintances, establishing new contacts	broadening horizons, raising cultural level, developing everyday skills, etc.	other
Obtained additional education – total	100	4.9	7.1	8.5	27.6	44.9	5.5	8.9	26.0
Urban areas	100	4.6	7.4	8.9	27.9	45.1	5.8	8.9	26.3
Rural areas	100	6.0	6.0	6.9	26.2	44.0	4.2	9.1	24.6
Age, years:									
25–29	100	8.2	7.7	10.4	25.9	43.4	7.8	11.6	25.9
30–39	100	6.1	8.1	9.8	27.0	44.2	6.2	9.6	25.3
40–49	100	3.4	6.8	8.4	29.6	45.3	4.2	7.5	25.6
50–59	100	2.8	5.9	6.1	28.2	47.2	4.0	7.0	26.4
60–64	100	1.8	4.6	3.3	23.1	43.4	5.6	10.6	31.3

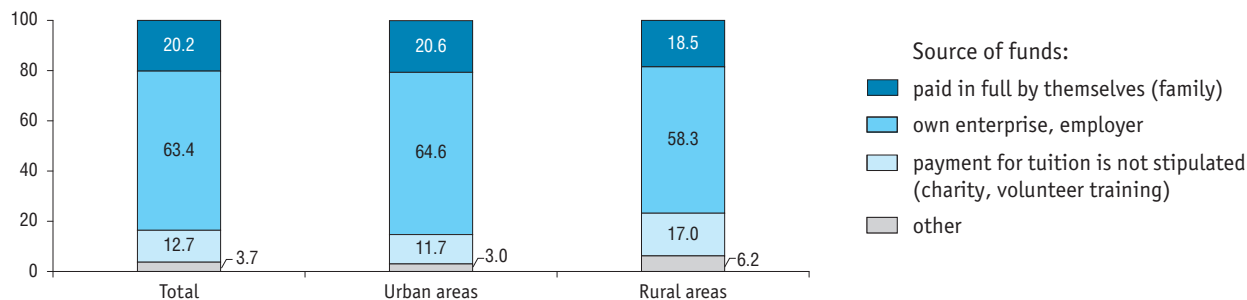
3.10. SOURCES OF FUNDS FOR ADDITIONAL EDUCATION OF THE POPULATION AGED 25–64: 2020

(as a percentage of population aged 25–64 who obtained additional education; on average per year)

	Total	Of whom additional education by type			
		vocational training	additional professional (vocational) education programmes	additional general development programmes	other
Obtained additional education – total	100	100	100	100	100
Sources of funds:					
paid in full by themselves (family)	20.2	41.7	12.9	17.2	48.2
own enterprise, employer	63.4	48.8	76.3	65.0	14.3
payment for tuition is not stipulated (charity, volunteer training)	12.7	5.9	7.3	14.6	18.9
other	3.7	3.6	3.5	3.2	18.6

3.11. SOURCES OF FUNDS FOR ADDITIONAL EDUCATION OF POPULATION AGED 25–64 BY RESIDENCE: 2020

(as a percentage of population aged 25–64 who obtained additional education; on average per year)



3.12. WILLINGNESS OF POPULATION AGED 25–64 TO PARTICIPATE IN LIFELONG LEARNING BY AGE AND LABOUR FORCE STATUS: 2020

(as a percentage of population aged 25–64 in each group; on average per year)

	Total		Of whom			
	are willing to participate	are not willing to participate	participated in lifelong learning		did not participate in lifelong learning	
			are willing to participate	are not willing to participate	are willing to participate	are not willing to participate
Population – total	19.2	80.8	35.5	64.5	6.8	93.2
<i>Age, years:</i>						
25–29	33.9	66.1	46.9	53.1	16.8	83.2
30–39	25.8	74.2	40.7	59.3	10.8	89.2
40–49	17.4	82.6	31.8	68.2	5.9	94.1
50–59	11.2	88.8	25.6	74.4	3.2	96.8
60–64	7.4	92.6	24.5	75.5	2.0	98.0
<i>Employed</i>	21.0	79.0	35.3	64.7	7.2	92.8
<i>Unemployed</i>	23.9	76.1	46.3	53.7	13.6	86.4
<i>Individuals not included in the labour force</i>	10.6	89.4	33.3	66.7	4.3	95.7

3.13. POPULATION AGED 25–64 YEARS WHO EXPRESSED THEIR WILLINGNESS TO PARTICIPATE IN LIFELONG LEARNING BY MAIN REASON AND AGE: 2020

(as a percentage of population aged 25–64 in each group; on average per year)

	Total	Of whom are willing to participate because of	
		professional interest	personal interest
Population who expressed their willingness to participate in lifelong learning – total	19.2	52.8	47.2
<i>Age, years:</i>			
25–29	33.9	55.4	44.6
30–39	25.8	55.3	44.7
40–49	17.4	56.3	43.7
50–59	11.2	45.8	54.2
60–64	7.4	25.4	74.6

TECHNICAL NOTES

Sample statistical monitoring of the population's participation in lifelong learning is carried out every five years by the Rosstat pursuant to Decree no. 946 of the Government of the Russian Federation of November 27, 2010 'On the Organisation of a National Statistical System for Observing Socio-Demographic Issues and Monitoring Mortality, Morbidity and Disability Rates and the Resulting Economic Losses'. The first survey was conducted in 2015. This monitoring is an added module to the labour force sample survey conducted by interviewing households in all Russian regions. In 2020, some 100 thousand households were surveyed (over 231 thousand respondents aged 15 and older, i.e. 0.19% of the population of this age). The surveyed period for monitoring the population's participation in lifelong learning is 12 months preceding the survey. The results of the sample monitoring are extended to all population aged 15 and older.

The term **lifelong learning** encompasses all purposeful learning activities, formal, non-formal, or informal, undertaken on an ongoing basis with the goal of improving knowledge, skills, and competences.

Formal education includes education on various levels (secondary general, secondary vocational, higher) provided by educational institutions. In international practice, there is an indicator called 'participation of population in formal education' which provides a percentage of individuals aged 25–64, who are enrolled

into any programmes of any level of the formal education system within the last 12 months.

Non-formal (additional) education covers organised educational activities which are not part of formal education programmes: additional professional (vocational) education programmes (development programmes, retraining programmes); professional and amateur courses; vocational lectures, seminars, training events (conducted on-the-job regularly or ad-hoc); additional education programmes for children and adults. In this section, additional education also includes vocational training programs – vocational training, retraining, and vocational development for skilled workers and employees. In international practice, an indicator called 'participation of the population in non-formal education' which provides a percentage of individuals aged 25–64 who are enrolled into any programmes of any level of the non-formal education system within the last 12 months. An indicator called 'participation of population in formal and (or) non-formal education' is also used and provides a percentage of individuals aged 25–64, who participated in all organised educational activities within the last 12 months.

Informal learning (self-education) is independent learning, which, unlike formal and non-formal education, is not recorded by way of a diploma or any other document but broadens the knowledge and skills of individuals. In international

practice, this indicator is called 'participation of population in informal learning'. It provides a percentage of individuals aged 25–64 who have been independently acquiring knowledge and skills over the last 12 months using printed materials (professional books, journals, etc.); technical devices (audio-visual

records, computers, the Internet); visiting knowledge dissemination organisations (libraries, museums, exhibitions, theatres, cinemas, etc.); using educational TV and radio programmes; studying under the tutelage of relatives, friends, or colleagues, etc.



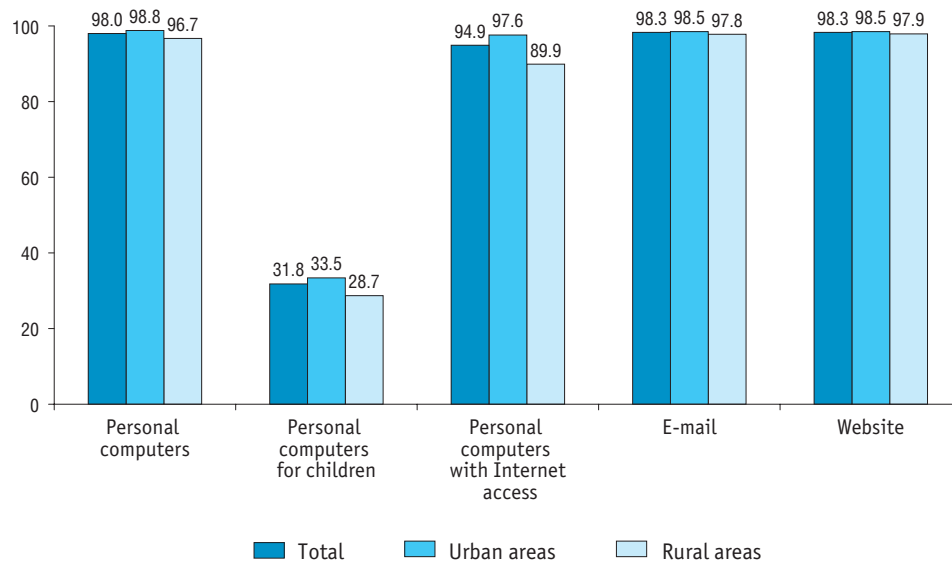
4

DIGITALISATION OF EDUCATION

4.1. Use of information and communication technologies in educational institutions

4.1.1. DIGITALISATION OF PRESCHOOL EDUCATION INSTITUTIONS: 2020

(at the end of the year; as a percentage of all institutions)



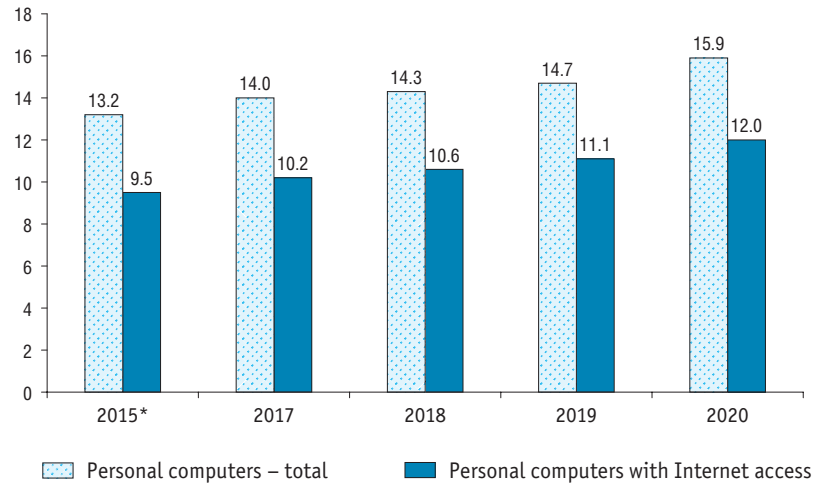
4.1.2. PERSONAL COMPUTERS USED FOR EDUCATIONAL PURPOSES IN EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(at the end of the year)

	Thousand units				Percentage			
	2017	2018	2019	2020	2017	2018	2019	2020
Total								
Personal computers	2169.6	2273.6	2396.1	2650.4	100	100	100	100
Of which:								
within local area networks	1178.3	1256.3	1321.0	1432.3	54.3	55.3	55.1	54.0
with Internet access	1583.1	1690.0	1810.5	2009.3	73.0	74.3	75.6	75.8
acquired in the reporting year	138.0	150.2	195.5	302.4	6.4	6.6	8.2	11.4
State and municipal institutions								
Personal computers	2143.0	2244.0	2366.4	2618.2	100	100	100	100
Of which:								
within local area networks	1163.5	1239.8	1304.1	1414.9	54.3	55.3	55.1	54.0
with Internet access	1561.2	1665.7	1785.6	1982.1	72.8	74.2	75.5	75.7
acquired in the reporting year	135.2	147.5	192.8	298.8	6.3	6.6	8.1	11.4
Private institutions								
Personal computers	26.5	29.6	29.8	32.2	100	100	100	100
Of which:								
within local area networks	14.8	16.5	16.9	17.4	55.6	55.8	56.7	53.9
with Internet access	21.9	24.3	24.9	27.2	82.6	82.2	83.6	84.3
acquired in the reporting year	2.8	2.7	2.7	3.6	10.5	9.1	9.2	11.2

4.1.3. AVAILABILITY OF PERSONAL COMPUTERS USED FOR EDUCATIONAL PURPOSES TO STUDENTS IN EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

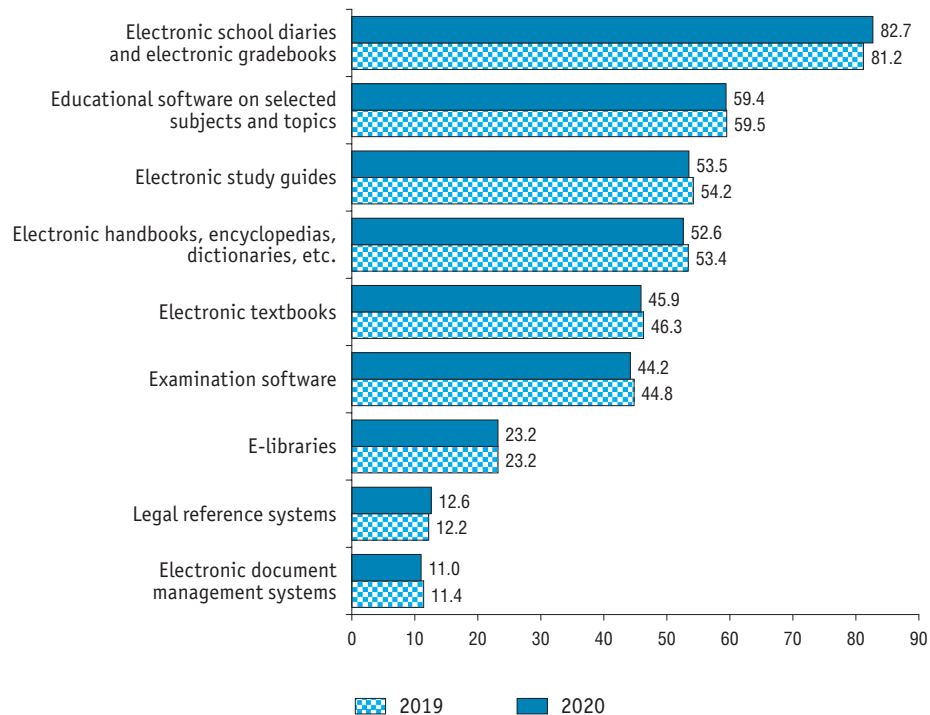
(at the end of the year; units per 100 students)



* At the beginning of the 2015/2016 academic year, excluding intramural part-time (shift-based) general education institutions.

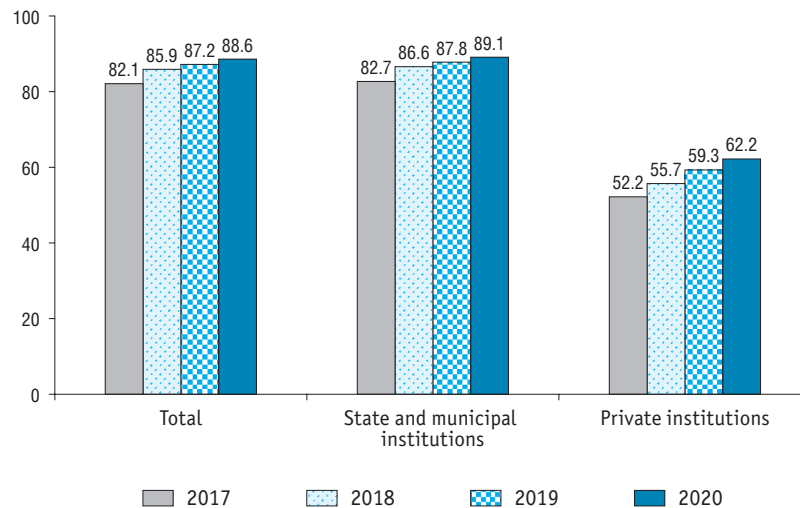
4.1.4. USE OF SOFTWARE AVAILABLE TO STUDENTS IN EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(at the end of the year; as a percentage of all institutions)



4.1.5. EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES USING ELECTRONIC SCHOOL DIARIES AND ELECTRONIC GRADEBOOKS

(at the end of the year; as a percentage of all institutions)



4.1.6. ENROLMENT IN PRIMARY GENERAL, BASIC GENERAL AND SECONDARY GENERAL EDUCATION PROGRAMMES USING E-LEARNING (at the beginning of the academic year)

	Using e-learning			Of which using exclusively e-learning		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total:						
thousand persons	2481.9	2694.8	3095.4	5.8	10.8	15.6
as a percentage of the total	15.4	16.3	18.3	0.0	0.1	0.1
Including programmes of:						
primary general education:						
thousand persons	1072.7	1161.1	1327.3	2.2	4.7	6.6
as a percentage of the total	15.3	16.1	18.1	0.0	0.1	0.1
basic general education:						
thousand persons	1137.1	1240.7	1446.2	2.7	4.6	7.2
as a percentage of the total	15.3	16.2	18.4	0.0	0.1	0.1
secondary general education:						
thousand persons	254.9	273.4	299.4	0.5	1.1	1.6
as a percentage of the total	17.5	18.7	20.8	0.0	0.1	0.1
educational programmes for students with mental deficiency (mental development disorders):						
thousand persons	17.3	19.6	22.6	0.4	0.4	0.2
as a percentage of the total	7.0	7.7	8.8	0.2	0.1	0.1

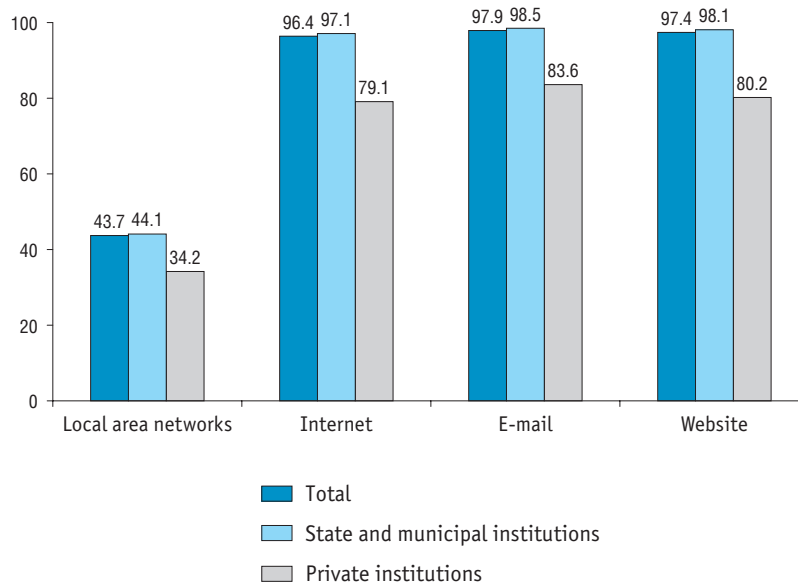
4.1.7. ENROLMENT IN PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES USING DISTANCE LEARNING

(at the beginning of the academic year)

	Using distance learning			Of which using exclusively distance learning		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total:						
thousand persons	614.2	797.2	2621.3	10.8	8.2	31.0
as a percentage of the total	3.8	4.8	15.5	0.1	0.0	0.2
Including programmes of:						
primary general education:						
thousand persons	246.4	325.1	1074.6	3.5	2.8	13.3
as a percentage of the total	3.5	4.5	14.7	0.0	0.0	0.2
basic general education:						
thousand persons	292.9	379.1	1254.6	5.2	4.1	13.9
as a percentage of the total	4.0	5.0	15.9	0.1	0.1	0.2
secondary general education:						
thousand persons	70.5	88.2	273.9	1.4	1.0	3.4
as a percentage of the total	4.8	6.0	19.0	0.1	0.1	0.2
educational programmes for students with mental deficiency (mental development disorders):						
thousand persons	4.4	4.8	18.3	0.7	0.3	0.4
as a percentage of the total	1.8	1.9	7.1	0.3	0.1	0.1

4.1.8. DIGITALISATION OF ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN: 2020*

(at the end of the year; as a percentage of all institutions)



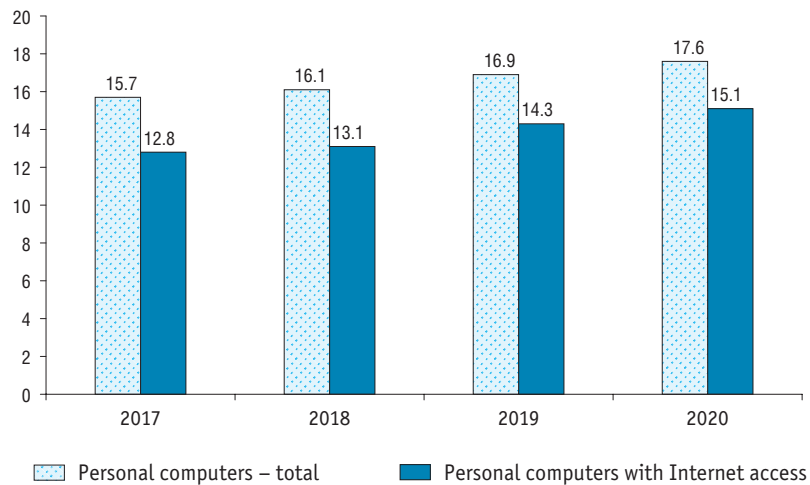
* The data refer to additional education institutions that provide reports to the Ministry of Education of the Russian Federation.

**4.1.9. PERSONAL COMPUTERS USED FOR EDUCATIONAL PURPOSES IN EDUCATIONAL INSTITUTIONS IMPLEMENTING
SECONDARY VOCATIONAL EDUCATION PROGRAMMES**
(at the end of the year)

	Thousand units				Percentage			
	2017	2018	2019	2020	2017	2018	2019	2020
	Total							
Personal computers	327.9	350.1	383.8	429.3	100	100	100	100
Of which:								
within local area networks	253.2	267.6	299.1	332.1	77.2	76.4	77.9	77.4
with Internet access	266.4	285.8	324.2	367.1	81.2	81.6	84.5	85.5
acquired in the reporting year	19.7	28.2	42.4	57.6	6.0	8.0	11.0	13.4
	State and municipal institutions							
Personal computers	311.7	331.0	362.6	405.2	100	100	100	100
Of which:								
within local area networks	240.2	252.6	282.6	313.2	77.1	76.3	78.0	77.3
with Internet access	251.7	268.0	304.3	344.8	80.8	81.0	83.9	85.1
acquired in the reporting year	17.9	26.3	39.8	54.5	5.7	7.9	11.0	13.5
	Private institutions							
Personal computers	16.2	19.1	21.3	24.1	100	100	100	100
Of which:								
within local area networks	13.0	14.9	16.5	18.9	80.2	78.1	77.7	78.6
with Internet access	14.6	17.8	19.8	22.3	90.3	92.9	93.3	92.7
acquired in the reporting year	1.8	1.9	2.6	3.1	11.2	9.7	12.1	12.9

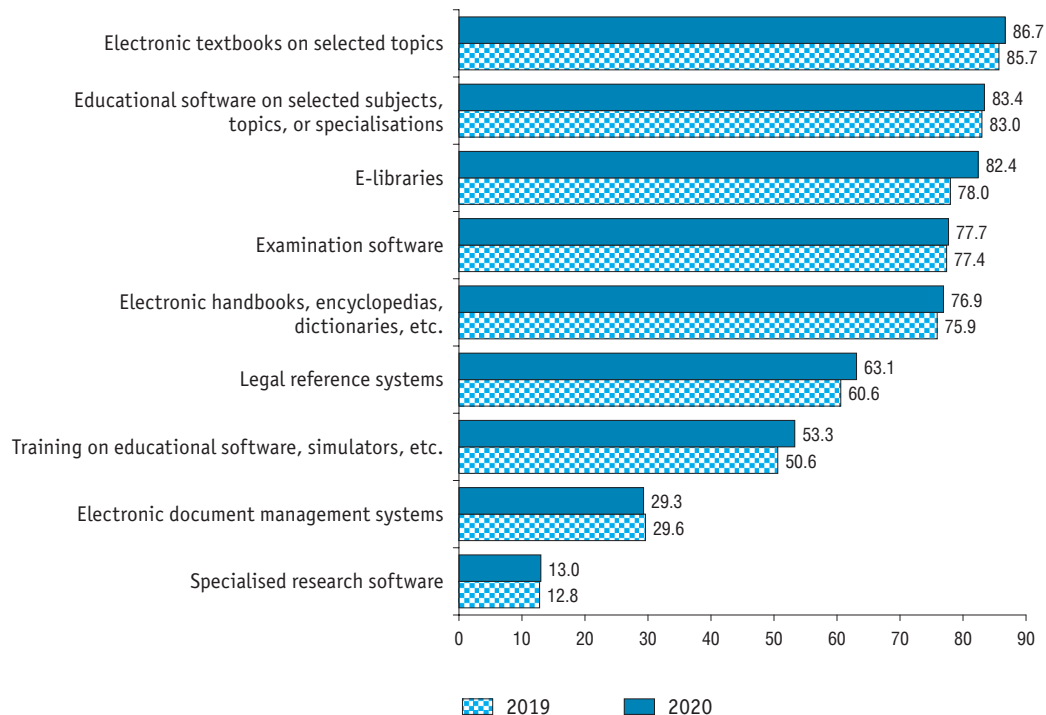
4.1.10. AVAILABILITY OF PERSONAL COMPUTERS USED FOR EDUCATIONAL PURPOSES TO STUDENTS IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES

(at the end of the year; units per 100 students)



4.1.11. USE OF SOFTWARE AVAILABLE TO STUDENTS IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES

(at the end of the year; as a percentage of all institutions)



4.1.12. ENROLMENT IN SECONDARY VOCATIONAL EDUCATION PROGRAMMES USING E-LEARNING*

(at the beginning of the academic year)

	Using e-learning			Of which using exclusively e-learning		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total:						
thousand persons	553.8	650.4	1075.8	2.6	4.8	10.7
as a percentage of the total	18.4	20.8	32.2	0.1	0.2	0.3
Of whom students within educational programmes:						
for skilled workers and employees:						
thousand persons	99.5	108.6	181.0	0.7	0.2	1.5
as a percentage of the total	18.4	20.0	31.4	0.1	0.0	0.3
for mid-level specialists:						
thousand persons	454.3	541.8	894.8	1.9	4.6	9.2
as a percentage of the total	18.4	21.0	32.4	0.1	0.2	0.3

* Here and below in table 4.1.13, enrolment includes foreign citizens and individuals without citizenship, including Russian nationals living abroad, studying in accordance with the quota established by the Government of the Russian Federation for the education of foreign citizens and individuals without citizenship in the Russian Federation.

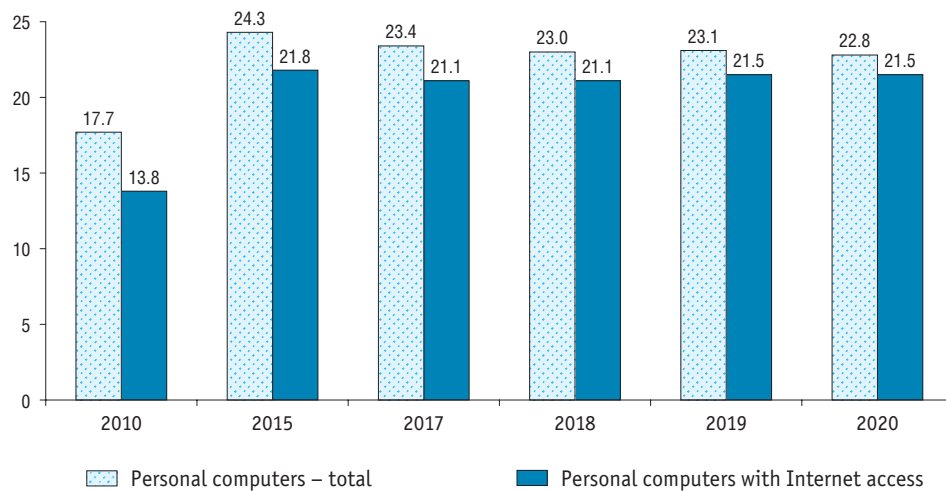
4.1.13. ENROLMENT IN SECONDARY VOCATIONAL EDUCATION PROGRAMMES USING DISTANCE LEARNING

(at the beginning of the academic year)

	Using distance learning			Of which using exclusively distance learning		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total:						
thousand persons	179.8	215.5	1428.8	2.7	3.2	39.3
as a percentage of the total	6.0	6.9	42.8	0.1	0.1	1.2
Of whom students within educational programmes:						
for skilled workers and employees:						
thousand persons	18.4	23.8	229.2	0.0	0.0	6.5
as a percentage of the total	3.4	4.4	39.8	0.0	0.0	1.1
for mid-level specialists:						
thousand persons	161.4	191.6	1199.6	2.7	3.1	32.8
as a percentage of the total	6.5	7.4	43.5	0.1	0.1	1.2

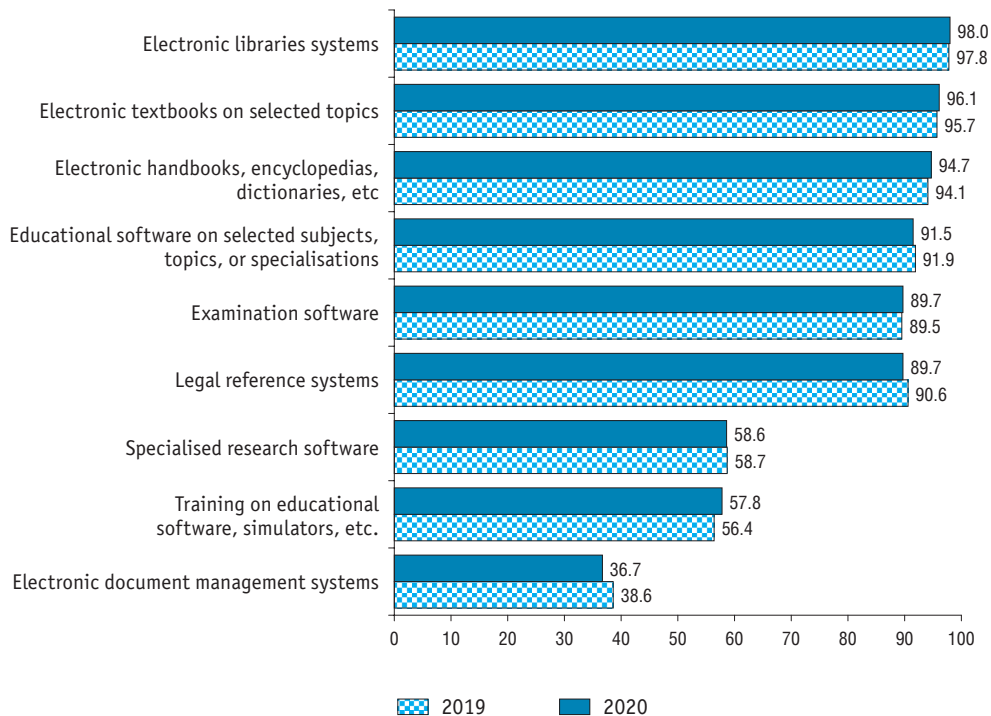
4.1.14. PERSONAL COMPUTERS USED FOR EDUCATIONAL PURPOSES IN HIGHER EDUCATION INSTITUTIONS (at the end of the year)

	Thousand units						Percentage					
	2010	2015	2017	2018	2019	2020	2010	2015	2017	2018	2019	2020
	Total											
Personal computers	643.3	712.4	684.3	678.0	683.7	698.3	100	100	100	100	100	100
Of which:												
within local area networks	548.0	631.1	613.7	602.5	628.3	654.9	85.2	88.6	89.7	88.9	91.9	93.8
with Internet access	504.2	639.3	617.0	620.8	634.1	657.1	78.4	89.7	90.2	91.6	92.7	94.1
acquired in the reporting year	46.3	43.4	30.5	33.6	39.5	44.7	7.2	6.1	4.5	5.0	5.8	6.4
	State and municipal institutions											
Personal computers	580.9	652.9	636.3	641.5	647.2	661.5	100	100	100	100	100	100
Of which:												
within local area networks	490.3	582.2	578.6	568.4	593.7	619.6	84.4	89.2	90.9	88.6	91.7	93.7
with Internet access	452.6	581.5	570.4	585.4	598.4	620.8	77.9	89.1	89.6	91.3	92.5	93.9
acquired in the reporting year	40.9	35.4	27.5	31.2	37.1	42.5	7.0	5.4	4.3	4.9	5.7	6.4
	Private institutions											
Personal computers	62.4	59.6	48.0	36.5	36.5	36.8	100	100	100	100	100	100
Of which:												
within local area networks	57.7	48.9	35.2	34.0	34.5	35.3	92.5	82.1	73.3	93.2	94.6	95.9
with Internet access	51.6	57.8	46.6	35.3	35.7	36.3	82.7	97.1	97.1	96.7	97.8	98.7
acquired in the reporting year	5.4	7.9	3.0	2.4	2.4	2.2	8.7	13.3	6.3	6.6	6.6	6.0

4.1.15. AVAILABILITY OF PERSONAL COMPUTERS USED FOR EDUCATIONAL PURPOSES TO STUDENTS IN HIGHER EDUCATION INSTITUTIONS*(at the end of the year; units per 100 students)*

4.1.16. USE OF SOFTWARE AVAILABLE TO STUDENTS IN HIGHER EDUCATION INSTITUTIONS

(at the end of the year; as a percentage of all institutions)



4.1.17. ENROLMENT IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES USING E-LEARNING* (at the beginning of the academic year)

	Using e-learning			Of which using exclusively e-learning		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total:						
thousand persons	676.9	839.9	1530.9	2.3	17.2	36.7
as a percentage of the total	16.1	20.5	37.5	0.1	0.4	0.9
Of whom students within educational programmes:						
bachelor's						
thousand persons	476.3	610.1	1028.3	2.3	14.0	29.3
as a percentage of the total	16.3	21.7	36.8	0.1	0.5	1.0
specialist's						
thousand persons	97.2	112.1	296.8	0.0	0.6	2.3
as a percentage of the total	13.3	14.9	38.2	0.0	0.1	0.3
master's						
thousand persons	103.3	117.6	205.8	0.0	2.6	5.1
as a percentage of the total	19.1	22.1	40.2	0.0	0.5	1.0

* Here and below in table 4.1.18, enrolment includes foreign citizens and individuals without citizenship, including Russian nationals living abroad, studying in accordance with the quota established by the Government of the Russian Federation for the education of foreign citizens and individuals without citizenship in the Russian Federation.

4.1.18. ENROLMENT IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES USING DISTANCE LEARNING (at the beginning of the academic year)

	Using distance learning			Of which using exclusively distance learning		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total:						
thousand persons	469.6	534.4	1936.9	30.6	40.0	74.2
as a percentage of the total	11.2	13.0	47.4	0.7	1.0	1.8
Of whom students within educational programmes:						
bachelor's						
thousand persons	361.2	396.3	1318.5	28.1	35.2	55.1
as a percentage of the total	12.4	14.1	47.2	1.0	1.3	2.0
specialist's						
thousand persons	48.1	59.7	366.1	0.4	0.7	11.1
as a percentage of the total	6.6	7.9	47.1	0.1	0.1	1.4
master's						
thousand persons	60.3	78.4	252.3	2.1	4.1	8.0
as a percentage of the total	11.1	14.8	49.2	0.4	0.8	1.6

4.1.19. PERSONAL COMPUTERS USED FOR EDUCATIONAL PURPOSES IN VOCATIONAL EDUCATION INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES
(at the end of the year)

	Thousand units			Percentage		
	2018	2019	2020	2018	2019	2020
Personal computers	15.4	17.2	21.1	100	100	100
Of which:						
within local area networks	7.9	8.2	10.1	51.2	47.8	48.1
with Internet access	9.0	9.7	12.8	58.7	56.1	60.7
acquired in the reporting year	1.1	0.8	1.0	7.0	4.4	4.7

4.1.20. PERSONAL COMPUTERS USED FOR EDUCATIONAL PURPOSES IN ADDITIONAL PROFESSIONAL (VOCATIONAL) INSTITUTIONS
(at the end of the year)

	Thousand units		Percentage	
	2019	2020	2019	2020
Personal computers	52.6	50.9	100	100
Of which:				
within local area networks	32.2	31.7	61.1	62.4
with Internet access	38.5	38.2	73.2	75.2
acquired in the reporting year	6.5	3.2	12.4	6.4

4.1.21. DISTRIBUTION OF EDUCATIONAL INSTITUTIONS BY TOP INTERNET ACCESS SPEED: 2020

(at the end of the year; as a percentage of all institutions using the Internet)

	256 kbit/s and under	256–511 kbit/s	512–999 kbit/s	1.0–1.9 Mbit/s	2.0– 30.0 Mbit/s	30.1–49.9 Mbit/s	50.0–99.9 Mbit/s	Over 100 Mbit/s
Educational institutions implementing primary general, basic general, and secondary general education programmes	3.3	3.2	3.3	5.7	24.5	10.1	29.2	20.7
Urban areas	0.4	0.8	1.1	2.6	23.5	8.4	23.8	39.5
Rural areas	5.5	5.1	5.1	8.0	25.3	11.5	33.3	6.2
State and municipal institutions	3.4	3.2	3.4	5.7	24.4	10.1	29.3	20.6
Private institutions	0.6	2.5	2.4	4.5	29.5	12.2	23.6	24.9
Educational institutions implementing secondary vocational education programmes	1.1	1.4	1.8	3.4	28.4	16.4	22.4	25.0
State and municipal institutions	1.2	1.2	1.6	3.1	27.9	16.2	22.8	26.0
Private institutions	0.4	3.1	3.9	5.7	31.8	18.1	19.4	17.6
Higher education institutions	0.2	0.4	0.2	0.8	15.5	14.6	24.6	43.8
State and municipal institutions	0.1	0.4	0.1	0.4	11.7	12.9	24.0	50.2
Private institutions	0.3	0.3	0.6	1.8	25.6	19.0	26.2	26.2
Additional professional (vocational) education institutions	1.2	2.6	4.0	4.6	35.0	15.7	16.3	20.7

4.1.22. LIBRARY SEATS EQUIPPED WITH A PERSONAL COMPUTER IN EDUCATIONAL INSTITUTIONS

(at the end of the year)

	Library seats equipped with a personal computer			Of which with Internet access		
	2018	2019	2020	2018	2019	2020
Thousand units						
Educational institutions implementing primary general, basic general, and secondary general education programmes	55.3	58.4	61.1	48.2	51.7	54.6
State and municipal institutions	53.9	56.9	59.5	46.9	50.3	53.2
Private institutions	1.4	1.5	1.5	1.4	1.4	1.4
Educational institutions implementing secondary vocational education programmes	21.9	23.1	23.9	20.7	21.9	22.8
State and municipal institutions	17.5	18.4	18.8	16.4	17.3	17.8
Private institutions	4.3	4.7	5.0	4.3	4.6	4.9
Higher education institutions	31.9	31.9	31.1	31.3	31.5	30.7
State and municipal institutions	25.3	25.0	24.5	24.8	24.7	24.1
Private institutions	6.5	6.9	6.6	6.5	6.8	6.6
Additional professional (vocational) education institutions	3.6	4.8	4.7	3.3	4.3	4.4

(continued)

	Library seats equipped with a personal computer			Of which with Internet access		
	2018	2019	2020	2018	2019	2020
As a percentage of the total number of library seats						
Educational institutions implementing primary general, basic general, and secondary general education programmes	11.6	12.1	12.6	10.2	10.7	11.3
State and municipal institutions	11.6	12.0	12.5	10.1	10.6	11.2
Private institutions	15.5	17.5	17.2	14.8	16.6	16.3
Educational institutions implementing secondary vocational education programmes	16.7	18.0	19.0	15.8	17.0	18.1
State and municipal institutions	14.9	16.0	16.8	13.9	15.0	15.9
Private institutions	33.5	35.0	36.6	33.0	34.3	35.9
Higher education institutions	17.7	16.7	18.9	17.4	16.5	18.6
State and municipal institutions	15.6	14.4	16.6	15.3	14.2	16.3
Private institutions	36.7	39.1	39.0	36.2	39.0	38.9
Additional professional (vocational) education institutions	40.4	39.9	44.2	37.2	35.9	41.4

4.1.23. EDUCATIONAL INSTITUTIONS WITH A WEBSITE: 2020

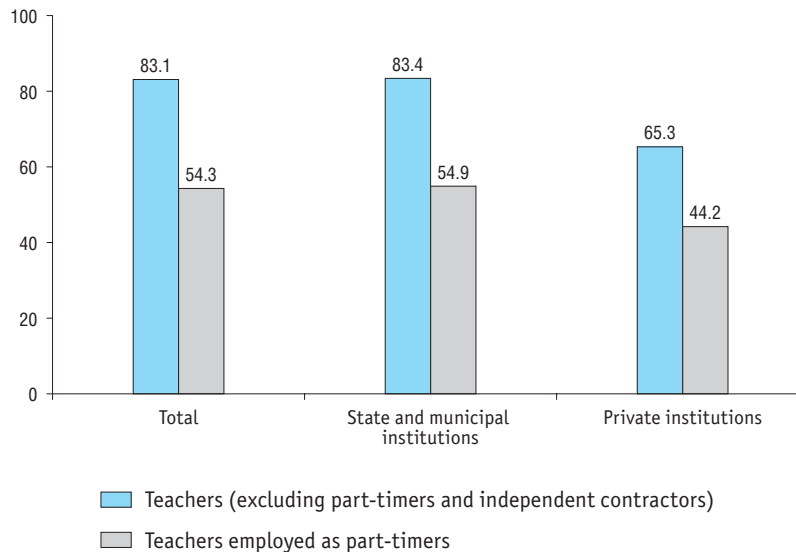
(at the end of the year; as a percentage of all institutions)

	Educational institutions – total	Including which provide a standardised profile of institution's activities*
Preschool education institutions	98.3	97.9
Urban areas	98.5	98.2
Rural areas	97.9	97.4
Educational institutions implementing primary general, basic general, and secondary general education programmes	99.4	99.4
State and municipal institutions	99.4	99.4
Private institutions	96.7	96.7
Additional education institutions implementing additional general education programmes for children**	97.4	95.9
State and municipal institutions	98.1	96.8
Private institutions	80.2	73.2
Educational institutions implementing secondary vocational education programmes	97.8	97.8
State and municipal institutions	97.7	97.7
Private institutions	98.5	98.3
Higher education institutions	99.2	98.7
State and municipal institutions	99.2	98.8
Private institutions	99.1	98.5

* In accordance with Article 29 of Federal Law no. 273-FL 'On Education in the Russian Federation' of December 29, 2012, the list of information on the activities of an educational institution

** The data refer to additional education institutions that provide reports to the Ministry of Education of the Russian Federation.

4.1.24. TEACHERS USING PERSONAL COMPUTERS IN EDUCATIONAL PROCESS AS A PERCENTAGE OF THE TOTAL NUMBER OF TEACHERS IN EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES: 2020/2021
(at the beginning of the academic year)



4.2. Education and training of personnel for the digital economy

4.2.1. ENROLMENT IN SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED GOODS AND SERVICES

(at the beginning of the academic year)

	Programmes for skilled workers and employees						Programmes for mid-level specialists					
	Thousand persons			As a percentage of the total*			Thousand persons			As a percentage of the total**		
	2018/ 2019	2019/ 2020	2020/ 2021	2018/ 2019	2019/ 2020	2020/ 2021	2018/ 2019	2019/ 2020	2020/ 2021	2018/ 2019	2019/ 2020	2020/ 2021
Total	28.3	28.1	28.1	5.2	5.2	4.9	261.2	286.5	322.2	10.6	11.1	11.7
Computer science and engineering	18.4	18.9	19.1	3.4	3.5	3.3	169.5	188.1	216.4	6.9	7.3	7.8
Information security	–	–	–	–	–	–	12.7	15.1	18.2	0.5	0.6	0.7
Electronics and communications engineering	5.8	5.6	5.6	1.1	1.0	1.0	35.3	36.5	37.6	1.4	1.4	1.4
Photonics, instrumentation engineering, optical and biomedical engineering	–	–	–	–	–	–	2.5	2.5	2.3	0.1	0.1	0.1
Mechanical engineering	4.1	3.7	3.4	0.8	0.7	0.6	20.0	21.6	23.4	0.8	0.8	0.8
Applied geology, mining and quarrying, oil and gas engineering, geodesy	–	–	–	–	–	–	3.4	3.6	3.8	0.1	0.1	0.1
Engineering systems management	–	–	–	–	–	–	15.7	16.9	18.1	0.6	0.7	0.7
Screen arts	–	–	–	–	–	–	2.1	2.2	2.3	0.1	0.1	0.1

* Of the total enrolment in programmes for skilled workers employees.

** Of the total enrolment in programmes for mid-level specialists.

4.2.2. ENTRANTS TO SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED GOODS AND SERVICE

	Programmes for skilled workers and employees						Programmes for mid-level specialists					
	Thousand persons			As a percentage of the total*			Thousand persons			As a percentage of the total**		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total	10.6	11.3	11.1	5.1	5.4	5.2	84.9	94.1	106.7	10.8	11.3	11.9
Computer science and engineering	7.0	8.0	7.8	3.4	3.8	3.6	55.9	62.7	73.9	7.1	7.5	8.2
Information security	–	–	–	–	–	–	4.5	5.4	6.4	0.6	0.6	0.7
Electronics and communications engineering	2.1	2.0	2.1	1.0	1.0	1.0	11.2	11.2	11.0	1.4	1.3	1.2
Photonics, instrumentation engineering, optical and biomedical engineering	–	–	–	–	–	–	0.6	0.6	0.6	0.1	0.1	0.1
Mechanical engineering	1.5	1.3	1.3	0.7	0.6	0.6	5.9	6.9	7.1	0.7	0.8	0.8
Applied geology, mining and quarrying, oil and gas engineering, geodesy	–	–	–	–	–	–	1.0	1.1	1.2	0.1	0.1	0.1
Engineering systems management	–	–	–	–	–	–	5.0	5.3	5.6	0.6	0.6	0.6
Screen arts	–	–	–	–	–	–	0.8	0.8	0.8	0.1	0.1	0.1

* Of the total number of entrants to programmes for skilled workers and employees.

** Of the total number of entrants to programmes for mid-level specialists.

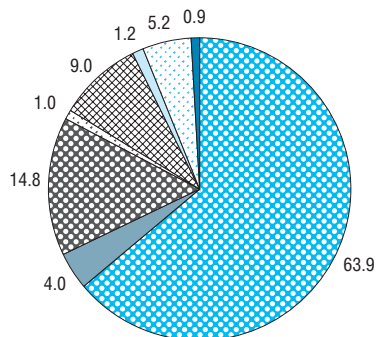
4.2.3. GRADUATES OF PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES AND MID-LEVEL SPECIALISTS BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED GOODS AND SERVICES









	Programmes for skilled workers and employees						Programmes for mid-level specialists					
	Thousand persons			As a percentage of the total*			Thousand persons			As a percentage of the total**		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total	10.0	9.7	9.6	5.9	5.9	6.7	46.4	47.8	51.8	8.7	8.9	9.4
Computer science and engineering	6.8	6.5	6.7	4.0	3.9	4.7	29.5	30.3	32.5	5.5	5.6	5.9
Information security	–	–	–	–	–	–	1.7	2.0	2.5	0.3	0.4	0.4
Electronics and communications engineering	1.7	1.7	1.7	1.0	1.0	1.2	6.8	7.0	7.4	1.3	1.3	1.3
Photonics, instrumentation engineering, optical and biomedical engineering	–	–	–	–	–	–	0.5	0.5	0.6	0.1	0.1	0.1
Mechanical engineering	1.6	1.5	1.3	0.9	0.9	0.9	3.9	3.9	4.3	0.7	0.7	0.8
Applied geology, mining and quarrying, oil and gas engineering, geodesy	–	–	–	–	–	–	0.7	0.6	0.7	0.1	0.1	0.1
Engineering systems management	–	–	–	–	–	–	2.9	2.9	3.2	0.5	0.5	0.6
Screen arts	–	–	–	–	–	–	0.4	0.5	0.6	0.1	0.1	0.1

* Of the total number of graduates enrolled in programmes for skilled workers and employees.

** Of the total number of graduates enrolled in programmes for mid-level specialists.

4.2.4. PERCENTAGE DISTRIBUTION OF GRADUATES OF SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED GOODS AND SERVICES: 2020



-  Computer science and engineering
-  Information security
-  Electronics and communications engineering
-  Photonics, instrumentation engineering, optical and biomedical engineering
-  Mechanical engineering
-  Applied geology, mining and quarrying, oil and gas engineering, geodesy
-  Engineering systems management
-  Screen arts

4.2.5. ENROLMENT IN BACHELOR'S, SPECIALIST'S, MASTER'S PROGRAMMES BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED PRODUCTS AND SERVICES
(at the beginning of the academic year)

	Thousand persons			As a percentage of the total*		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total	398.4	415.9	443.8	9.6	10.2	11.0
Engineering mathematics	31.0	32.4	33.8	0.7	0.8	0.8
Computer and information sciences	17.5	18.5	19.4	0.4	0.5	0.5
Computer science and engineering	164.3	176.5	195.3	3.9	4.3	4.8
Information security	29.9	32.4	36.7	0.7	0.8	0.9
Electronics and communications engineering	63.4	62.9	64.1	1.5	1.5	1.6
Photonics, instrumentation engineering, optical and biomedical engineering	19.7	19.1	18.6	0.5	0.5	0.5
Nuclear power engineering and technology	1.3	1.1	1.0	0.0	0.0	0.0
Mechanical engineering	33.7	34.9	35.5	0.8	0.9	0.9
Engineering physics and technology	0.2	0.2	0.2	0.0	0.0	0.0
Weapons and armaments systems	2.0	2.1	2.1	0.0	0.1	0.1
Nanotechnologies and nanomaterials	4.0	4.1	4.2	0.1	0.1	0.1
Economics and management	19.0	18.4	18.7	0.5	0.5	0.5
Mass media, library and information science	2.9	3.7	4.6	0.1	0.1	0.1
Cultural studies and sociocultural projects	3.9	3.8	3.9	0.1	0.1	0.1
Screen arts	5.9	5.7	5.6	0.1	0.1	0.1

* Of the total enrolment in bachelor's, specialist's, and master's programmes.

4.2.6. ENTRANTS TO BACHELOR'S, SPECIALIST'S, MASTER'S PROGRAMMES BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED PRODUCTS AND SERVICES

	Thousand persons			As a percentage of the total*		
	2018	2019	2020	2018	2019	2020
Total	129.5	135.6	142.3	11.3	12.0	13.0
Engineering mathematics	11.0	11.4	11.4	1.0	1.0	1.0
Computer and information sciences	5.9	6.4	6.4	0.5	0.6	0.6
Computer science and engineering	56.4	61.2	66.6	4.9	5.4	6.1
Information security	8.9	9.8	11.0	0.8	0.9	1.0
Electronics and communications engineering	19.1	19.0	19.1	1.7	1.7	1.8
Photonics, instrumentation engineering, optical and biomedical engineering	6.3	5.9	5.8	0.5	0.5	0.5
Nuclear power engineering and technology	0.2	0.2	0.2	0.0	0.0	0.0
Mechanical engineering	10.2	10.4	10.2	0.9	0.9	0.9
Engineering physics and technology	0.0	0.0	0.0	0.0	0.0	0.0
Weapons and armaments systems	0.5	0.5	0.5	0.0	0.0	0.0
Nanotechnologies and nanomaterials	1.4	1.3	1.4	0.1	0.1	0.1
Economics and management	6.0	6.1	5.9	0.5	0.5	0.5
Mass media, library and information science	1.3	1.4	1.7	0.1	0.1	0.2
Cultural studies and sociocultural projects	0.9	0.9	1.0	0.1	0.1	0.1
Screen arts	1.3	1.2	1.1	0.1	0.1	0.1

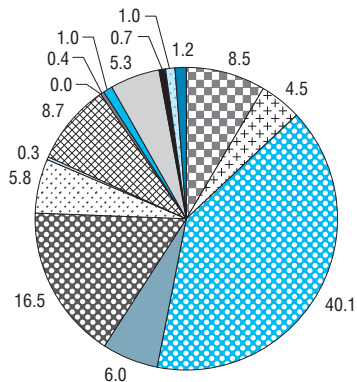
* Of the total number of entrants to bachelor's, specialist's, and master's programmes.
















4.2.7. GRADUATES OF BACHELORS, SPECIALISTS, AND MASTER'S PROGRAMMES BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED GOODS AND SERVICES

	Thousand persons			As a percentage of the total*		
	2018	2019	2020	2018	2019	2020
Total	76.0	77.3	75.6	8.1	8.5	8.9
Engineering mathematics	6.2	6.2	6.4	0.7	0.7	0.8
Computer and information sciences	3.2	3.2	3.4	0.3	0.4	0.4
Computer science and engineering	31.2	31.0	30.3	3.3	3.4	3.6
Information security	4.4	4.5	4.6	0.5	0.5	0.5
Electronics and communications engineering	12.3	13.0	12.5	1.3	1.4	1.5
Photonics, instrumentation engineering, optical and biomedical engineering	4.4	4.6	4.4	0.5	0.5	0.5
Nuclear power engineering and technology	0.3	0.3	0.2	0.0	0.0	0.0
Mechanical engineering	5.9	6.6	6.6	0.6	0.7	0.8
Engineering physics and technology	0.0	0.0	0.0	0.0	0.0	0.0
Weapons and armaments systems	0.2	0.3	0.3	0.0	0.0	0.0
Nanotechnologies and nanomaterials	0.7	0.7	0.8	0.1	0.1	0.1
Economics and management	5.2	4.8	4.0	0.6	0.5	0.5
Mass media, library and information science	0.2	0.4	0.5	0.0	0.0	0.1
Cultural studies and sociocultural projects	0.8	0.8	0.8	0.1	0.1	0.1
Screen arts	0.9	0.8	0.9	0.1	0.1	0.1

* Of the total number of graduates of bachelor's, specialist's, and master's programmes.

4.2.8. PERCENTAGE DISTRIBUTION OF GRADUATES OF BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED GOODS AND SERVICES: 2020



- | | |
|--|---|
|  Engineering mathematics |  Mechanical engineering |
|  Computer and information sciences |  Engineering physics and technology |
|  Computer science and engineering |  Weapons and armaments systems |
|  Information security |  Nanotechnologies and nanomaterials |
|  Electronics and communications engineering |  Economics and management |
|  Photonics, instrumentation engineering, optical and biomedical engineering |  Mass media, library and information science |
|  Nuclear power engineering and technology |  Cultural studies and sociocultural projects |
| |  Screen arts |

4.2.9. ENROLMENT, ENTRANTS, AND GRADUATES WITHIN POSTGRADUATE AND APPRENTICESHIP PROGRAMMES BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED GOODS AND SERVICES

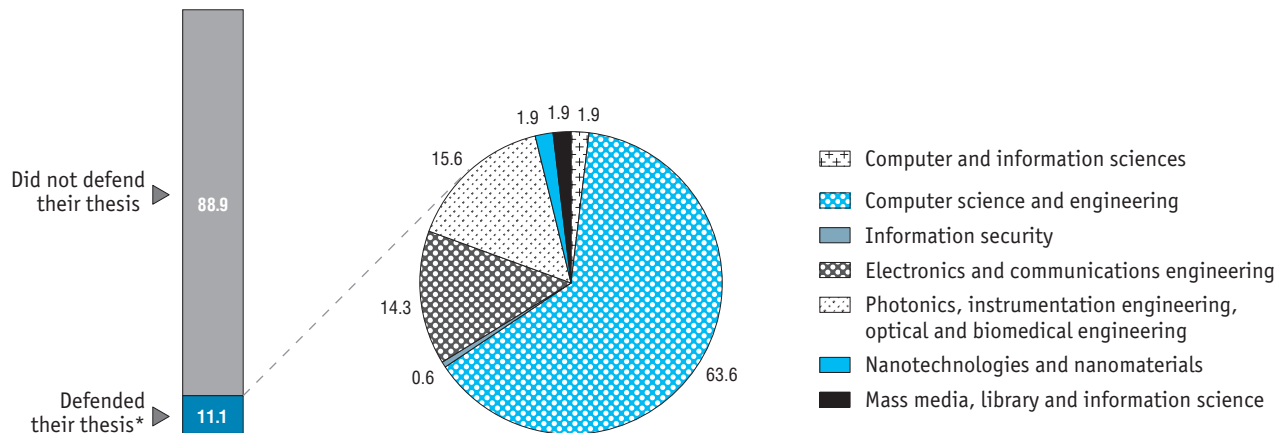
	Enrolment				Entrants				Graduates			
	Persons		As a percentage of the total*		Persons		As a percentage of the total**		Persons		As a percentage of the total***	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Total	10781	11288	12.7	12.7	3000	3422	11.8	12.1	1758	1391	11.1	9.7
Computer and information sciences	254	331	0.3	0.4	99	137	0.4	0.5	37	35	0.2	0.2
Computer science and engineering	6913	7216	8.1	8.1	1901	2135	7.5	7.6	1164	841	7.4	5.9
Information security	464	500	0.5	0.6	136	172	0.5	0.6	48	45	0.3	0.3
Electronics and communications engineering	1774	1817	2.1	2.0	446	524	1.8	1.9	277	274	1.8	1.9
Photonics, instrumentation engineering, optical and biomedical engineering	951	978	1.1	1.1	261	299	1.0	1.1	137	131	0.9	0.9
Weapons and armaments systems	52	59	0.1	0.1	16	20	0.1	0.1	6	1	0.0	0.0
Nanotechnologies and nanomaterials	34	29	0.0	0.0	11	10	0.0	0.0	7	8	0.0	0.1
Mass media, library and information science	328	343	0.4	0.4	124	116	0.5	0.4	77	52	0.5	0.4
Screen arts	11	15	0.0	0.0	6	9	0.0	0.0	5	4	0.0	0.0

* Of the total enrolment in postgraduate and apprenticeship programmes.

** Of the total number of entrants to postgraduate and apprenticeship programmes.

*** Of the total number of graduates of postgraduate and apprenticeship programmes.

4.2.10. PERCENTAGE DISTRIBUTION OF STUDENTS WHO DEFENDED THEIR POSTGRADUATE THESIS BY FIELD OF EDUCATION WITHIN AREAS OF DIGITAL TECHNOLOGIES AND PRODUCTION OF RELATED GOODS AND SERVICES: 2020



* Within the postgraduate programme period specified in the enrolment order.

4.3. Students' digital skills

4.3.1. PLACES OF STUDENTS' USE OF PERSONAL COMPUTERS AND THE INTERNET BY LEVEL OF EDUCATION AND RESIDENCE: 2020* (percentage)

	Secondary vocational education			Higher education**		
	Total	Urban areas	Rural areas	Total	Urban areas	Rural areas
Used a personal computer:						
at home	83	88	71	90	92	84
at work	5	5	5	18	18	19
at study place	70	72	64	66	66	65
at friends'	31	32	29	30	31	26
in public access spots on a free-of-charge basis (in public libraries, museums, Multifunctional Public Services Centres, etc.)	12	14	7	14	15	14
in commercial access spots on a paid basis (in Internet cafés, hotels, etc.)	10	11	5	14	15	10
on the road (in public transport)	4	5	2	6	6	4
at other places	19	21	13	25	26	19
Used the Internet:						
at home	94	97	88	96	97	93
at work	8	8	8	23	23	20
at study place	80	82	76	74	74	72
at friends'	53	54	48	54	56	45
in public access spots on a free-of-charge basis (in public libraries, museums, Multifunctional Public Services Centres, etc.)	31	33	26	35	35	33

(continued)

	Secondary vocational education			Higher education**		
	Total	Urban areas	Rural areas	Total	Urban areas	Rural areas
in commercial access spots on a paid basis (in Internet cafés, hotels, etc.)	18	20	12	26	28	19
on the road (in public transport)	9	11	5	13	14	7
at other places	54	59	43	65	68	50

* Within the last three months.

** Here and below, bachelor's, specialist's, and master's programmes.

4.3.2. LACK OF A COMPUTER AND BROADBAND INTERNET ACCESS IN HOUSEHOLDS WHERE STUDENTS LIVE BY LEVEL OF EDUCATION AND RESIDENCE

	Secondary vocational education						Higher education					
	Total		Urban areas		Rural areas		Total		Urban areas		Rural areas	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
No computer in a household	12	11	9	7	20	18	6	5	5	4	11	9
No Internet access in a household	5	3	3	1	9	6	2	1	2	1	5	2
Low-speed Internet (under 256 Kbit/s) in a household	5	3	3	1	10	6	2	1	1	1	8	3
No computer, no Internet access, or low-speed Internet in a household	17	13	11	8	29	23	9	6	6	5	18	11

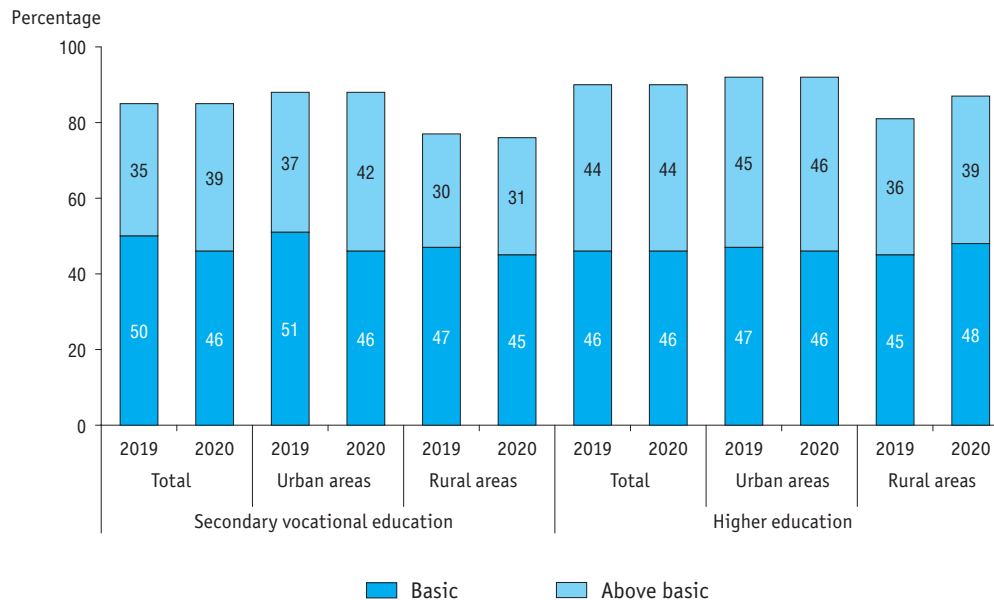
4.3.3. STUDENTS' SOFTWARE SKILLS BY LEVEL OF EDUCATION AND RESIDENCE*

(percentage)

	Secondary vocational education						Higher education					
	Total		Urban areas		Rural areas		Total		Urban areas		Rural areas	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Using word processing software	76	77	79	81	68	69	83	83	86	84	72	80
Using spreadsheet software (filtering, sorting, using formulas, creating charts, etc.)	51	52	55	57	41	42	62	64	65	66	50	57
Using software to edit photos, video, or audio files	47	45	51	49	38	36	54	52	56	53	43	47
Creating e-presentations using special software (Power Point, etc.)	34	39	37	42	30	31	43	44	44	45	35	39
Writing software by oneself using a programming language	2	1	2	1	1	1	4	2	5	2	2	1

* Within the last 12 months.

4.3.4. TRENDS IN STUDENTS' SOFTWARE SKILLS BY LEVEL OF EDUCATION AND RESIDENCE*



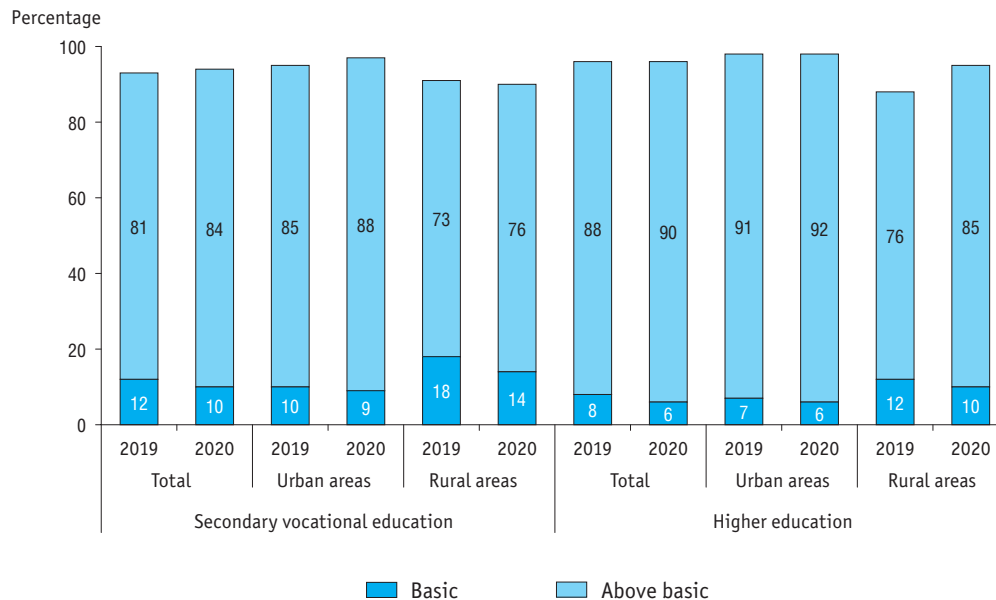
* Here and below in figure 4.3.6, 4.3.8, 4.3.11–4.3.14, the methodology for assessing the level of digital skills is provided in Technical Notes.

4.3.5. STUDENTS' COMMUNICATION SKILLS BY LEVEL OF EDUCATION AND RESIDENCE*
(percentage)

	Secondary vocational education						Higher education					
	Total		Urban areas		Rural areas		Total		Urban areas		Rural areas	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Sending/receiving e-mails	45	54	50	59	34	43	63	69	68	71	42	60
Making online telephone/video calls (e.g., via Skype, etc.)	76	82	79	85	68	75	82	88	85	89	71	83
Uploading personal files to any websites, social networks for public access	44	45	49	49	33	35	51	52	54	54	38	41
Participation in social networks (for example, Vkontakte, Odnoklassniki, My World, Facebook, Twitter, Instagram, etc.)	86	86	88	89	82	80	89	90	91	91	81	85

* Within the last three months.

4.3.6. TRENDS IN STUDENTS' COMMUNICATION SKILLS BY LEVEL OF EDUCATION AND RESIDENCE



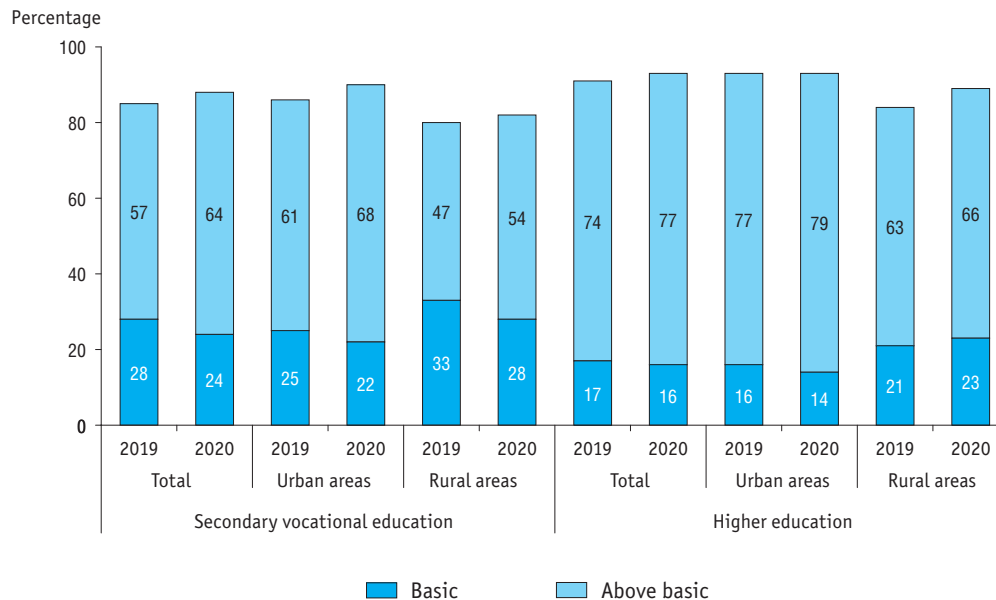
4.3.7. STUDENTS' INFORMATION SKILLS BY LEVEL OF EDUCATION AND RESIDENCE*

(percentage)

	Secondary vocational education						Higher education					
	Total		Urban areas		Rural areas		Total		Urban areas		Rural areas	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Copying or moving files or folders	67	72	69	75	62	64	76	79	79	80	67	75
Use of Internet space for storing documents, images, music, videos, and other files (for example, on Yandex.Disk, Google Drive, etc.)	20	26	24	30	11	17	32	35	34	37	21	27
Obtaining information from official public and municipal services' websites	36	41	39	44	30	33	53	54	55	56	44	44
Searching for information about goods and services	47	50	51	52	39	44	62	64	65	67	50	51
Searching for health-related information or healthcare services	12	13	14	13	8	13	21	22	23	23	16	17

* Within the last three months.

4.3.8. TRENDS IN STUDENTS' INFORMATION SKILLS BY LEVEL OF EDUCATION AND RESIDENCE



4.3.9. STUDENTS' INFORMATION SKILLS RELATED TO EDUCATION BY LEVEL OF EDUCATION AND RESIDENCE* (percentage)

	Secondary vocational education						Higher education					
	Total		Urban areas		Rural areas		Total		Urban areas		Rural areas	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Acquiring information and knowledge on general topics via Wikipedia, other online encyclopaedias, etc.	56	55	62	61	42	41	65	62	68	65	49	47
Reading/downloading online newspapers, magazines, or e-books	22	27	24	31	16	19	33	33	35	35	24	24
Searching for information about education, courses, trainings, etc.	22	20	26	22	13	16	33	28	36	29	21	22

* Within the last three months.

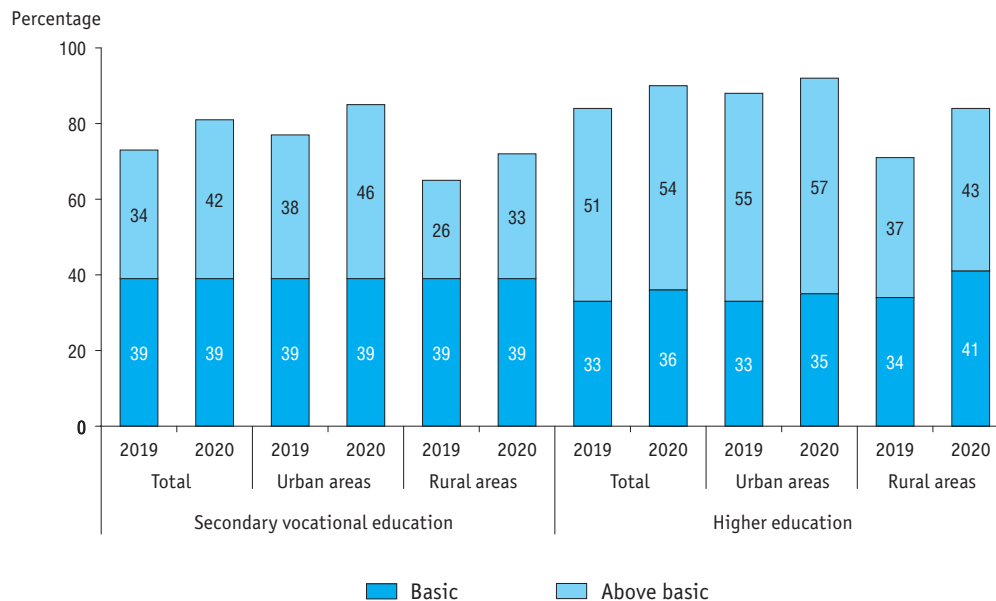
4.3.10. STUDENTS' PROBLEM-SOLVING SKILLS BY LEVEL OF EDUCATION AND RESIDENCE (percentage)

	Secondary vocational education						Higher education					
	Total		Urban areas		Rural areas		Total		Urban areas		Rural areas	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Digital equipment setup skills:												
installing or reinstalling an operating system*	4	5	5	5	2	3	9	6	9	7	7	4
searching, downloading, installing, and configuration of software*	11	12	12	13	8	8	17	17	18	18	12	14
transferring files between a computer and other devices (digital camera, player, mobile phone)*	53	48	57	52	44	39	62	58	65	60	47	49
Skills in using online services:												
buying goods or services online**	30	32	33	35	24	25	47	52	50	55	34	40
selling goods or services online**	6	4	6	5	5	3	10	11	11	12	5	6
performing financial transactions online (Internet banking)**	35	40	37	42	31	34	54	60	57	61	44	54
distance learning**	9	53	11	57	4	42	17	55	19	57	10	46

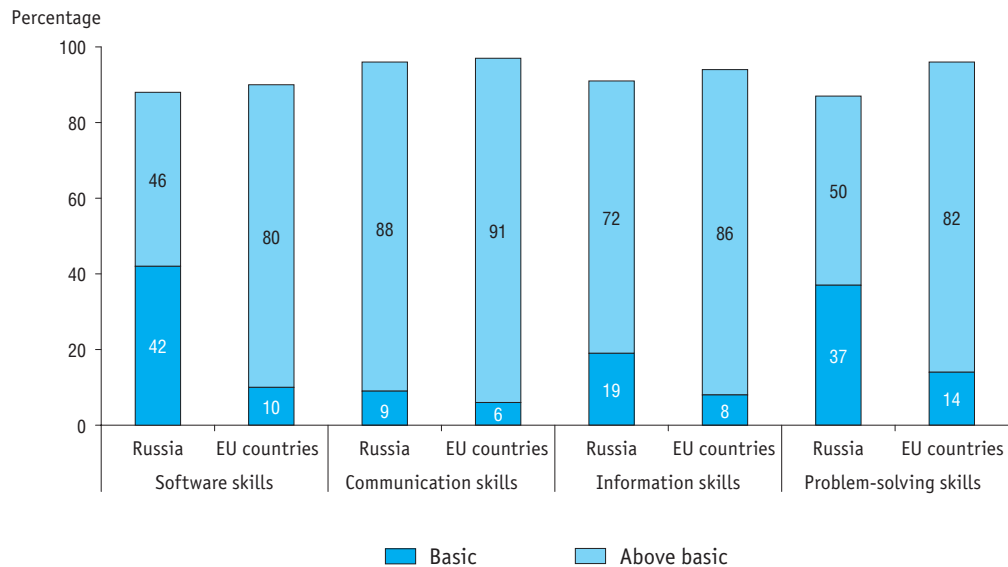
* Within the last 12 months.

** Within the last three months.

4.3.11. STUDENTS' PROBLEM-SOLVING SKILLS BY LEVEL OF EDUCATION AND RESIDENCE

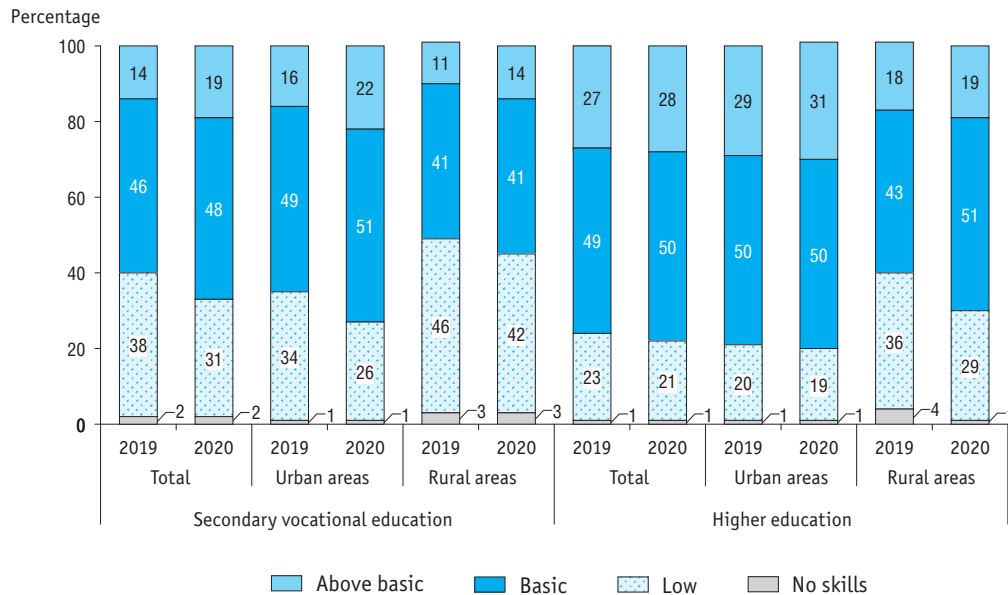


4.3.12. TRENDS IN STUDENTS' DIGITAL SKILLS IN RUSSIA AND EU COUNTRIES BY SKILL GROUP: 2020*



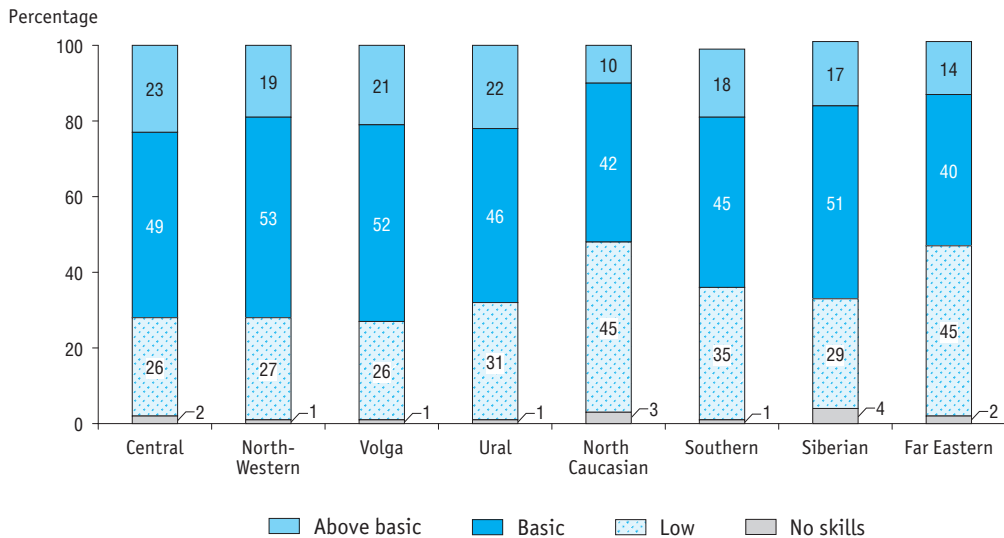
* Within the last three months; for EU countries, the data for 2019 refer to students aged 15 and older.

4.3.13. TRENDS IN STUDENTS' COMMUNICATION SKILLS BY LEVEL OF EDUCATION AND RESIDENCE

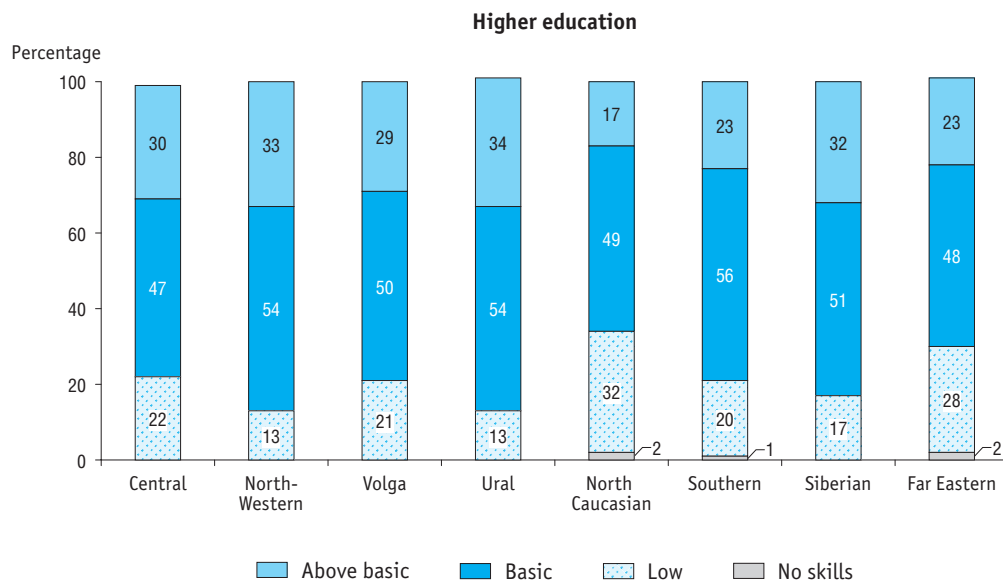


4.3.14. TRENDS IN STUDENTS' COMMUNICATION SKILLS BY LEVEL OF EDUCATION AND FEDERAL DISTRICT: 2020

Secondary vocational education



(continued)



4.4. Online education

4.4.1. DISTRIBUTION OF ONLINE COURSES IN HIGHER EDUCATION INSTITUTIONS BY EDUCATIONAL PLATFORM*

(as at October 2021; as a percentage of all online courses)

1,262

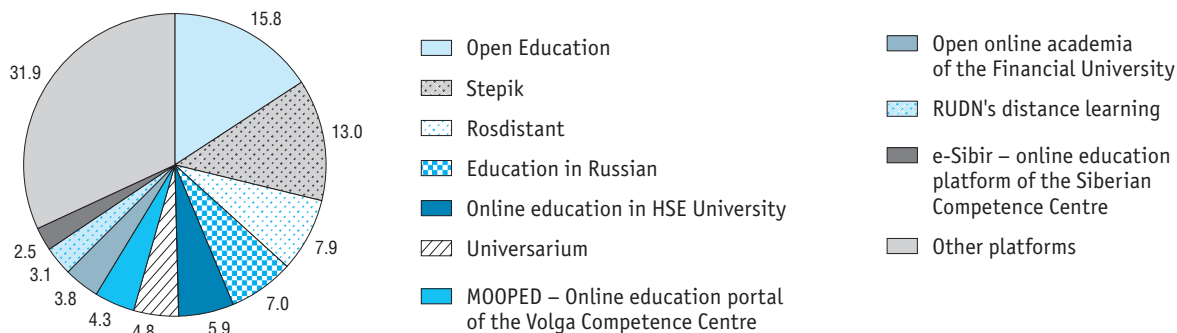
online courses

59

educational platforms

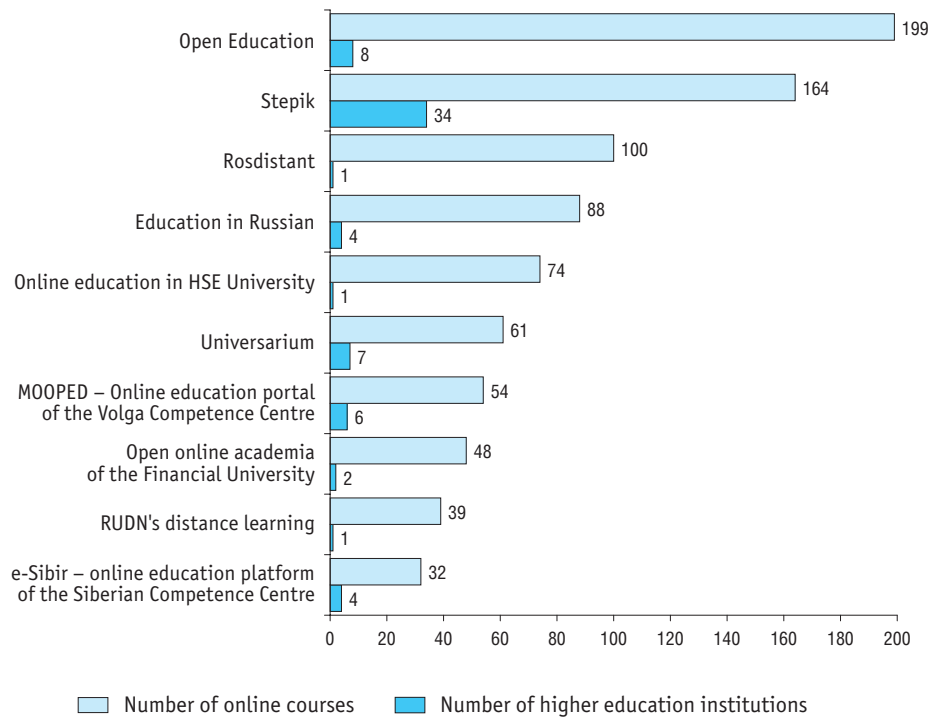
94

higher education institutions



* Here and below in figure 4.4.2, the data refer to educational platforms in the State Information System 'Modern Digital Educational Environment in the Russian Federation' (<https://online.edu.ru>).

4.4.2. TOP 10 EDUCATIONAL PLATFORMS BY NUMBER OF ONLINE COURSES IN HIGHER EDUCATION INSTITUTIONS (as at October 2021)



TECHNICAL NOTES

The information about the **use of information and communication technologies in educational institutions** includes separate subdivisions (and branches thereof), whose main activity is educational activity directed at implementation of corresponding educational programmes.

Availability of personal computers used for educational purposes to students is the number of personal computers used for educational purposes per 100 students of educational institutions. It is defined as the ratio of the number of personal computers used for educational purposes to the number of students normalised to intramural full-time mode of studies, multiplied by 100.

Top access speed of data transmission via Internet is bandwidth; the maximum rate of data transfer across a given path is measured in bits per second (bit/s).

Website is an Internet site which has a specific address and an owner, and comprises web pages. For statistical purposes, an enterprise is considered to have a website if it has at least one web page displaying regularly updated information (at least once every six months).

Education and training in the field of digital technologies and the production of related goods and services mean systematic and organised education and graduation of skilled personnel with special knowledge and expertise in the field of digital technologies and related goods and services. Pursuant to Order no. 1199 of the Ministry of Science and Higher Education of the Russian Federation of October 29, 2013, the following professions and qualifications of the secondary vocational education programmes are attributed to the field of digital technologies and production of related goods and services:

Key general groups of professions and qualifications	Professions/Qualifications
Programmes for skilled workers and employees	
Computer science and engineering	All qualifications
Electronics and communications engineering	Radio-electronic equipment installer Radio technician Communication equipment installer

(continued)

Key general groups of professions and qualifications	Professions/Qualifications
Mechanical engineering	Communication equipment operator Electronic equipment maintenance engineer Control and instrumentation maintenance engineer Control and instrumentation technician
Programmes for mid-level specialists	
Computer science and engineering	All qualifications
Information security	All qualifications
Electronics and communications engineering	All qualifications
Photonics, instrumentation engineering, optical and biomedical engineering	Aircraft instruments Radio-electronic devices Optical and optoelectronic instruments and systems Biomedical instruments and systems Medical equipment assembly, maintenance and repair
Mechanical engineering	Industrial process automation (by industry sector) Additive technologies Mechatronics and mobile robotics (by industry sector) Operation and maintenance of industrial robots
Applied geology, mining and quarrying, oil and gas engineering, geodesy	Information systems for urban planning
Engineering systems management	All qualifications
Screen arts	All qualifications

Pursuant to Order no. 1061 of the Ministry of Science and Higher Education of September 12, 2013, **the following professions and qualifications of bachelor's, specialist's and master's**

degree programmes are attributed to the field of digital technologies and production of related goods and services:

Key general groups of professions and qualifications	Professions/Qualifications
Engineering mathematics	Applied mathematics and computer science Applied mathematics
Computer and information sciences	All qualifications
Computer science and engineering	All qualifications*
Information security	All qualifications*
Electronics and communications engineering	All qualifications*
Photonics, instrumentation engineering, optical and biomedical engineering	All qualifications*
Nuclear power engineering and technology	Electronics and automation of physical installations*
Mechanical engineering	Engineering mechanics Industrial process automation Mechatronics and mobile robotics
Engineering physics and technology	All qualifications
Weapons and armaments systems	All qualifications Professions: aircraft gun armament; artillery and missile armament; design, production, and testing of ship armaments and information management systems
Nanotechnologies and nanomaterials	All qualifications

(continued)

Key general groups of professions and qualifications	Professions/Qualifications
Economics and management	Business informatics
Mass media, library and information science	Television Media communications
Cultural studies and sociocultural projects	All qualifications Qualifications: stage and event management
Screen arts	All qualifications

* Including data of a federal statistics monitoring of professions from the List of Higher Education Professions and Qualifications, approved by Order no. 1060 of Russian Ministry of Science and Higher Education of September 12, 2013.

Pursuant to Order no. 1061 of the Ministry of Science and Higher Education of September 12, 2013, **the following professions and qualifications of postgraduate and apprenticeship**

programmes are attributed to the field of digital technologies and production of related goods and services:

Key general groups of professions and qualifications	Professions/Qualifications
Postgraduate programmes	
Computer and information sciences	All qualifications
Computer science and engineering	All qualifications
Information security	All qualifications
Electronics and communications engineering	All qualifications

(continued)

Key general groups of professions and qualifications	Professions/Qualifications
Photonics, instrumentation engineering, optical and biomedical engineering	All qualifications
Weapons and armaments systems	All qualifications
Nanotechnologies and nanomaterials	All qualifications
Mass media, library and information science	All qualifications
Apprenticeship programmes	
Screen arts	All qualifications

Student's digital competencies are evaluated based on the results of a Rosstat annual survey according form no. 1-IT 'Population Sample Survey Questionnaire on the Use of Information Technologies and Information and Communications Networks' and a labour force survey according to form no. 1-Z 'Labour Force Sample Survey Questionnaire'. Surveys are conducted by a sample method in all Russian regions, with the subsequent distribution of the results to the total population.

The measurement of digital competencies is based on the Eurostat methodology (<https://ec.europa.eu/eurostat/cache/meta->

[data/en/tepsr_sp410_esmsip2.htm#indicator1552656414946](https://ec.europa.eu/eurostat/cache/meta-data/en/tepsr_sp410_esmsip2.htm#indicator1552656414946)). According to this methodology, the level of digital competencies development is calculated based on information about more than 20 types of actions performed on a computer or on the Internet, which are formed into four groups of skills: Software skills, Communication skills, Information skills, Problem-solving skills. The calculation is done in two stages.

At the first stage, the level of literacy in each skill group is assessed. There are two levels: basic and above basic.

Skill and Action Groups	Skill literacy levels
Software skills	
<p>List A</p> <p>Using word processing software</p> <p>Using spreadsheet software (filtering, sorting, using formulas, creating charts, etc.)</p> <p>Using software to edit photos, video, or audio files</p> <p>List B</p> <p>Creating e-presentations using special software (Power Point, etc.)</p> <p>Writing software by oneself using a programming language</p>	<p>Basic level: there is one or more skills from List A and none from List B</p> <p>Above basic level: there is at least one skill from List B</p>
Communication skills	
<p>Sending/receiving e-mails</p> <p>Making online telephone/video calls (e.g., via Skype, etc.)</p> <p>Uploading personal files (books, articles, photos, videos, software, etc.) to publicly accessible websites, social media</p> <p>Participating in social networks (for example, Vkontakte, Odnoklassniki, Facebook, Instagram, etc.)</p>	<p>Basic level: there is one skill from the group</p> <p>Above basic level: there is more than one skill from the group</p>
Information skills	
<p>Copying or moving files or folders</p> <p>Saving files on Internet storage space, like images, music, videos, and other files (for example, on Yandex.Disk, Google Drive, etc.)</p> <p>Obtaining information from official public and municipal services' websites</p> <p>Searching for information about goods and services</p> <p>Searching for health-related information or healthcare services</p>	<p>Basic level: there is one skill from the group</p> <p>Above basic level: there is more than one skill from the group</p>

(continued)

Skill and Action Groups	Skill literacy levels
Problem solving skills	
List A. Changing settings of any software	Basic level: there is one skill from List A or List B
Installing or reinstalling an operating system	Above basic level: there is at least one skill from List A and List B
Search, download, installing, and configuration of software	
Transferring files between computers and other devices (digital camera, player, mobile phone)	
List B. Using online learning resources	
Buying goods or services online	
Selling goods or services online	
Performing financial transactions online (Internet banking)	
Distance learning	

At the second stage, an integral assessment is formed for all four skill groups. It is defined as follows: 'above basic' – skills in all groups at the 'above basic' level; 'basic' – skills in all groups, provided that at least in one group the skill cannot be 'above basic'; 'low' – the lack of skills in one, two or three groups; 'no skills' – the lack of skills in all four groups (this category also includes individuals who have not used the Internet within the last three months).

In addition to the four groups of digital skills involved in the Eurostat-based calculation of the integral assessment, another

group is presented – information skills related to education and training. This group is being studied in order to present a more comprehensive view on digitalisation of education.

State Information System 'Modern Digital Learning Environment in the Russian Federation' (SIS MDLE) is an information resource that provides access on the 'one window' principle for all categories of citizens, including those studying under higher education and additional professional (vocational) education programmes, to online courses implemented by various educational institutions and platforms.

SIS MDLE oversees implementation of the following goals:

- creation and maintenance of a register with online courses conducted by various educational institutions;
- integration with educational platforms and information systems of educational institutions, as well as the development of centralised accounting of learning outcomes from online courses;
- taking into account higher education and additional professional (vocational) education programmes and results of their implementation (if finished).

Educational platforms are information platforms on the Internet, where educational organisations host online courses undertaken by students using distance learning and e-learning technologies.

Online course is a training course implemented using exclusively e-learning or distance learning technologies, posted on official websites of educational institutions, educational platforms, accessed via the Internet, and aimed at ensuring that students achieve certain learning outcomes.

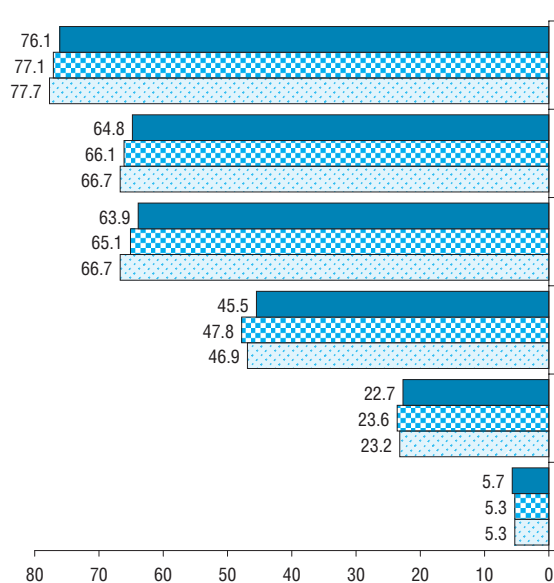


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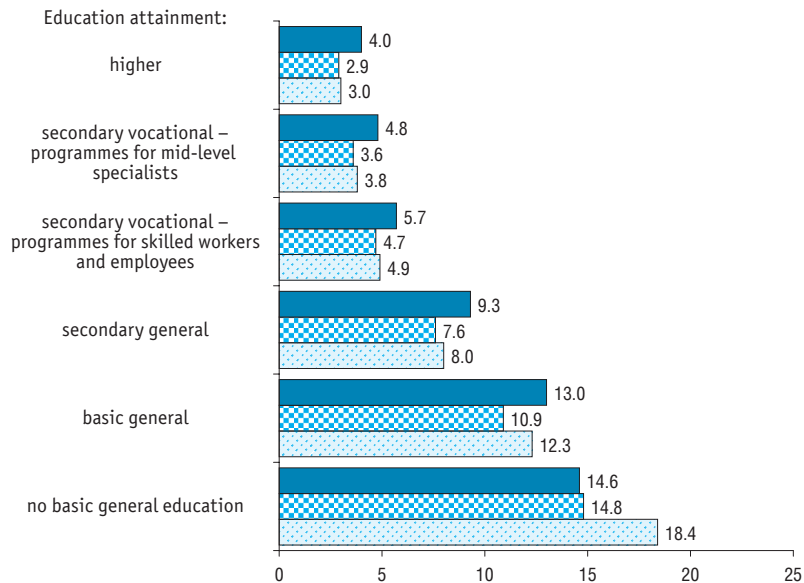
EDUCATION AND THE LABOUR MARKET

5.1. EMPLOYMENT AND UNEMPLOYMENT RATES BY EDUCATIONAL ATTAINMENT

Employment rate (employed population as a percentage of the total population with the corresponding educational attainment)



Unemployment rate (unemployed population as a percentage of the labour force with the corresponding educational attainment)



2018 2019 2020

5.2. EMPLOYED POPULATION BY EDUCATIONAL ATTAINMENT AND GENDER

	Total			Male			Female		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total employment, thousand persons	72532	71933	70601	37259	36912	36208	35272	35021	34393
Of whom have attained education:									
higher	24819	24632	25023	11148	10962	11082	13671	13669	13941
secondary vocational – programmes for mid-level specialists	18526	18423	18104	8121	8054	7986	10406	10368	10118
secondary vocational – programmes for skilled workers and employees	14112	13951	13562	9047	8986	8781	5065	4965	4781
secondary general	12459	12121	11223	7293	7122	6650	5166	4999	4573
basic general	2439	2635	2517	1537	1682	1602	903	953	915
no basic general education	176	172	173	114	106	108	62	66	65
Employment rate (employed population as a percentage of the total population with the corresponding educational attainment)	59.8	59.4	58.4	67.8	67.3	66.1	53.2	52.9	52.1
Of whom have attained education:									
higher	77.7	77.1	76.1	83.1	82.4	81.6	73.9	73.3	72.2
secondary vocational – programmes for mid-level specialists	66.7	66.1	64.8	77.8	77.3	76.2	60.0	59.4	57.9
secondary vocational – programmes for skilled workers and employees	66.7	65.1	63.9	73.8	72.6	71.1	56.9	54.9	53.8
secondary general	46.9	47.8	45.5	57.1	57.8	55.5	37.4	38.3	36.1
basic general	23.2	23.6	22.7	31.9	32.7	31.1	15.8	15.8	15.4
no basic general education	5.3	5.3	5.7	9.2	8.1	8.5	3.0	3.4	3.6

5.3. EMPLOYED POPULATION BY EDUCATIONAL ATTAINMENT AND AGE

(employed population as a percentage of the total population with the corresponding educational attainment in each age group)

	Total			Educational attainment																	
				higher			secondary vocational – programmes for mid-level specialists			secondary vocational – programmes for skilled workers and employees			secondary general			basic general			no basic general education		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total employment	59.8	59.4	58.4	77.7	77.1	76.1	66.7	66.1	64.8	66.7	65.1	63.9	46.9	47.8	45.5	23.2	23.6	22.7	5.3	5.3	5.7
Age, years:																					
under 20	5.6	5.1	4.8	19.9	33.4	45.7	48.8	60.7	47.7	59.3	51.9	53.9	9.2	8.7	8.4	2.8	3.0	3.0	1.0	1.3	1.2
20–24	47.8	49.4	48.0	71.2	72.6	69.5	75.9	76.8	73.9	78.1	77.3	75.7	24.2	26.1	25.2	43.9	43.7	42.3	16.2	24.0	25.6
25–29	84.3	83.6	81.5	88.2	86.7	85.1	87.6	87.1	84.8	87.1	86.5	85.3	74.9	75.3	71.7	63.7	64.1	58.1	23.3	22.0	30.9
30–34	86.8	86.1	84.2	90.5	89.7	87.8	89.8	89.0	86.7	88.1	87.7	86.2	80.1	79.4	76.7	68.1	67.3	65.2	31.3	26.6	28.2
35–39	88.9	88.5	86.8	93.0	92.3	90.8	92.3	91.5	89.9	89.9	89.2	88.3	82.3	82.4	79.4	69.5	71.2	67.2	33.1	32.3	31.4
40–44	90.2	89.6	88.6	95.0	94.3	93.3	93.2	93.0	91.4	90.5	90.3	89.3	83.6	83.0	81.5	71.8	70.6	68.9	37.4	32.6	31.5
45–49	89.8	89.3	89.0	95.5	94.8	93.9	91.9	91.5	91.7	89.5	88.5	88.7	82.8	82.7	81.5	69.8	70.5	71.1	31.2	33.5	34.1
50–54	85.3	85.2	85.0	92.4	92.3	91.8	87.2	87.0	87.3	84.6	84.2	84.2	78.1	78.6	77.2	63.9	65.3	63.8	34.3	29.8	35.5
55–59	64.2	64.8	66.5	76.4	77.2	77.1	63.7	64.8	67.1	63.8	63.9	66.5	56.4	56.5	57.7	45.9	46.6	47.1	23.3	22.8	27.0
60–69	23.3	24.0	24.5	33.7	35.2	35.6	23.4	24.1	24.5	22.3	22.2	23.4	18.5	19.2	18.8	13.3	13.9	14.4	8.6	8.2	9.0
70 and over	2.3	2.4	2.3	5.2	5.2	4.9	2.3	2.6	2.4	2.0	1.8	2.2	1.7	2.0	1.6	1.6	1.5	1.1	0.8	0.9	0.8

5.4. UNEMPLOYED POPULATION BY EDUCATIONAL ATTAINMENT AND GENDER

	Total			Male			Female		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total unemployment, thousand persons	3658	3465	4321	1916	1846	2237	1743	1619	2085
Of whom have attained education:									
higher	758	740	1037	334	339	445	424	401	592
secondary vocational – programmes for mid-level specialists	722	687	906	327	312	413	395	374	493
secondary vocational – programmes for skilled workers and employees	720	687	817	442	432	501	278	255	317
secondary general	1076	998	1157	577	540	634	499	458	523
basic general	342	322	375	209	203	226	133	120	149
no basic general education	40	30	30	27	19	18	13	10	12
Unemployment rate (unemployed population as a percentage of the labour force with the corresponding educational attainment)	4.8	4.6	5.8	4.9	4.8	5.8	4.7	4.4	5.7
Of whom have attained education:									
higher	3.0	2.9	4.0	2.9	3.0	3.9	3.0	2.9	4.1
secondary vocational – programmes for mid-level specialists	3.8	3.6	4.8	3.9	3.7	4.9	3.7	3.5	4.6
secondary vocational – programmes for skilled workers and employees	4.9	4.7	5.7	4.7	4.6	5.4	5.2	4.9	6.2
secondary general	8.0	7.6	9.3	7.3	7.1	8.7	8.8	8.4	10.3
basic general	12.3	10.9	13.0	12.0	10.7	12.4	12.9	11.2	14.0
no basic general education	18.4	14.8	14.6	19.2	15.5	14.3	17.0	13.5	15.2

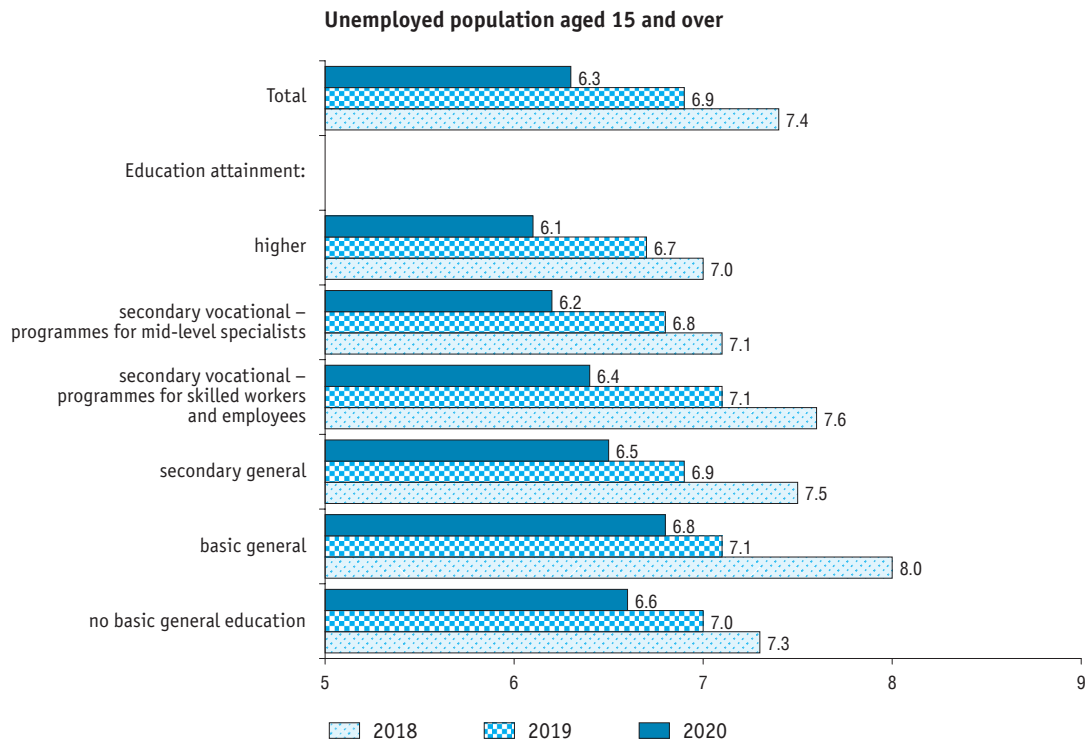
5.5. UNEMPLOYED POPULATION BY EDUCATIONAL ATTAINMENT AND AGE

(unemployed population as a percentage of labour force with the corresponding educational attainment in each age group)

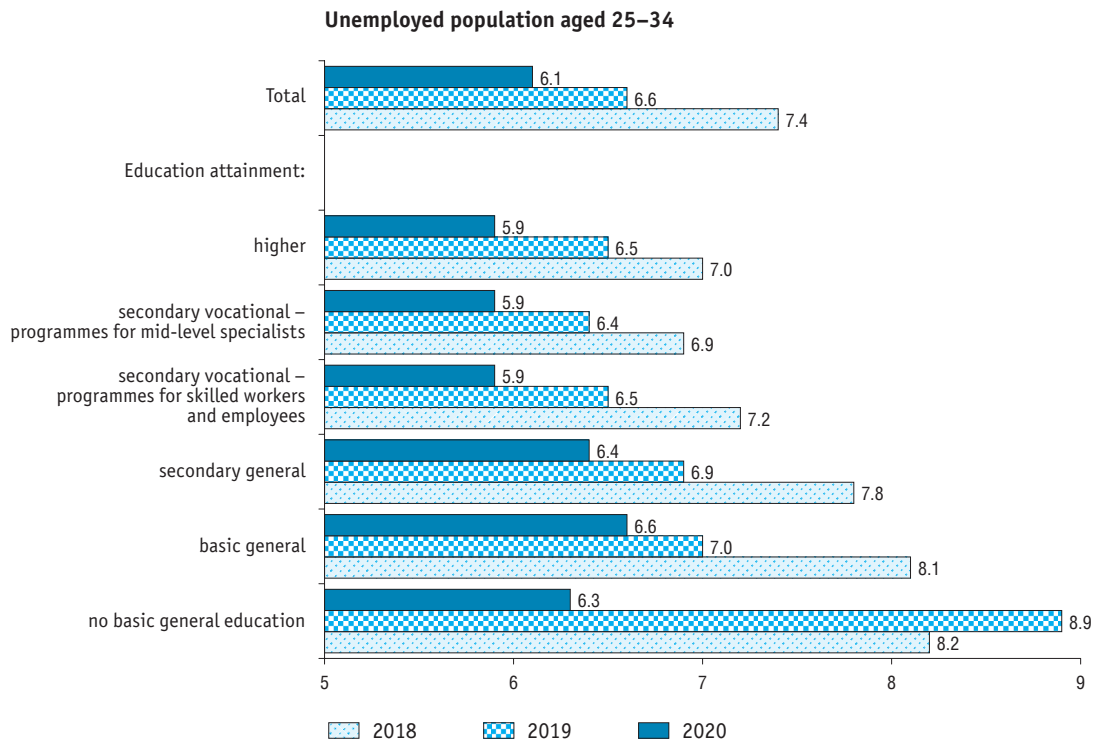
	Total			Educational attainment																	
				higher			secondary vocational – programmes for mid-level specialists			secondary vocational – programmes for skilled workers and employees			secondary general			basic general			no basic general education		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total unemployment	4.8	4.6	5.8	3.0	2.9	4.0	3.8	3.6	4.8	4.9	4.7	5.7	8.0	7.6	9.3	12.3	10.9	13.0	18.4	14.8	14.6
<i>Age, years:</i>																					
under 20	27.6	24.7	27.2	50.2	6.4	29.2	29.0	18.4	31.5	23.8	21.7	22.8	26.2	26.3	28.4	30.6	26.1	26.8	33.5	20.1	17.3
20–24	15.3	14.4	16.2	15.7	14.7	15.8	12.0	10.9	13.1	11.0	10.7	12.6	20.3	19.0	20.8	20.5	20.5	23.4	23.5	26.5	19.0
25–29	5.5	5.6	7.4	3.9	4.3	6.0	4.2	4.5	6.5	5.6	5.7	7.1	9.3	8.7	10.9	15.2	13.4	18.2	24.3	21.6	13.2
30–34	4.4	4.4	6.0	2.8	2.8	4.4	3.4	3.6	5.1	5.1	4.6	6.4	7.0	7.5	9.7	12.0	11.3	13.0	19.4	12.1	18.3
35–39	3.9	3.6	5.1	2.2	2.3	3.5	2.9	2.7	4.1	4.3	4.4	5.5	6.7	5.7	8.4	11.1	8.8	11.8	22.1	12.2	14.9
40–44	3.5	3.4	4.6	1.8	1.8	2.8	2.5	2.3	3.8	4.2	4.0	4.9	5.9	6.0	7.8	10.4	9.4	10.9	17.0	14.8	21.9
45–49	3.5	3.5	4.3	1.6	1.7	2.6	2.8	2.8	3.4	4.4	4.3	5.1	5.7	6.1	7.1	11.0	9.6	9.7	18.3	12.7	12.5
50–54	3.7	3.7	4.5	1.9	2.0	2.4	3.0	3.0	3.8	4.7	4.6	5.4	5.5	5.5	7.0	9.7	7.4	9.2	11.7	12.7	7.7
55–59	3.4	3.2	4.0	1.8	1.8	2.7	3.3	2.7	3.4	3.7	3.5	4.2	4.8	5.0	5.9	7.6	6.5	9.5	8.2	11.6	11.2
60–69	2.9	2.6	2.8	2.0	1.9	2.2	2.8	2.4	2.3	2.8	2.9	3.0	4.4	3.1	3.7	4.5	3.9	4.5	3.3	11.7	1.6
70 and over	1.6	2.4	2.8	1.1	1.3	1.8	1.6	2.2	4.4	1.4	4.1	1.1	2.4	2.1	3.4	1.8	4.7	4.7	1.8	1.9	2.9

5.6. AVERAGE DURATION OF UNEMPLOYMENT BY EDUCATIONAL ATTAINMENT

(average job seeking period; months)



(continued)



5.7. LONG-TERM UNEMPLOYMENT BY EDUCATIONAL ATTAINMENT AND GENDER

(unemployed individuals who have been seeking a job for over 12 months as a percentage of the total unemployed population with the corresponding educational attainment)

	Total			Male			Female		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Unemployed population aged 15 and over									
Total	28.6	23.8	18.8	27.9	23.1	19.2	29.3	24.5	18.4
Of whom have attained education:									
higher	25.0	21.6	16.6	22.2	21.2	17.8	27.2	22.0	15.8
secondary vocational – programmes for mid-level specialists	26.3	22.9	17.1	25.1	20.6	16.5	27.2	24.8	17.6
secondary vocational – programmes for skilled workers and employees	30.9	25.5	19.9	30.9	24.9	19.8	30.8	26.5	20.0
secondary general	28.8	23.7	20.1	28.4	23.5	19.9	29.2	24.0	20.3
basic general	35.4	26.6	22.9	33.4	24.8	23.6	38.5	29.7	21.8
no basic general education	31.2	26.7	19.0	30.6	30.8	22.5	32.4	19.1	13.7
Unemployed population aged 25–34									
Total	27.9	21.5	16.7	26.0	19.9	16.7	29.9	23.2	16.6
Of whom have attained education:									
higher	24.4	20.2	15.9	19.7	20.1	17.3	27.9	20.2	15.0
secondary vocational – programmes for mid-level specialists	25.4	19.9	15.2	23.9	16.6	14.4	26.6	22.4	15.9
secondary vocational – programmes for skilled workers and employees	28.3	21.9	15.9	26.5	19.8	14.2	30.8	24.9	18.5
secondary general	29.6	22.3	18.2	28.1	20.2	17.6	31.3	24.6	18.9
basic general	36.6	25.2	20.4	34.5	22.1	22.3	40.2	30.7	17.8
no basic general education	35.9	39.6	20.7	33.5	41.3	22.0	41.6	34.8	17.9

5.8. LABOUR FORCE PARTICIPATION OF GRADUATES WITH SECONDARY VOCATIONAL AND HIGHER EDUCATION WHO COMPLETED THEIR STUDIES IN 2017–2019: 2020

	Labour force, <i>thousand persons</i>	Of whom		Labour force participation, <i>percentage</i>	Employment rate, <i>percentage*</i>	Unemployment rate, <i>percentage**</i>
		employed	unemployed			
Total	3484	3112	372	86.9	77.6	10.7
Of whom have attained education:						
higher	2010	1831	179	88.5	80.6	8.9
secondary vocational – programmes for mid-level specialists	1006	876	130	84.8	73.9	12.9
secondary vocational – programmes for skilled workers and employees	468	405	63	85.1	73.6	13.5

* Employed population as a percentage of the total graduates with the corresponding educational attainment.

** Unemployed population as a percentage of the total number of graduates with the corresponding educational attainment who are included in the labour force.

5.9. CORRESPONDENCE BETWEEN THE MAIN JOB AND OBTAINED PROFESSION OF SECONDARY VOCATIONAL EDUCATION GRADUATES WHO STUDIED UNDER THE PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES AND COMPLETED THEIR STUDIES IN 2017–2019 BY FIELD OF EDUCATION: 2020

	Graduates, <i>thousand persons</i>	Of whom have a job		As a percentage of the total	
		related to the obtained profession	not related to the obtained profession	related to the obtained profession	not related to the obtained profession
Total	404.6	226.1	178.6	56	50
Of whom:					
Civil engineering	40.8	18.1	22.8	44	56
Computer science and engineering	5.1	2.9	2.2	57	43
Electronics and communications engineering	5.0	2.0	3.0	39	61
Electrical and thermal power engineering	12.2	7.1	5.2	58	42
Mechanical engineering	65.8	33.9	31.9	51	49
Chemical engineering	5.7	3.9	1.8	68	32
Industrial ecology and biotechnology	57.6	33.7	23.9	58	42
Technosphere safety and environmental engineering	2.7	1.9	0.8	70	30
Applied geology, mining and quarrying, oil and gas engineering, geodesy	7.0	4.2	2.9	59	41
Surface transport engineering and technology	91.4	49.0	42.4	54	46
Shipbuilding and water-borne transportation engineering and technology	5.2	2.8	2.4	54	46
Light industry technological processes	8.9	5.5	3.4	62	38
Nursing	4.6	3.8	0.8	82	18
Agriculture, forestry and fisheries	24.8	8.6	16.2	35	65
Economics and management	20.2	16.2	4.0	80	20
Services sector and tourism	31.6	23.8	7.8	75	25
History and archaeology	5.6	3.7	1.9	65	35
Fine and applied arts	5.2	1.9	3.3	37	63

5.10. CORRESPONDENCE BETWEEN THE MAIN JOB AND OBTAINED PROFESSION OF SECONDARY VOCATIONAL EDUCATION GRADUATES WHO STUDIED UNDER THE PROGRAMMES FOR MID-LEVEL SPECIALISTS AND COMPLETED THEIR STUDIES IN 2017–2019 BY FIELD OF EDUCATION: 2020

	Graduates, <i>thousand persons</i>	Of whom have a job		As a percentage of the total	
		related to the obtained profession	not related to the obtained profession	related to the obtained profession	not related to the obtained profession
Total	876.1	511.2	364.9	58	42
Of whom:					
Architecture	2.3	0.2	2.0	11	89
Civil engineering	47.8	18.1	29.7	38	62
Computer science and engineering	49.8	25.0	24.7	50	50
Information security	2.6	1.6	1.0	62	38
Electronics and communications engineering	17.5	9.7	7.8	56	44
Photonics, instrumentation engineering, optical and biomedical engineering	4.6	2.8	1.8	61	39
Electrical and thermal power engineering	37.9	19.5	18.4	51	49
Mechanical engineering	28.1	10.6	17.4	38	62
Chemical engineering	6.1	3.1	3.0	51	49
Industrial ecology and biotechnology	27.2	13.7	13.5	50	50
Technosphere safety and environmental engineering	9.7	4.5	5.2	46	54
Applied geology, mining and quarrying, oil and gas engineering, geodesy	25.6	11.7	13.9	46	54
Materials engineering	15.4	8.5	6.9	55	45
Surface transport engineering and technology	76.4	39.6	36.8	52	48
Shipbuilding and water-borne transportation engineering and technology	7.6	4.4	3.2	58	42
Engineering systems management	3.0	1.7	1.2	58	42

(continued)

	Graduates, <i>thousand persons</i>	Of whom have a job		As a percentage of the total	
		related to the obtained profession	not related to the obtained profession	related to the obtained profession	not related to the obtained profession
Light industry technological processes	4.5	2.1	2.4	47	53
Clinical medicine	33.2	28.8	4.4	87	13
Health sciences and preventive medicine	2.6	2.2	0.4	84	16
Pharmacology and pharmacy	20.0	18.8	1.3	94	6
Nursing	60.3	54.3	6.0	90	10
Agriculture, forestry and fisheries	37.8	13.8	24.0	36	64
Veterinary science and animal science	7.3	5.6	1.7	76	24
Economics and management	130.3	73.6	56.7	56	44
Sociology and social work	6.2	3.7	2.5	59	41
Law	45.2	19.7	25.5	44	56
Mass media, library and information science	3.4	2.0	1.4	59	41
Services sector and tourism	29.0	18.0	11.1	62	38
Education and pedagogical sciences	83.2	62.9	20.3	76	24
History and archaeology	4.0	2.0	2.0	50	50
Physical training and sport	12.1	7.7	4.4	64	36
Cultural studies and sociocultural projects	6.0	4.7	1.3	79	21
Performing arts and creative writing	3.0	2.8	0.2	93	7
Musical arts	6.0	3.9	2.1	64	36
Fine and applied arts	12.7	5.2	7.4	41	59

5.11. CORRESPONDENCE BETWEEN THE MAIN JOB AND OBTAINED PROFESSION OF HIGHER EDUCATION GRADUATES WHO COMPLETED THEIR STUDIES IN 2017–2019 BY FIELD OF EDUCATION: 2020

	Graduates, <i>thousand persons</i>	Of whom have a job		As a percentage of the total	
		related to the obtained profession	not related to the obtained profession	related to the obtained profession	not related to the obtained profession
Total	1831.1	1283.8	547.3	70	30
Of whom:					
Engineering mathematics	25.4	15.2	10.2	60	40
Computer and information sciences	10.1	8.8	1.4	87	13
Physics and astronomy	4.0	2.4	1.6	60	40
Chemistry	6.2	4.6	1.6	74	26
Earth sciences	23.9	11.7	12.2	49	51
Biological sciences	7.4	4.6	2.8	62	38
Architecture	15.1	7.2	7.9	48	52
Civil engineering	47.7	29.9	17.8	63	37
Computer science and engineering	111.2	88.9	22.3	80	20
Information security	15.3	11.4	3.9	75	25
Electronics and communications engineering	17.8	14.0	3.8	79	21
Photonics, instrumentation engineering, optical and biomedical engineering	5.8	4.1	1.7	71	29
Electrical and thermal power engineering	52.0	37.3	14.7	72	28
Nuclear power engineering and technology	2.7	1.8	0.8	68	32
Mechanical engineering	56.6	33.1	23.5	58	42
Engineering physics and technology	2.8	1.7	1.0	62	38
Chemical engineering	9.5	5.9	3.6	62	38
Industrial ecology and biotechnology	12.4	6.9	5.5	56	44
Technosphere safety and environmental engineering	11.5	6.9	4.6	60	40

(continued)

	Graduates, <i>thousand persons</i>	Of whom have a job		As a percentage of the total	
		related to the obtained profession	not related to the obtained profession	related to the obtained profession	not related to the obtained profession
Applied geology, mining and quarrying, oil and gas engineering, geodesy	44.8	32.0	12.8	72	28
Materials engineering	7.7	6.1	1.6	79	21
Surface transport engineering and technology	34.9	24.5	10.4	70	30
Aircraft and aerospace engineering	6.1	4.6	1.5	76	24
Flight navigation and aircraft and aerospace equipment operation	5.0	3.7	1.3	74	26
Shipbuilding and water-borne transportation engineering and technology	6.9	4.6	2.3	67	33
Engineering systems management	14.0	8.6	5.4	61	39
Light industry technological processes	4.8	2.9	1.8	61	39
Basic medicine	1.8	1.5	0.3	83	17
Clinical medicine	79.0	77.1	1.8	98	2
Health sciences and preventive medicine	5.9	5.6	0.3	94	6
Pharmacology and pharmacy	15.7	15.3	0.4	97	3
Nursing	4.1	3.9	0.2	96	4
Veterinary medicine	9.0	7.1	1.8	80	20
Agriculture, forestry and fisheries	31.3	14.4	17.0	46	54
Veterinary science and animal science	6.0	4.1	1.9	69	31
Psychology	29.8	18.2	11.5	61	39
Economics and management	495.2	320.2	175.0	65	35
Sociology and social work	17.9	9.4	8.4	53	47
Law	211.6	152.4	59.2	72	28
Political sciences and area studies	5.8	2.7	3.1	46	54

(continued)

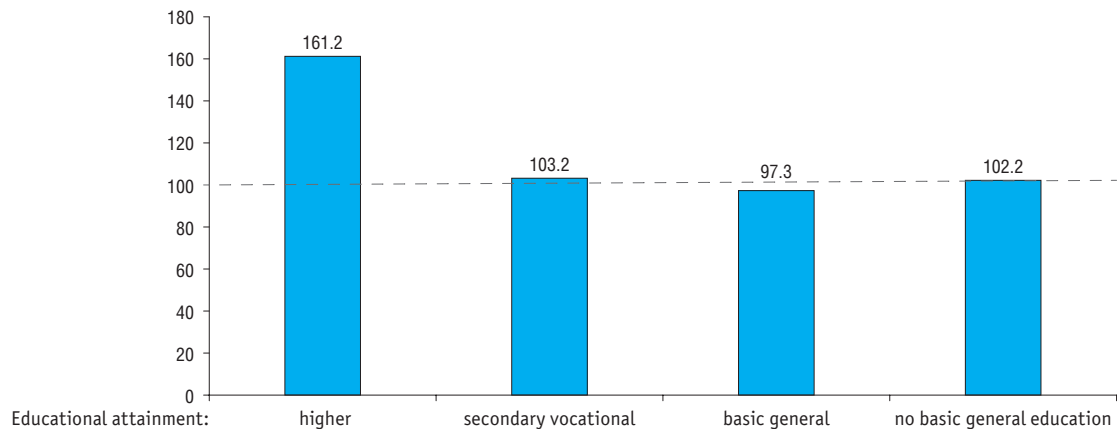
	Graduates, <i>thousand persons</i>	Of whom have a job		As a percentage of the total	
		related to the obtained profession	not related to the obtained profession	related to the obtained profession	not related to the obtained profession
Mass media, library and information science	24.0	14.8	9.3	61	39
Services sector and tourism	35.4	20.3	15.1	57	43
Education and pedagogical sciences	172.1	139.7	32.4	81	19
Linguistics and literary studies	27.8	18.7	9.1	67	33
History and archaeology	9.3	6.0	3.3	64	36
Physical training and sport	28.9	24.0	4.9	83	17
Cultural studies and sociocultural projects	8.0	6.2	1.8	77	23
Performing arts and creative writing	6.0	4.9	1.1	82	18
Musical arts	6.9	6.6	0.4	95	5
Fine and applied arts	18.7	13.0	5.7	70	30
Defence administration	9.6	8.2	1.4	85	15

5.12. AVERAGE SALARY OF EMPLOYEES BY GROUP OF OCCUPATIONS AND EDUCATIONAL ATTAINMENT: 2019*
(roubles)

	Total	Educational attainment				
		higher	secondary vocational	secondary general	basic general	no basic general education
Employees – total	44729	57708	36926	35794	34812	36593
Managers	84410	90645	52223	49492	54950	82683
Professionals	48848	51446	37347	40418	42833	50275
Technicians and associate professionals	44862	57978	40636	38822	38544	36034
Employees engaged in the preparation and execution of documentation, accounting, and maintenance	28821	32823	27235	24740	24996	25648
Employees of the service and trade sector, protection of citizens and property	27878	36491	25808	27165	27786	31198
Skilled workers of agriculture and forestry, aquaculture, and fishing	29374	27066	28601	29567	30238	31020
Skilled workers in manufacturing, construction, transportation and related occupations	42944	47429	42896	41871	41615	43487
Operators of production plants and machines, assemblers and drivers	43887	49569	42575	43991	43304	45375
Unskilled workers	23567	25344	22891	23921	23279	24561

* Here and below in figure 5.13, according to the results of sample payroll surveys of organisations for October (excluding lump-sum payments).

5.13. AVERAGE SALARY OF EMPLOYEES BY EDUCATIONAL ATTAINMENT: 2019
(as a percentage of the average salary of employees with secondary general education)



5.14. GRADUATES REGISTERED WITH PUBLIC EMPLOYMENT AGENCIES*

(at the end of the year; thousand persons)

	2000	2005	2010	2016	2017	2018	2019	2020
Total unemployment – total	1037.0	1830.1	1589.4	894.6	775.5	693.2	691.4	2773.1
Male	322.2	630.5	698.4	425.6	364.5	328.0	316.6	1184.8
Female	714.8	1199.5	891.0	469.0	411.0	365.2	374.8	1588.4
Of whom graduates of:								
general education institutions	21.6	57.8	...	2.4	2.0	1.9	2.5	11.6
male	6.5	22.8	...	1.1	1.0	0.9	1.2	5.0
female	15.1	34.9	...	1.3	1.0	1.0	1.3	6.5
vocational education institutions	44.7	87.9	34.4	11.1	10.2	10.6	9.1	11.6
male	35.8	28.5	14.3	4.6	4.4	4.5	3.9	4.9
female	8.9	59.4	20.1	6.5	5.8	6.1	5.2	6.7
higher education institutions (bachelor's, specialist's, and master's programmes)	9.5	24.7	15.5	6.3	4.2	3.2	2.4	5.1
male	1.9	6.6	5.0	2.1	1.4	1.1	0.9	1.7
female	7.6	18.1	10.5	4.2	2.8	2.1	1.5	3.4

* Source: Russian Federal Service for Labour and Employment.

TECHNICAL NOTES

The data for employment and unemployment rates are provided from the results of national labour force surveys conducted by statistical authorities of the Russian Federation. Since January 2017, the survey includes the data on individuals aged 15 and over. The data on all indicators are given as the annual average.

Labour force is comprised of individuals aged 15 and over who were considered employed or unemployed over the surveyed period.

Employed population (employment) are individuals aged 15 and over who were involved in any activities (taking at least one hour per week) over the survey period, related to manufacturing of goods or rendering of services for a payment or profit. The number of the employed population also includes those who were temporarily absent at the workplace but returned after the period of absence.

Employment rate is the number of employed individuals as a percentage of the total population.

Unemployed population (unemployment), according to International Labour Organisation (ILO) standards, are individuals aged 15 and over who simultaneously met the following criteria over the survey period:

- had no job (gainful activity);
- have been searching for a job during the last four weeks, i.e. applied to public or commercial employment agencies, made use of or placed advertisements in the media or on the Internet, approached the firm's management (employer)

directly, used their own network or connections to get a job or made some steps to start their own business;

- were ready to start working over the week when the survey was conducted.

Students, pensioners, and the disabled people are included into the category of the unemployed population, if they did not have a job, were looking for a job and were ready to start working.

Unemployment rate is the number of the unemployed individuals as a percentage of the total labour force.

Duration of unemployment (job seeking period) is a period of time during which an individual, unemployed at the time, is looking for a job using every means available.

Average duration of unemployment (average job seeking period) is calculated as the weighted average for the given category of the unemployed population.

Labour force participation is the ratio of the number of labour force (employed and unemployed) of a certain age group to the total population of the corresponding age group, calculated as a percentage.

Employment rate of graduates is the ratio of the number of employed graduates of a certain year of graduation to the total number of graduates of the same year of graduation, calculated as a percentage.

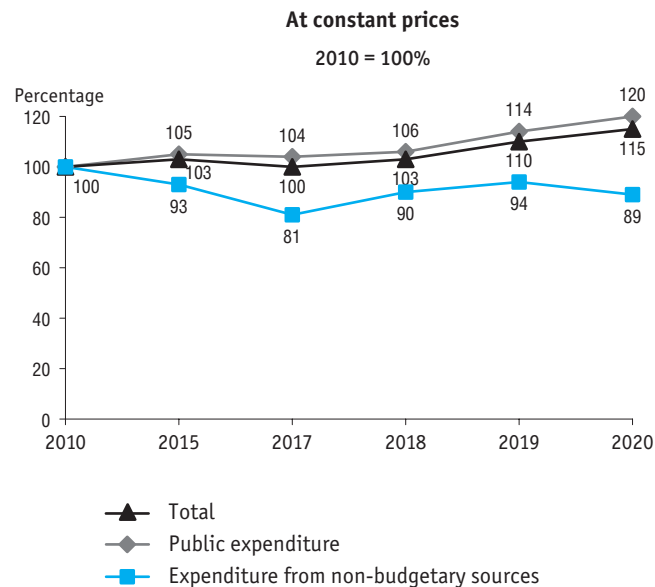
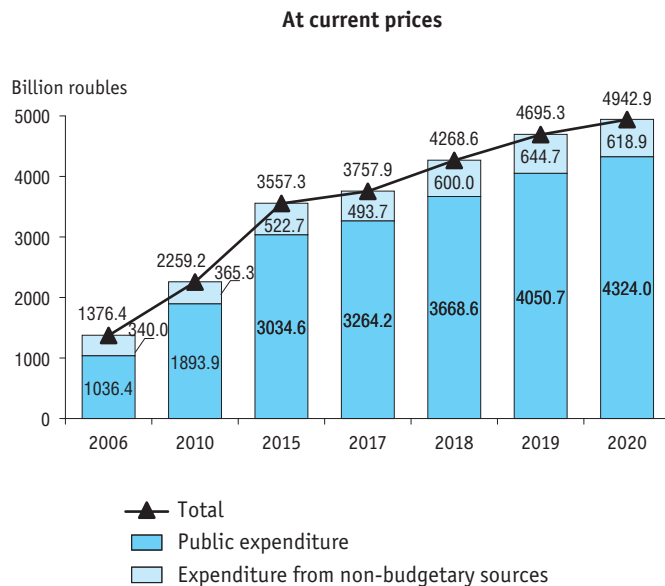
Unemployment rate of graduates is the ratio of the number of unemployed graduates of a certain year of graduation to the number of graduates who are part of the labour force (employed and unemployed) of the same year of graduation, calculated as a percentage.



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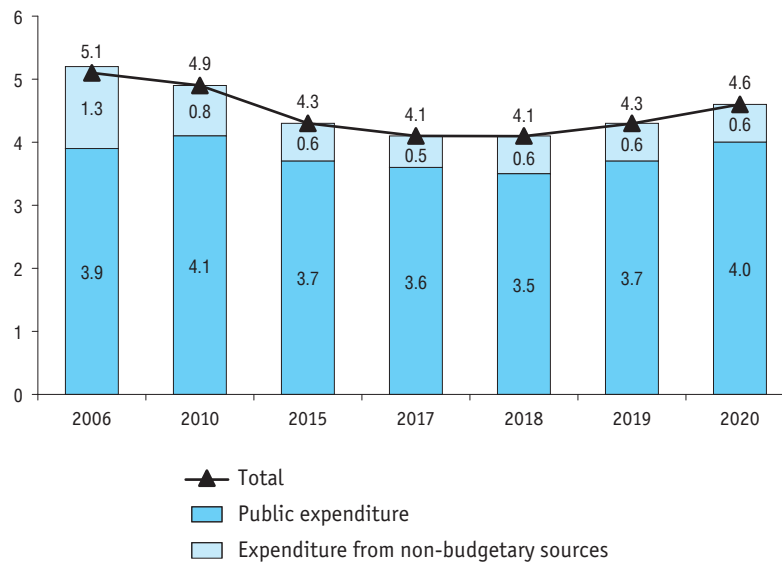
FUNDING

6.1. EXPENDITURE ON EDUCATION IN THE RUSSIAN FEDERATION*



* As there are no official statistical data on expenditure from non-budgetary sources, preschool education is not included since 2016.

6.2. EXPENDITURE ON EDUCATION IN THE RUSSIAN FEDERATION AS A PERCENTAGE OF GDP



6.3. PUBLIC EXPENDITURE ON EDUCATION BY LEVEL OF THE BUDGET SYSTEM

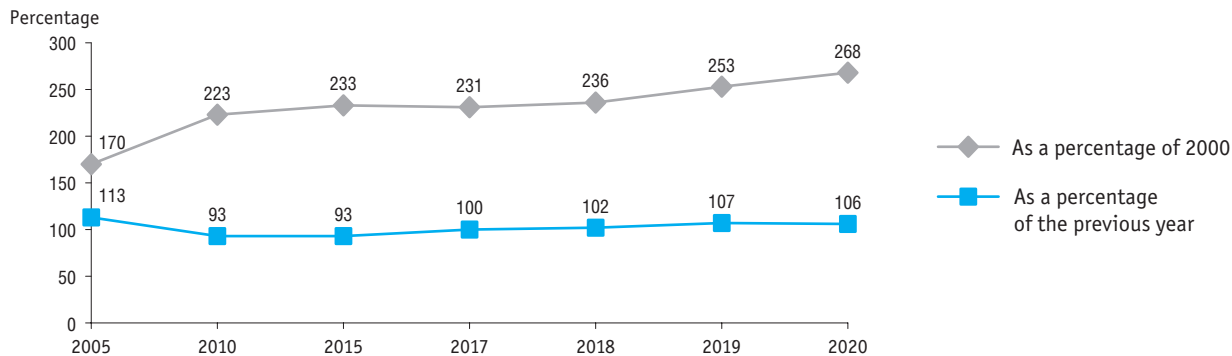
(billion roubles)

	2000	2005	2010	2015	2017	2018	2019	2020
Consolidated budget of the Russian Federation and budgets of state extra-budgetary funds*	214.7	801.8	1893.9	3034.6	3264.2	3668.6	4050.7	4324.0
Federal budget	38.1	162.1	442.8	610.6	615.0	722.6	826.5	956.9
Budgets of state extra-budgetary funds	...	11.0	0.1	0.2	0.1	0.2	0.2	0.2
Consolidated budgets of Russian regions	176.6	628.6	1450.9	2472.5	2690.1	3015.6	3356.3	3552.5
Budgets of territorial state extra-budgetary funds	...	0.01	0.0	0.0	-	-	-	-

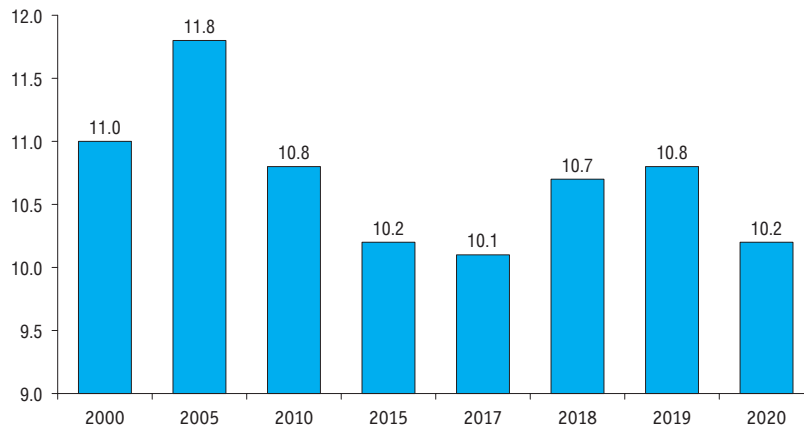
* Here and below in figures 6.4–6.6, 6.8, and table 6.7, the 2000 data excludes the budgets of state extra-budgetary funds.

6.4. TRENDS IN PUBLIC EXPENDITURE ON EDUCATION

(at constant prices)



6.5. EXPENDITURE ON EDUCATION AS A PERCENTAGE OF THE TOTAL EXPENDITURE OF THE CONSOLIDATED BUDGET OF THE RUSSIAN FEDERATION AND BUDGETS OF STATE EXTRA-BUDGETARY FUNDS



6.6. PUBLIC EXPENDITURE ON EDUCATION AS A PERCENTAGE OF GDP BY LEVEL OF THE BUDGET SYSTEM



6.7. PUBLIC EXPENDITURE ON EDUCATION BY SUBSECTION OF THE BUDGET EXPENDITURE CLASSIFICATION

(billion roubles)

	2000	2005	2010	2015	2017	2018	2019	2020
Consolidated budget of the Russian Federation and budgets of state extra-budgetary funds	214.7	801.8	1893.9	3034.6	3264.2	3668.6	4050.7	4324.0
Preschool education	32.0	113.0	321.3	692.1	722.5	841.4	964.8	987.0
General education	107.9	356.0	827.4	1405.9	1329.5	1471.7	1643.3	1817.5
Additional education of children*	...	...	...	...	237.7	251.0	266.8	270.2
Secondary vocational education	23.6	82.8	163.8	197.8	212.0	251.6	268.0	284.0
Higher education**	24.4	125.9	377.8	517.1	511.0	554.2	585.2	644.3
Professional (vocational) training, retraining, and development programmes***	1.4	6.7	13.2	19.5	23.9	33.0	43.3	47.4
Youth policies****	...	24.8	49.5	58.4	68.5	72.8	81.2	70.7
Applied research in education	...	1.8	15.7	13.4	12.9	14.6	14.7	16.3
Other issues in education*****	25.4	90.8	125.1	130.5	146.3	178.4	183.4	186.7

* Here and below in figure 6.8, until 2017, the expenses were included in the 'General education' subsection.

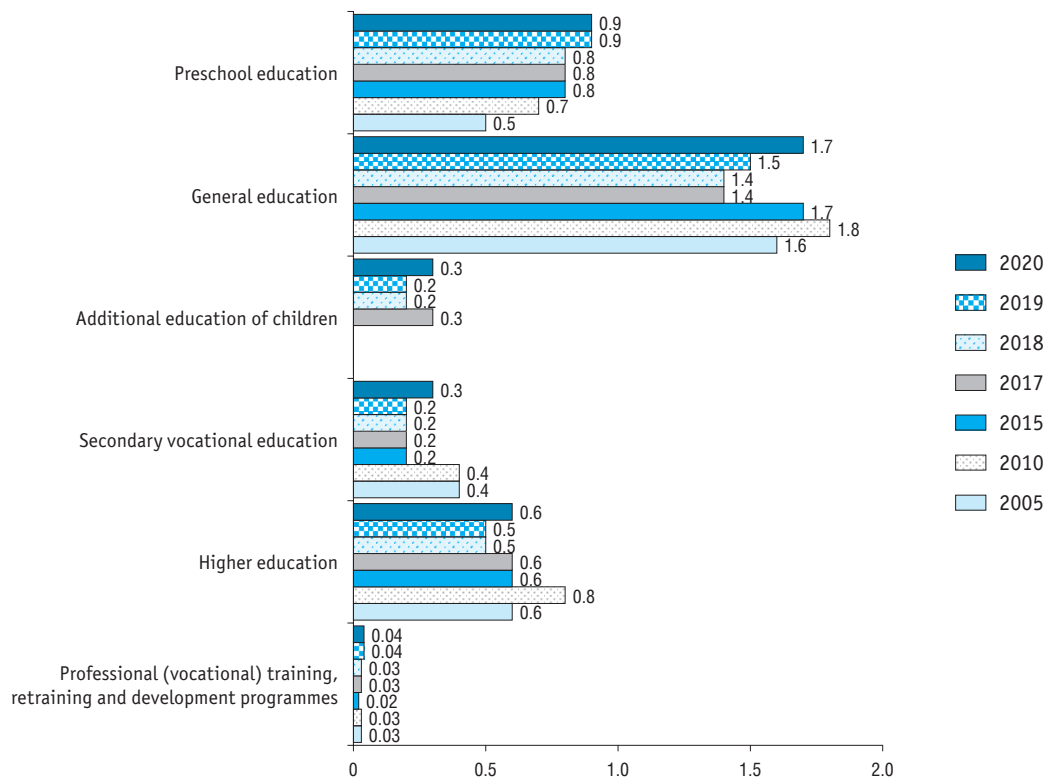
** Here and below in figures 6.8 and 6.9, in 2000 and 2005, 'Higher professional education' subsection; in 2010–2015, 'Higher and postgraduate professional education' subsection.

*** Here and below in figure 6.8, in 2000 and 2005, 'Retraining and upgrading of professional skills' subsection.

**** In 2005–2015, 'Youth policies and children's rehabilitation and recovery' subsection.

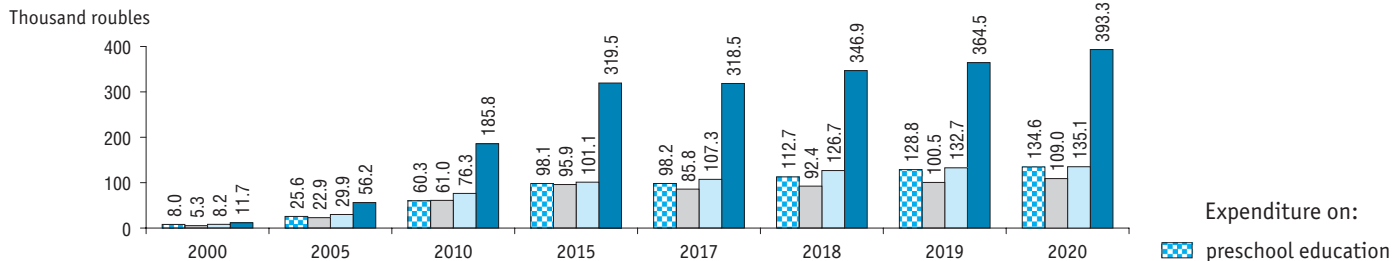
***** In 2000, 'Other expenditure on education' subsection.

6.8. PUBLIC EXPENDITURE ON EDUCATION AS A PERCENTAGE OF GDP BY SUBSECTION OF THE BUDGET EXPENDITURE CLASSIFICATION

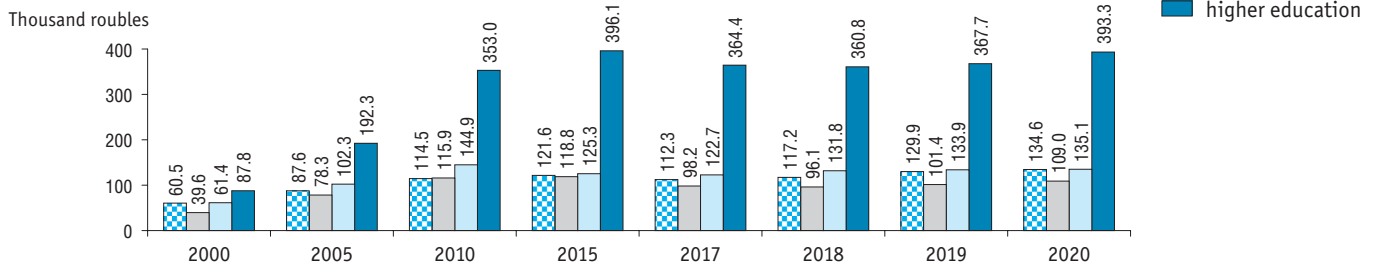


6.9. PUBLIC EXPENDITURE ON EDUCATION PER STUDENT BY SUBSECTION OF THE BUDGET EXPENDITURE CLASSIFICATION

At current prices



At constant 2019 prices



6.10. PAID EDUCATIONAL SERVICES*

	2000	2005	2010	2015	2017	2018	2019	2020
Million roubles	41530	152670	326100	539685	613294	655472	696769	646303
As a percentage:								
of the previous year, <i>in comparable prices</i>	121.7	107.7	99.1	96.8	102.3	100.1	99.7	89.4
of 2000, <i>in comparable prices</i>	100	152.6	172.4	164.6	165.1	165.2	164.7	147.3
of the total volume of paid services rendered to the population	6.9	6.7	6.6	6.7	6.7	6.8	6.8	7.2
Paid services per capita, <i>roubles</i>	285.3	1063.8	2282.8	3686.2	4176.5	4464.1	4747.5	4413.0

* Including results of non-observed activities assessment.

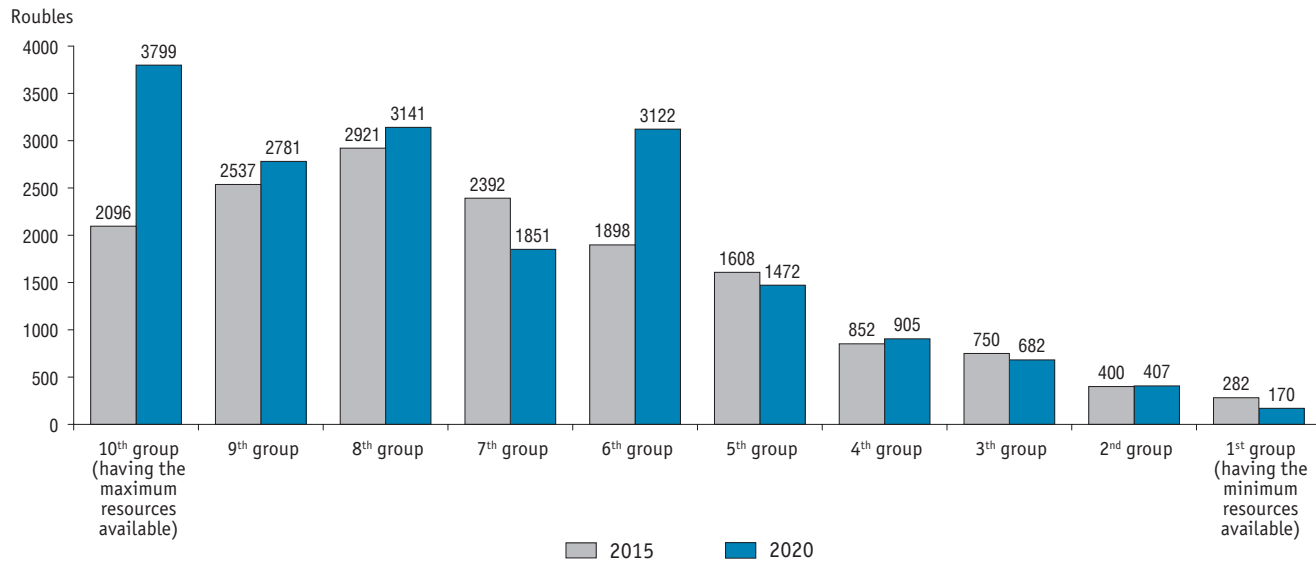
6.11. HOUSEHOLD EXPENDITURE ON PAID EDUCATIONAL SERVICES*

	Expenditure on paid educational services		
	Per household member a year, <i>roubles</i>	As a percentage of consumer expenditure	As a percentage of personal services expenditure
2000	137	1.0	7.2
2005	931	1.8	7.8
2010	1583	1.3	4.9
2015	1574	0.9	3.4
2017	1544	0.8	2.8
2018	1690	0.8	2.9
2019	1987	0.9	3.0
2020	1904	0.9	3.3

* According to the household budget survey.

6.12. HOUSEHOLD EXPENDITURE ON PAID EDUCATIONAL SERVICES BY INCOME DECILES

(average, per household member a year)



6.13. HOUSEHOLD EXPENDITURE ON PAID EDUCATIONAL SERVICES BY EDUCATIONAL ATTAINMENT

	Expenditure on education per household member a year, <i>roubles</i>	Including by educational attainment, <i>percentage</i>				
		preschool and primary general	secondary general*	secondary vocational – programmes for mid-level specialists	higher – bachelor's, specialist's, and master's programmes	not specified by the level
2000	137	2.4	34.2	–	52.2	11.2
2005	931	11.8	8.6	10.4	64.9	4.3
2010	1583	5.7	11.7	6.9	69.4	6.3
2015	1574	11.9	21.0	6.5	51.6	9.0
2017	1544	15.6	17.6	10.3	47.1	9.5
2018	1690	14.5	14.9	10.0	44.2	16.4
2019	1987	13.1	15.1	9.1	50.2	12.5
2020	1904	10.3	13.5	14.0	51.6	10.6

* In 2000, including expenditure on vocational education.

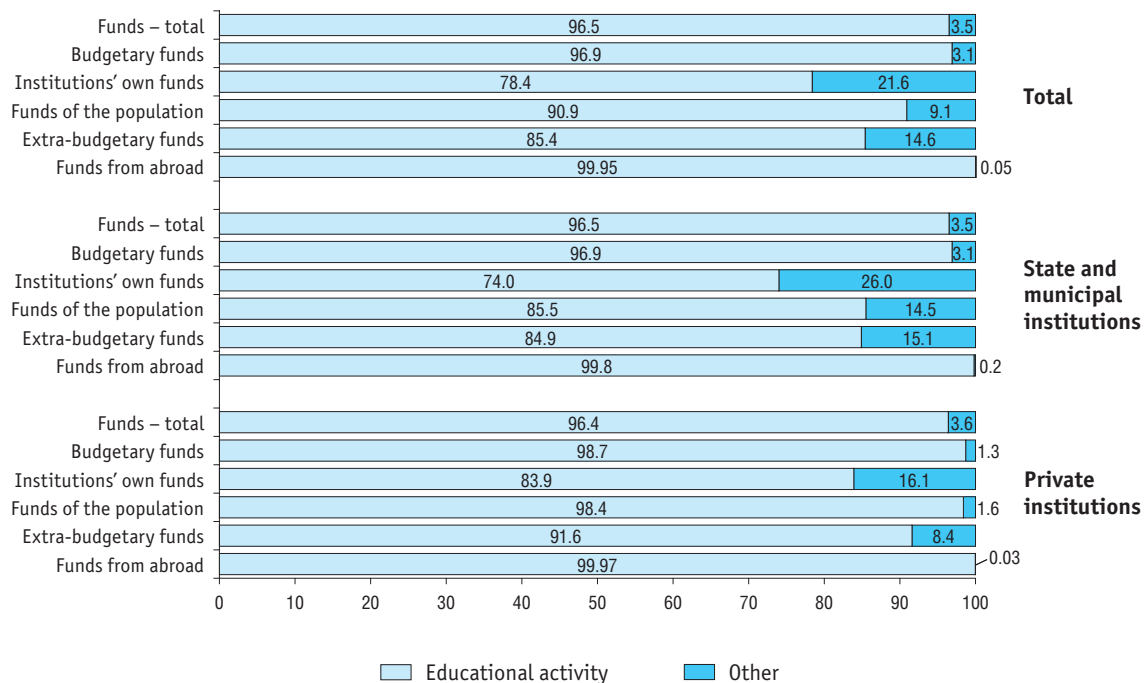
6.14. FUNDS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY SOURCE

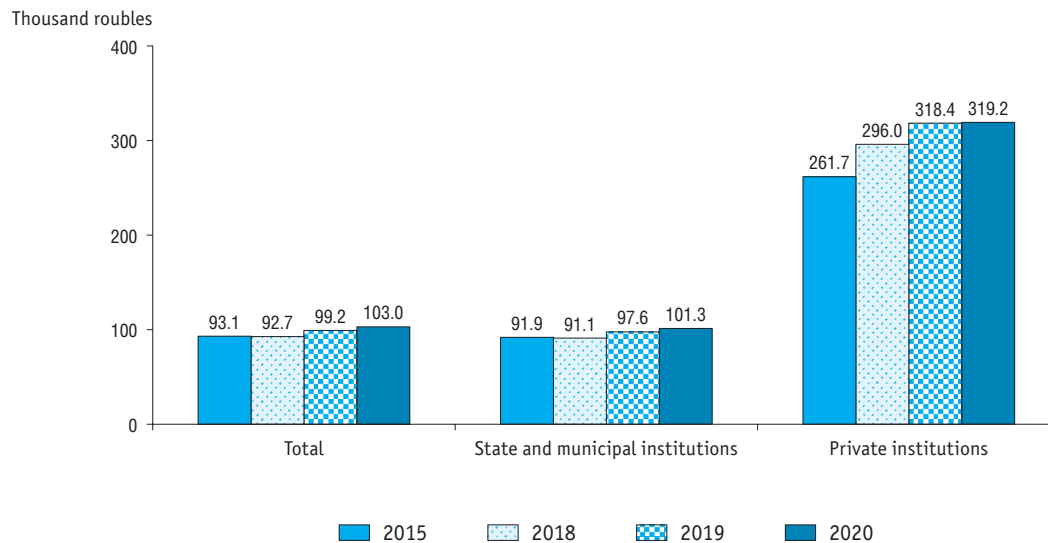
	Total				State and municipal institutions				Private institutions			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
Million roubles												
Funds – total	1381482.1	1528882.7	1677081.4	1788639.5	1347513.8	1490892.7	1637658.3	1745664.4	33968.2	37990.0	39423.1	42975.1
Budgetary funds	1301451.0	1440378.9	1577150.5	1708380.1	1294636.4	1432840.7	1569296.0	1697918.0	6814.5	7538.2	7854.5	10462.1
Of which:												
federal budget	11034.3	12193.1	17732.8	57088.3	10136.6	11290.4	17008.6	56194.0	897.7	902.6	724.2	894.3
budgets of Russian regions	1059137.9	1165599.6	1269183.0	1342173.9	1054115.7	1160387.9	1263369.1	1334906.5	5022.3	5211.7	5813.9	7267.4
local budgets	231278.7	262586.3	290234.7	309118.0	230384.2	261162.4	288918.3	306817.5	894.6	1423.9	1316.4	2300.5
Institutions' own funds	8905.3	9140.0	15346.7	13604.7	3980.9	4475.9	9477.4	7590.0	4924.4	4664.1	5869.4	6014.7
Funds of the population	65174.4	72624.7	77444.2	61012.6	43899.4	48188.7	52913.8	35401.2	21275.1	24436.0	24530.4	25611.4
Extra-budgetary funds	5540.8	6019.8	6643.6	5096.7	4989.9	5382.8	5951.4	4711.0	550.9	636.9	692.3	385.7
Funds from abroad	410.6	719.3	496.3	545.4	7.3	4.6	19.8	44.2	403.3	714.7	476.5	501.2
Percentage												
Funds – total	100	100	100	100	100	100	100	100	100	100	100	100
Budgetary funds	94.2	94.2	94.0	95.5	96.1	96.1	95.8	97.3	20.1	19.8	19.9	24.3
Of which:												
federal budget	0.8	0.8	1.1	3.2	0.8	0.8	1.0	3.2	2.6	2.4	1.8	2.1
budgets of Russian regions	76.7	76.2	75.7	75.0	78.2	77.8	77.1	76.5	14.8	13.7	14.7	16.9
local budgets	16.7	17.2	17.3	17.3	17.1	17.5	17.6	17.6	2.6	3.7	3.3	5.4
Institutions' own funds	0.6	0.6	0.9	0.8	0.3	0.3	0.6	0.4	14.5	12.3	14.9	14.0
Funds of the population	4.7	4.8	4.6	3.4	3.3	3.2	3.2	2.0	62.6	64.3	62.2	59.6
Extra-budgetary funds	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	1.6	1.7	1.8	0.9
Funds from abroad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.9	1.2	1.2

6.15. FUNDS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY SOURCE AND ACTIVITY

	Million roubles						Percentage					
	Total		Educational activity		Other		Total		Educational activity		Other	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
	Total											
Funds – total	1677081.4	1788639.5	1615307.6	1726666.5	61773.8	61973.0	100	100	100	100	100	100
Budgetary funds	1577150.5	1708380.1	1528336.6	1655653.0	48814.0	52727.1	94.0	95.5	94.6	95.9	79.0	85.1
Institutions' own funds	15346.7	13604.7	12290.8	10662.0	3055.9	2942.7	0.9	0.8	0.8	0.6	4.9	4.7
Funds of the population	77444.2	61012.6	68471.1	55454.3	8973.2	5558.3	4.6	3.4	4.2	3.2	14.5	9.0
Extra-budgetary funds	6643.6	5096.7	5713.9	4352.1	929.8	744.6	0.4	0.3	0.4	0.3	1.5	1.2
Funds from abroad	496.3	545.4	495.3	545.2	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
	State and municipal institutions											
Funds – total	1637658.3	1745664.4	1577170.0	1685242.4	60488.3	60422.0	100	100	100	100	100	100
Budgetary funds	1569296.0	1697918.0	1520617.5	1645324.2	48678.6	52593.8	95.8	97.3	96.4	97.6	80.5	87.0
Institutions' own funds	9477.4	7590.0	7058.9	5613.0	2418.4	1977.0	0.6	0.4	0.4	0.3	4.0	3.3
Funds of the population	52913.8	35401.2	44340.1	30262.2	8573.7	5139.0	3.2	2.0	2.8	1.8	14.2	8.5
Extra-budgetary funds	5951.4	4711.0	5133.8	3998.8	817.5	712.1	0.4	0.3	0.3	0.2	1.4	1.2
Funds from abroad	19.8	44.2	19.7	44.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	Private institutions											
Funds – total	39423.1	42975.1	38137.6	41424.2	1285.5	1551.0	100	100	100	100	100	100
Budgetary funds	7854.5	10462.1	7719.1	10328.9	135.4	133.3	19.9	24.3	20.2	24.9	10.5	8.6
Institutions' own funds	5869.4	6014.7	5231.9	5049.0	637.5	965.7	14.9	14.0	13.7	12.2	49.6	62.3
Funds of the population	24530.4	25611.4	24131.0	25192.0	399.5	419.4	62.2	59.6	63.3	60.8	31.1	27.0
Extra-budgetary funds	692.3	385.7	580.0	353.3	112.2	32.5	1.8	0.9	1.5	0.9	8.7	2.1
Funds from abroad	476.5	501.2	475.6	501.1	0.9	0.2	1.2	1.2	1.2	1.2	0.1	0.0

6.16. PERCENTAGE DISTRIBUTION OF FUNDS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY ACTIVITY AND SOURCE: 2020



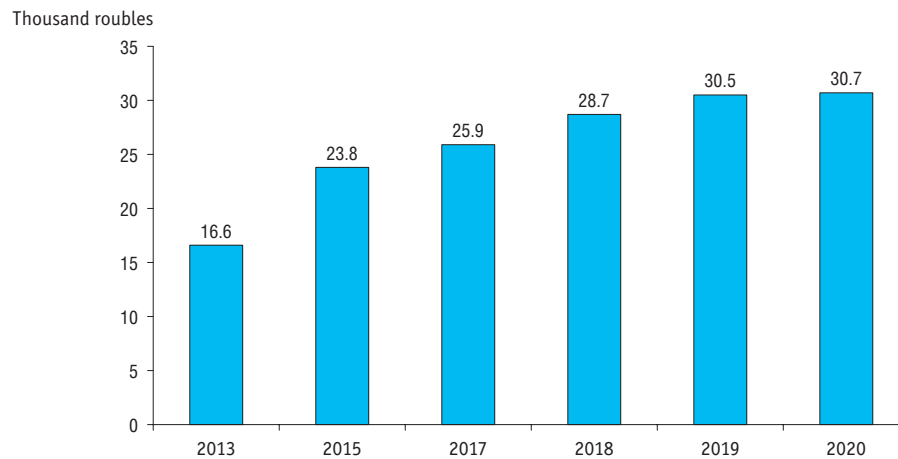
6.17. TOTAL FUNDS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES PER STUDENT

6.18. FUNDS OF ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY SOURCE*

	2012	2013	2015	2017	2018	2019	2020
Million roubles							
Funds – total	95271.9	139104.5	239867.6	251904.7	267919.8	271649.1	261912.7
Budgetary funds	88465.7	128229.7	217299.2	223016.8	237799.9	240891.0	239212.1
Remaining funds at the beginning of the year	305.1	707.8	1547.8	2017.7	2251.8	2629.4	3368.2
Gains from rendering fee-based additional education services	3802.3	6008.2	12338.5	17777.8	18710.3	19230.9	12996.1
Gains from production	378.4	445.3	1308.9	1102.2	1023.0	929.2	661.2
Charity	600.5	1013.0	2264.8	2152.8	2216.6	2009.8	1603.5
Others	1720.0	2700.5	5108.5	5837.3	5918.3	5958.9	4071.6
Percentage							
Funds – total	100	100	100	100	100	100	100
Budgetary funds	92.9	92.2	90.6	88.5	88.8	88.7	91.3
Remaining funds at the beginning of the year	0.3	0.5	0.6	0.8	0.8	1.0	1.3
Gains from rendering fee-based additional education services	4.0	4.3	5.1	7.1	7.0	7.1	5.0
Gains from production	0.4	0.3	0.5	0.4	0.4	0.3	0.3
Charity	0.6	0.7	0.9	0.9	0.8	0.7	0.6
Others	1.8	1.9	2.1	2.3	2.2	2.2	1.6

* Here and below in figure 6.19, the data refer to additional education institutions that provide reports to the Ministry of Education of the Russian Federation.

6.19. FUNDS OF ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN PER STUDENT



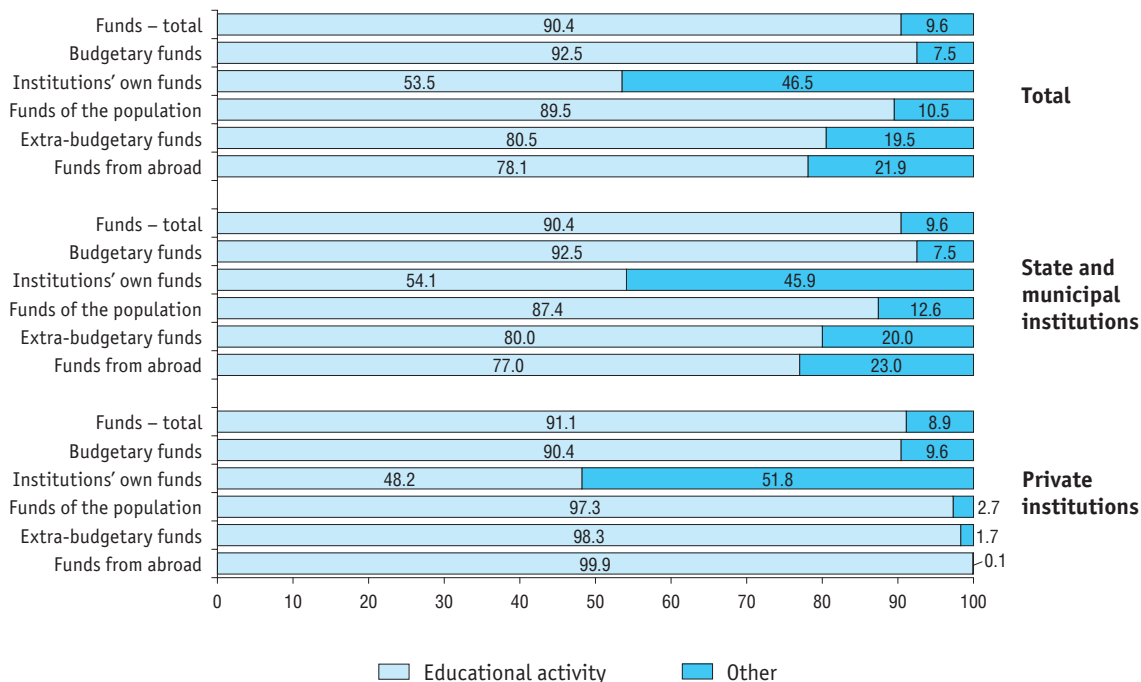
6.20. FUNDS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY SOURCE

	Total			State and municipal institutions			Private institutions		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Million roubles									
Funds – total	283069.4	315410.4	331165.0	275507.9	306402.4	320191.6	7561.5	9008.0	10973.3
Budgetary funds	234620.8	259672.6	272630.0	234472.6	259402.0	272307.7	148.2	270.5	322.3
Of which:									
federal budget	15302.8	16699.9	19374.1	15295.7	16686.2	19327.4	7.1	13.6	46.7
budgets of Russian regions	217080.1	240533.8	251423.2	216961.3	240287.0	251164.0	118.9	246.8	259.3
local budgets	2237.8	2438.9	1832.6	2215.6	2428.8	1816.3	22.2	10.1	16.3
Institutions' own funds	10136.8	12167.9	13073.0	8762.7	10839.6	11742.6	1374.1	1328.3	1330.4
Funds of the population	34912.5	40418.8	42154.2	28938.1	33084.0	32931.3	5974.3	7334.8	9223.0
Extra-budgetary funds	3307.0	3078.5	3112.3	3246.6	3008.1	3024.6	60.5	70.4	87.7
Funds from abroad	92.3	72.6	195.5	87.9	68.6	185.5	4.4	3.9	10.0
Percentage									
Funds – total	100	100	100	100	100	100	100	100	100
Budgetary funds	82.9	82.3	82.3	85.1	84.7	85.0	2.0	3.0	2.9
Of which:									
federal budget	5.4	5.3	5.9	5.6	5.4	6.0	0.1	0.2	0.4
budgets of Russian regions	76.7	76.3	75.9	78.7	78.4	78.4	1.6	2.7	2.4
local budgets	0.8	0.8	0.6	0.8	0.8	0.6	0.3	0.1	0.1
Institutions' own funds	3.6	3.9	3.9	3.2	3.5	3.7	18.2	14.7	12.1
Funds of the population	12.3	12.8	12.7	10.5	10.8	10.3	79.0	81.4	84.0
Extra-budgetary funds	1.2	1.0	0.9	1.2	1.0	0.9	0.8	0.8	0.8
Funds from abroad	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1

6.21. FUNDS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY SOURCE AND ACTIVITY

	Million roubles						Percentage					
	Total		Educational activity		Other		Total		Educational activity		Other	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
	Total											
Funds – total	315410.4	331165.0	282984.3	299470.0	32426.1	31695.0	100	100	100	100	100	100
Budgetary funds	259672.6	272630.0	240382.0	252074.7	19290.6	20555.3	82.3	82.3	84.9	84.2	59.5	64.9
Institutions' own funds	12167.9	13073.0	5596.4	6989.7	6571.5	6083.3	3.9	3.9	2.0	2.3	20.3	19.2
Funds of the population	40418.8	42154.2	34581.2	37746.9	5837.6	4407.4	12.8	12.7	12.2	12.6	18.0	13.9
Extra-budgetary funds	3078.5	3112.3	2377.3	2506.0	701.2	606.3	1.0	0.9	0.8	0.8	2.2	1.9
Funds from abroad	72.6	195.5	47.5	152.7	25.1	42.7	0.0	0.1	0.0	0.1	0.1	0.1
	State and municipal institutions											
Funds – total	306402.4	320191.6	274817.7	289469.9	31584.7	30721.7	100	100	100	100	100	100
Budgetary funds	259402.0	272307.7	240119.7	251783.5	19282.3	20524.2	84.7	85.0	87.4	87.0	61.0	66.8
Institutions' own funds	10839.6	11742.6	4794.1	6348.0	6045.5	5394.6	3.5	3.7	1.7	2.2	19.1	17.6
Funds of the population	33084.0	32931.3	27551.3	28775.9	5532.7	4155.4	10.8	10.3	10.0	9.9	17.5	13.5
Extra-budgetary funds	3008.1	3024.6	2309.0	2419.8	699.1	604.8	1.0	0.9	0.8	0.8	2.2	2.0
Funds from abroad	68.6	185.5	43.5	142.7	25.1	42.7	0.0	0.1	0.0	0.0	0.1	0.1
	Private institutions											
Funds – total	9008.0	10973.3	8166.6	10000.0	841.3	973.3	100	100	100	100	100	100
Budgetary funds	270.5	322.3	262.3	291.2	8.3	31.1	3.0	2.9	3.2	2.9	1.0	3.2
Institutions' own funds	1328.3	1330.4	802.3	641.7	526.1	688.7	14.7	12.1	9.8	6.4	62.5	70.8
Funds of the population	7334.8	9223.0	7029.9	8971.0	304.9	252.0	81.4	84.0	86.1	89.7	36.2	25.9
Extra-budgetary funds	70.4	87.7	68.3	86.2	2.1	1.5	0.8	0.8	0.8	0.9	0.3	0.2
Funds from abroad	3.9	10.0	3.9	10.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0

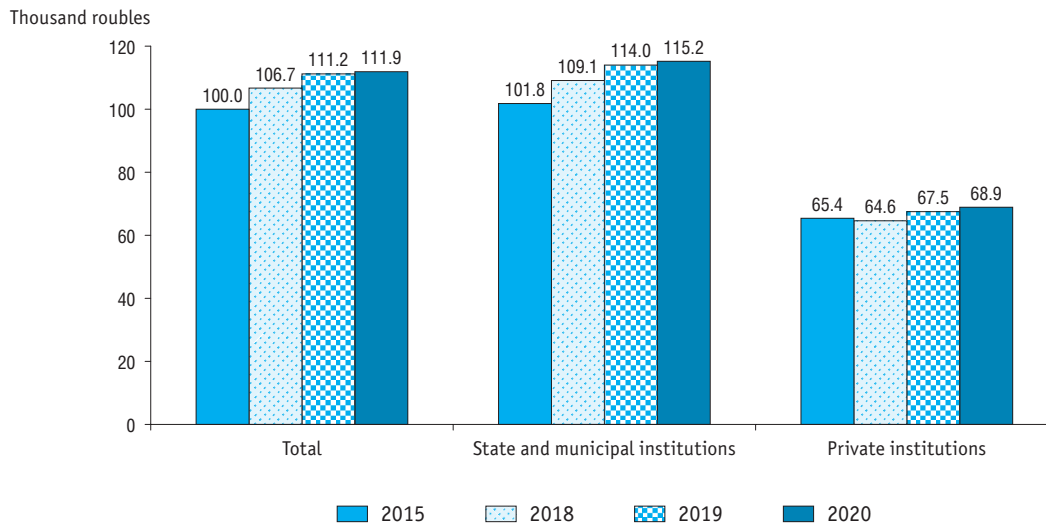
6.22. PERCENTAGE DISTRIBUTION OF FUNDS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY ACTIVITY AND SOURCE: 2020



6.23. DISTRIBUTION OF FUNDS RECEIVED BY EDUCATIONAL INSTITUTIONS FROM IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY PROGRAMME AND SOURCE: 2020

	Million roubles					Percentage				
	Total	Of which				Total	Of which			
		programmes for skilled workers and employees	programmes for mid-level specialists	vocational training programmes	additional professional (vocational) programmes		programmes for skilled workers and employees	programmes for mid-level specialists	vocational training programmes	additional professional (vocational) programmes
Total										
Funds – total	299470.0	63273.1	197824.4	15107.7	8396.8	100	100	100	100	100
Budgetary funds	252074.7	61481.6	164214.7	9799.9	2865.7	84.2	97.2	83.0	64.9	34.1
Institutions' own funds	6989.7	313.5	1275.0	2153.4	2926.0	2.3	0.5	0.6	14.3	34.8
Funds of the population	37746.9	1309.6	30675.3	2828.5	2264.4	12.6	2.1	15.5	18.7	27.0
Extra-budgetary funds	2506.0	165.9	1522.1	325.9	337.1	0.8	0.3	0.8	2.2	4.0
Funds from abroad	152.7	2.5	137.3	0.0	3.5	0.1	0.0	0.1	0.0	0.0
State and municipal institutions										
Funds – total	289469.9	63168.6	188577.6	14848.9	8152.6	100	100	100	100	100
Budgetary funds	251783.5	61456.2	163999.4	9780.7	2851.7	87.0	97.3	87.0	65.9	35.0
Institutions' own funds	6348.0	274.0	997.1	1987.4	2789.3	2.2	0.4	0.5	13.4	34.2
Funds of the population	28775.9	1270.1	22012.0	2755.3	2176.3	9.9	2.0	11.7	18.6	26.7
Extra-budgetary funds	2419.8	165.9	1438.1	325.5	335.3	0.8	0.3	0.8	2.2	4.1
Funds from abroad	142.7	2.4	130.9	0.0	–	0.0	0.0	0.1	0.0	–
Private institutions										
Funds – total	10000.0	104.5	9246.8	258.8	244.2	100	100	100	100	100
Budgetary funds	291.2	25.3	215.3	19.2	14.0	2.9	24.3	2.3	7.4	5.7
Institutions' own funds	641.7	39.5	277.8	166.0	136.7	6.4	37.8	3.0	64.1	56.0
Funds of the population	8971.0	39.6	8663.3	73.2	88.1	89.7	37.9	93.7	28.3	36.1
Extra-budgetary funds	86.2	–	83.9	0.4	1.8	0.9	–	0.9	0.2	0.8
Funds from abroad	10.0	0.0	6.4	–	3.5	0.1	0.0	0.1	–	1.4

6.24. FUNDS RECEIVED BY SECONDARY VOCATIONAL EDUCATION INSTITUTIONS FROM IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES PER STUDENT ENROLLED IN A SECONDARY VOCATIONAL EDUCATION PROGRAMME*



* Including the funds of higher education institutions implementing secondary vocational education programmes as an additional type of activity.

6.25. FUNDS OF HIGHER EDUCATION INSTITUTIONS BY SOURCE

	Total				State and municipal institutions				Private institutions			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
Million roubles												
Funds – total	789451.3	888337.2	957969.5	1031857.8	744845.3	845436.1	908146.3	973915.1	44606.0	42901.1	49823.2	57942.7
Budgetary funds	446579.8	509367.2	550896.4	614393.5	438365.7	501530.2	540792.6	603835.9	8214.1	7837.0	10103.8	10557.6
Of which:												
federal budget	419959.0	484060.7	524386.6	585619.3	412312.3	476980.7	514897.8	575483.3	7646.7	7080.1	9488.8	10136.0
budgets of Russian regions	25592.8	24754.7	25971.8	28233.4	25057.0	24028.3	25396.0	27834.7	535.8	726.3	575.7	398.7
local budgets	1028.1	551.8	538.0	540.8	996.4	521.2	498.7	517.9	31.7	30.6	39.3	22.8
Institutions' own funds	95891.7	110807.9	119577.7	121712.8	88731.0	103943.1	111941.8	108481.9	7160.7	6864.8	7636.0	13230.9
Funds of the population	217969.2	229966.4	242787.8	248969.3	189359.9	203328.3	212506.5	216267.9	28609.3	26638.1	30281.3	32701.4
Extra-budgetary funds	16107.1	22092.0	24169.6	24113.9	15898.9	21087.4	22953.4	23477.4	208.2	1004.6	1216.1	636.4
Funds from abroad	12903.5	16103.7	20538.0	22668.3	12489.7	15547.1	19952.0	21851.9	413.7	556.6	586.0	816.4
Percentage												
Funds – total	100	100	100	100	100	100	100	100	100	100	100	100
Budgetary funds	56.6	57.3	57.5	59.5	58.9	59.3	59.5	62.0	18.4	18.3	20.3	18.2
Of which:												
federal budget	53.2	54.5	54.7	56.8	55.4	56.4	56.7	59.1	17.1	16.5	19.0	17.5
budgets of Russian regions	3.2	2.8	2.7	2.7	3.4	2.8	2.8	2.9	1.2	1.7	1.2	0.7
local budgets	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Institutions' own funds	12.1	12.5	12.5	11.8	11.9	12.3	12.3	11.1	16.1	16.0	15.3	22.8
Funds of the population	27.6	25.9	25.3	24.1	25.4	24.1	23.4	22.2	64.1	62.1	60.8	56.4
Extra-budgetary funds	2.0	2.5	2.5	2.3	2.1	2.5	2.5	2.4	0.5	2.3	2.4	1.1
Funds from abroad	1.6	1.8	2.1	2.2	1.7	1.8	2.2	2.2	0.9	1.3	1.2	1.4

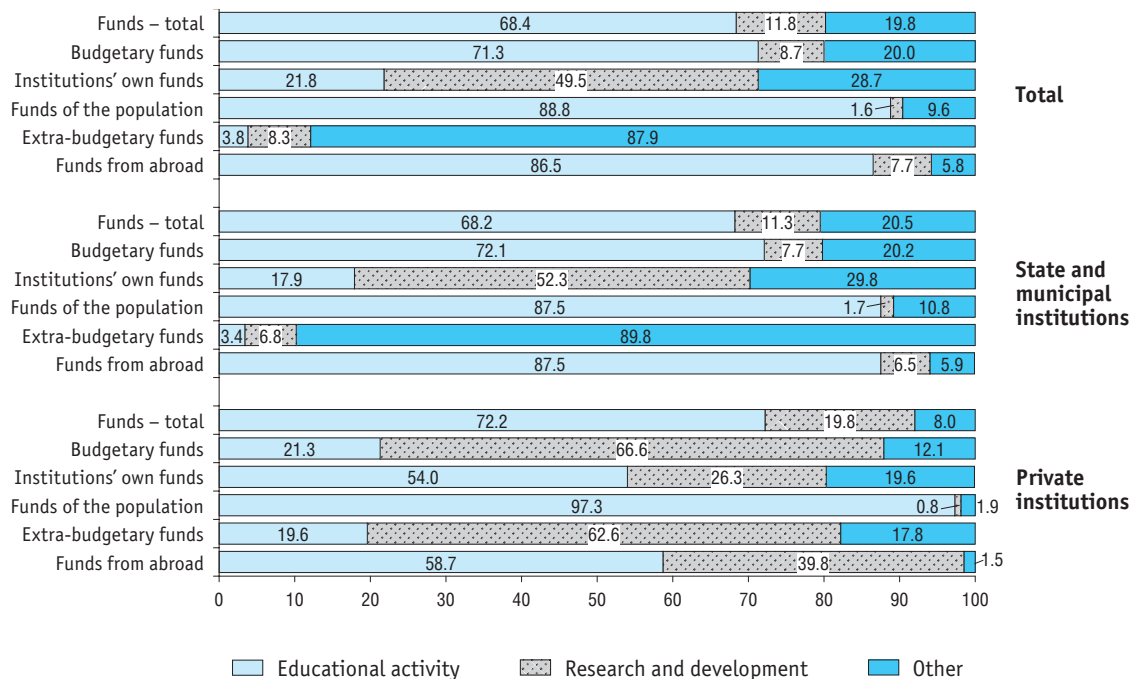
6.26. FUNDS OF HIGHER EDUCATION INSTITUTIONS BY SOURCE AND ACTIVITY

	Million roubles							
	Total		Educational activity		Research and development		Other	
	2019	2020	2019	2020	2019	2020	2019	2020
Total								
Funds – total	957969.5	1031857.8	658740.5	705966.9	116823.6	121329.6	182405.3	204561.3
Budgetary funds	550896.4	614393.5	406488.4	437815.7	48947.0	53449.9	95460.9	123127.9
Institutions' own funds	119577.7	121712.8	23509.3	26543.3	60202.1	60196.5	35866.4	34973.1
Funds of the population	242787.8	248969.3	210304.8	221073.5	2339.1	3930.5	30143.9	23965.2
Extra-budgetary funds	24169.6	24113.9	899.3	926.4	3849.8	1999.1	19420.6	21188.3
Funds from abroad	20538.0	22668.3	17538.8	19607.8	1485.7	1753.6	1513.6	1306.8
State and municipal institutions								
Funds – total	908146.3	973915.1	623019.8	664133.1	106883.0	109838.2	178243.5	199943.8
Budgetary funds	540792.6	603835.9	404174.8	435565.0	42913.9	46422.5	93703.8	121848.4
Institutions' own funds	111941.8	108481.9	19997.0	19394.4	57615.9	56712.0	34328.8	32375.5
Funds of the population	212506.5	216267.9	181056.3	189242.8	2103.0	3674.4	29347.2	23350.7
Extra-budgetary funds	22953.4	23477.4	613.1	801.8	2931.8	1600.9	19408.4	21074.8
Funds from abroad	19952.0	21851.9	17178.5	19129.0	1318.3	1428.5	1455.2	1294.5
Private institutions								
Funds – total	49823.2	57942.7	35720.8	41833.8	9940.6	11491.5	4161.8	4617.4
Budgetary funds	10103.8	10557.6	2313.6	2250.7	6033.1	7027.4	1757.1	1279.4
Institutions' own funds	7636.0	13230.9	3512.3	7148.9	2586.1	3484.4	1537.5	2597.6
Funds of the population	30281.3	32701.4	29248.5	31830.7	236.1	256.2	796.7	614.5
Extra-budgetary funds	1216.1	636.4	286.1	124.6	917.9	398.3	12.1	113.6
Funds from abroad	586.0	816.4	360.3	478.9	167.4	325.2	58.3	12.3

(continued)

	Percentage							
	Total		Educational activity		Research and development		Other	
	2019	2020	2019	2020	2019	2020	2019	2020
Total								
Funds – total	100	100	100	100	100	100	100	100
Budgetary funds	57.5	59.5	61.7	62.0	41.9	44.1	52.3	60.2
Institutions' own funds	12.5	11.8	3.6	3.8	51.5	49.6	19.7	17.1
Funds of the population	25.3	24.1	31.9	31.3	2.0	3.2	16.5	11.7
Extra-budgetary funds	2.5	2.3	0.1	0.1	3.3	1.6	10.6	10.4
Funds from abroad	2.1	2.2	2.7	2.8	1.3	1.4	0.8	0.6
State and municipal institutions								
Funds – total	100	100	100	100	100	100	100	100
Budgetary funds	59.5	62.0	64.9	65.6	40.2	42.3	52.6	60.9
Institutions' own funds	12.3	11.1	3.2	2.9	53.9	51.6	19.3	16.2
Funds of the population	23.4	22.2	29.1	28.5	2.0	3.3	16.5	11.7
Extra-budgetary funds	2.5	2.4	0.1	0.1	2.7	1.5	10.9	10.5
Funds from abroad	2.2	2.2	2.8	2.9	1.2	1.3	0.8	0.6
Private institutions								
Funds – total	100	100	100	100	100	100	100	100
Budgetary funds	20.3	18.2	6.5	5.4	60.7	61.2	42.2	27.7
Institutions' own funds	15.3	22.8	9.8	17.1	26.0	30.3	36.9	56.3
Funds of the population	60.8	56.4	81.9	76.1	2.4	2.2	19.1	13.3
Extra-budgetary funds	2.4	1.1	0.8	0.3	9.2	3.5	0.3	2.5
Funds from abroad	1.2	1.4	1.0	1.1	1.7	2.8	1.4	0.3

6.27. PERCENTAGE DISTRIBUTION OF FUNDS OF HIGHER EDUCATION INSTITUTIONS BY ACTIVITY AND SOURCE: 2020

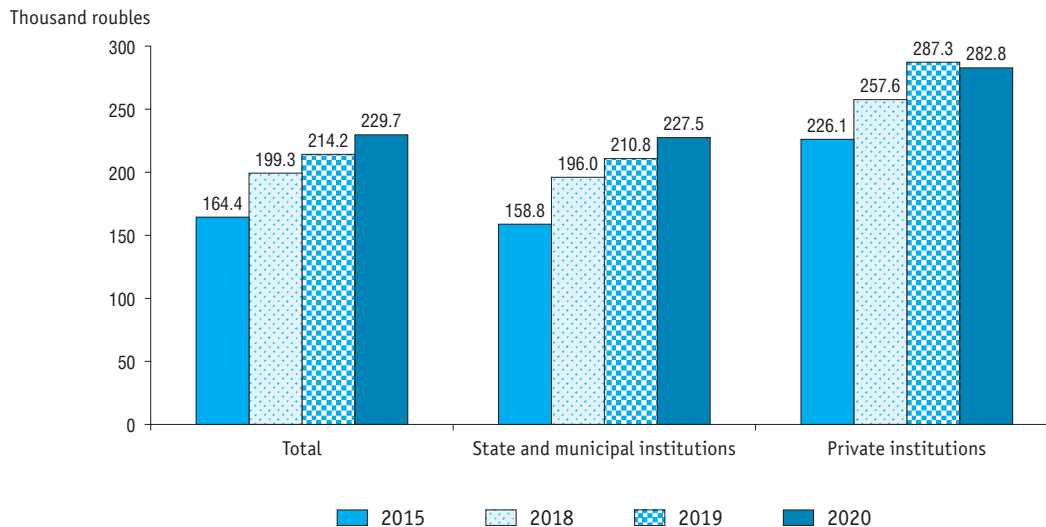


6.28. DISTRIBUTION OF FUNDS RECEIVED BY EDUCATIONAL INSTITUTIONS FROM IMPLEMENTING HIGHER EDUCATION PROGRAMMES BY PROGRAMME AND SOURCE: 2020

	Million roubles						
	Total	Of which					
		programmes for skilled workers and employees	programmes for mid-level specialists	bachelor's, specialist's, and master's programmes	postgraduate, residency, and apprenticeship programmes	vocational training programmes	additional professional (vocational) programmes
Total							
Funds – total	705966.9	500.3	35366.8	582393.7	30189.6	1440.2	29587.7
Budgetary funds	437815.7	371.7	17430.6	369885.9	22892.0	448.3	7232.1
Institutions' own funds	26543.3	35.0	351.8	11060.4	526.7	423.3	10131.5
Funds of the population	221073.5	93.2	17300.6	183568.1	6036.6	551.5	11161.0
Extra-budgetary funds	926.4	–	134.4	708.6	2.9	11.8	68.6
Funds from abroad	19607.8	0.3	149.4	17170.7	731.4	5.2	994.5
State and municipal institutions							
Funds – total	664133.1	474.1	31521.3	550306.2	29209.0	1421.2	27090.5
Budgetary funds	435565.0	371.7	17389.8	368305.0	22504.1	445.8	7009.2
Institutions' own funds	19394.4	9.4	204.7	7505.6	407.1	421.1	9076.3
Funds of the population	189242.8	92.7	13680.1	157133.5	5570.7	545.4	9953.6
Extra-budgetary funds	801.8	–	104.8	622.0	2.9	3.7	68.3
Funds from abroad	19129.0	0.3	141.9	16740.1	724.2	5.2	983.2
Private institutions							
Funds – total	41833.8	26.1	3845.6	32087.6	980.6	19.0	2497.2
Budgetary funds	2250.7	–	40.8	1580.9	387.9	2.6	222.9
Institutions' own funds	7148.9	25.6	147.1	3554.8	119.6	2.2	1055.2
Funds of the population	31830.7	0.6	3620.5	26434.6	466.0	6.2	1207.5
Extra-budgetary funds	124.6	–	29.6	86.6	–	8.0	0.3
Funds from abroad	478.9	–	7.5	430.6	7.2	–	11.3

(continued)

	Million roubles						
	Total	Of which					
		programmes for skilled workers and employees	programmes for mid-level specialists	bachelor's, specialist's, and master's programmes	postgraduate, residency, and apprenticeship programmes	vocational training programmes	additional professional (vocational) programmes
Total							
Funds – total	100	100	100	100	100	100	100
Budgetary funds	62.0	74.3	49.3	63.5	75.8	31.1	24.4
Institutions' own funds	3.8	7.0	1.0	1.9	1.7	29.4	34.2
Funds of the population	31.3	18.6	48.9	31.5	20.0	38.3	37.7
Extra-budgetary funds	0.1	–	0.4	0.1	0.0	0.8	0.2
Funds from abroad	2.8	0.1	0.4	2.9	2.4	0.4	3.4
State and municipal institutions							
Funds – total	100	100	100	100	100	100	100
Budgetary funds	65.6	78.4	55.2	66.9	77.0	31.4	25.9
Institutions' own funds	2.9	2.0	0.6	1.4	1.4	29.6	33.5
Funds of the population	28.5	19.5	43.4	28.6	19.1	38.4	36.7
Extra-budgetary funds	0.1	–	0.3	0.1	0.0	0.3	0.3
Funds from abroad	2.9	0.1	0.5	3.0	2.5	0.4	3.6
Private institutions							
Funds – total	100	100	100	100	100	100	100
Budgetary funds	5.4	–	1.1	4.9	39.6	13.6	8.9
Institutions' own funds	17.1	97.8	3.8	11.1	12.2	11.8	42.3
Funds of the population	76.1	2.2	94.1	82.4	47.5	32.4	48.4
Extra-budgetary funds	0.3	–	0.8	0.3	–	42.2	0.0
Funds from abroad	1.1	–	0.2	1.3	0.7	–	0.5

6.29. FUNDS RECEIVED BY HIGHER EDUCATION INSTITUTIONS FROM IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES PER STUDENT ENROLLED IN A BACHELOR'S, SPECIALIST'S, OR MASTER'S PROGRAMME

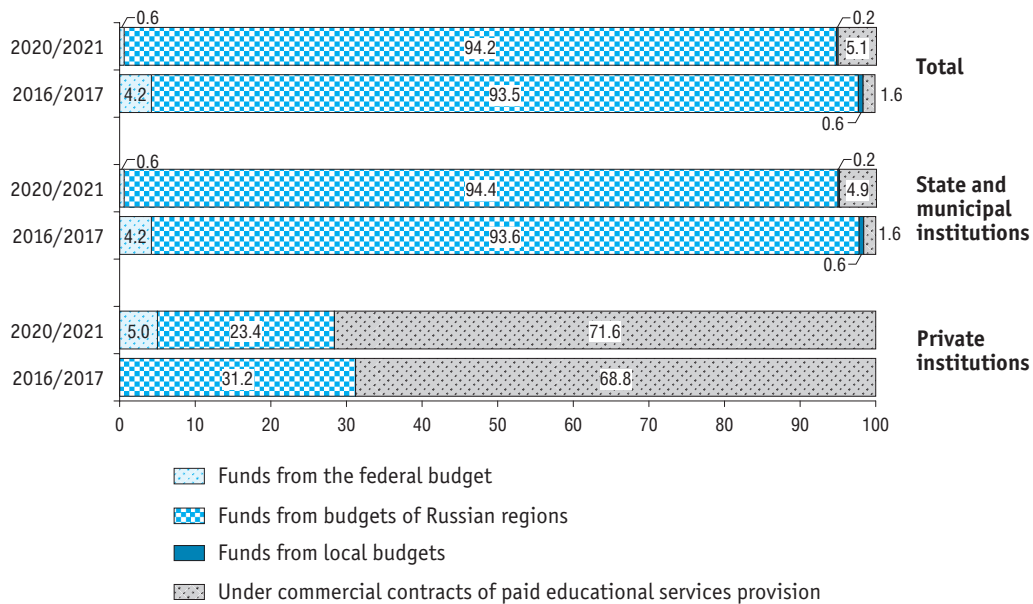
6.30. ENROLMENT, ENTRANTS, AND GRADUATES WITHIN PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES BY SOURCE OF FUNDS

(thousand persons)

	2016	2017	2018	2019	2020
Enrolment, at the beginning of the academic year*	547.6	543.2	542.1	543.4	576.5
Of whom studying:					
at the expense of budgetary funds	538.4	531.4	527.2	523.3	547.2
at state and municipal institutions	538.3	531.3	526.8	522.7	546.7
at private institutions	0.1	0.1	0.3	0.6	0.4
under commercial contracts of paid educational services provision	9.2	11.8	14.9	20.1	29.3
at state and municipal institutions	9.0	11.1	14.0	18.9	28.2
at private institutions	0.2	0.7	0.9	1.2	1.1
Entrants	208.0	205.5	207.1	209.7	213.8
Of whom studying:					
at the expense of budgetary funds	202.4	199.0	198.0	197.6	196.5
at state and municipal institutions	202.3	198.9	197.7	197.1	196.3
at private institutions	0.1	0.1	0.2	0.5	0.2
under commercial contracts of paid educational services provision	5.6	6.5	9.2	12.1	17.3
at state and municipal institutions	5.5	6.0	8.4	11.1	16.3
at private institutions	0.1	0.5	0.8	1.0	1.0
Graduates	184.4	181.1	168.6	165.5	142.5
Of whom studying:					
at the expense of budgetary funds	182.2	177.8	164.1	160.4	137.1
at state and municipal institutions	182.1	177.7	164.0	160.3	137.0
at private institutions	0.1	0.1	0.1	0.1	0.1
under commercial contracts of paid educational services provision	2.1	3.3	4.5	5.1	5.4
at state and municipal institutions	2.0	2.9	3.9	4.5	4.8
at private institutions	0.1	0.5	0.6	0.6	0.5

* At the beginning of the 2016/2017, 2017/2018, 2018/2019, 2019/2020, 2020/2021 academic years, respectively.

6.31. PERCENTAGE DISTRIBUTION OF ENROLMENT IN PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES BY SOURCE OF FUNDS

(at the beginning of the academic year)

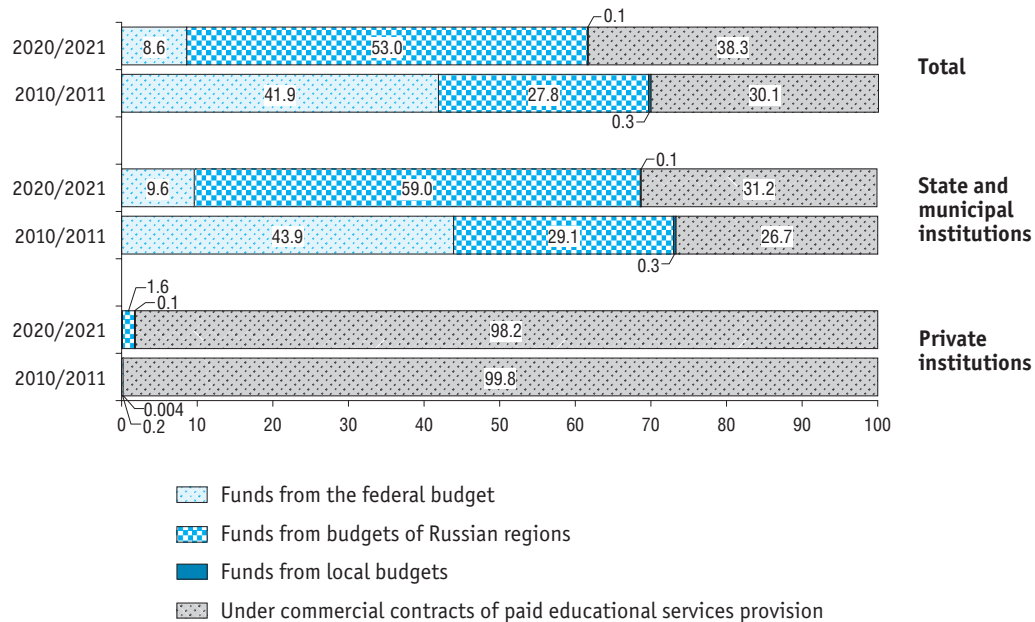
6.32. ENROLMENT, ENTRANTS, AND GRADUATES WITHIN PROGRAMMES FOR MID-LEVEL SPECIALISTS BY SOURCE OF FUNDS

(thousand persons)

	2000	2005	2010	2015	2017	2018	2019	2020
Enrolment, at the beginning of the academic year*	2360.8	2590.7	2125.7	2180.2	2387.7	2464.3	2576.2	2759.8
Of whom studying:								
at the expense of budgetary funds	1590.1	1603.9	1485.9	1533.3	1615.6	1629.0	1654.9	1703.9
at state and municipal institutions	1590.1	1603.9	1485.7	1531.0	1613.7	1625.7	1650.6	1698.6
at private institutions	...	...	0.2	2.3	1.9	3.3	4.3	5.3
under commercial contracts of paid educational services provision	770.7	986.8	639.8	646.9	772.1	835.3	921.3	1055.9
at state and municipal institutions	718.5	869.1	541.2	500.3	596.4	639.0	693.0	771.4
at private institutions	52.2	117.7	98.6	146.6	175.6	196.4	228.3	284.5
Entrants	867.2	854.1	705.3	699.3	744.0	783.0	832.4	900.2
Of whom studying:								
at the expense of budgetary funds	516.5	500.5	489.8	455.4	472.6	476.4	484.7	499.7
at state and municipal institutions	516.5	500.5	489.7	454.7	471.7	474.7	483.1	497.7
at private institutions	...	...	0.0	0.7	0.8	1.7	1.6	2.0
under commercial contracts of paid educational services provision	350.7	353.6	215.5	243.9	271.4	306.6	347.8	400.6
at state and municipal institutions	325.9	310.4	182.1	185.1	203.7	228.4	253.6	278.2
at private institutions	24.8	43.2	33.5	58.8	67.8	78.2	94.1	122.4
Graduates	579.3	684.4	572.1	446.0	506.9	531.5	539.8	552.8
Of whom studying:								
at the expense of budgetary funds	414.2	399.3	356.8	320.1	345.5	354.6	354.5	360.3
at state and municipal institutions	414.2	399.3	356.8	319.4	345.0	354.2	354.1	359.6
at private institutions	...	...	0.0	0.7	0.5	0.4	0.5	0.7
under commercial contracts of paid educational services provision	165.1	285.1	215.3	125.9	161.4	176.9	185.3	192.4
at state and municipal institutions	153.5	252.1	178.9	91.6	117.5	130.5	137.9	141.6
at private institutions	11.6	33.0	36.4	34.3	43.9	46.4	47.4	50.9

* Here and below in table 6.34, at the beginning of 2000/2001, 2005/2006, 2010/2011, 2015/2016, 2017/2018, 2018/2019, 2019/2020, 2020/2021 academic years, respectively.

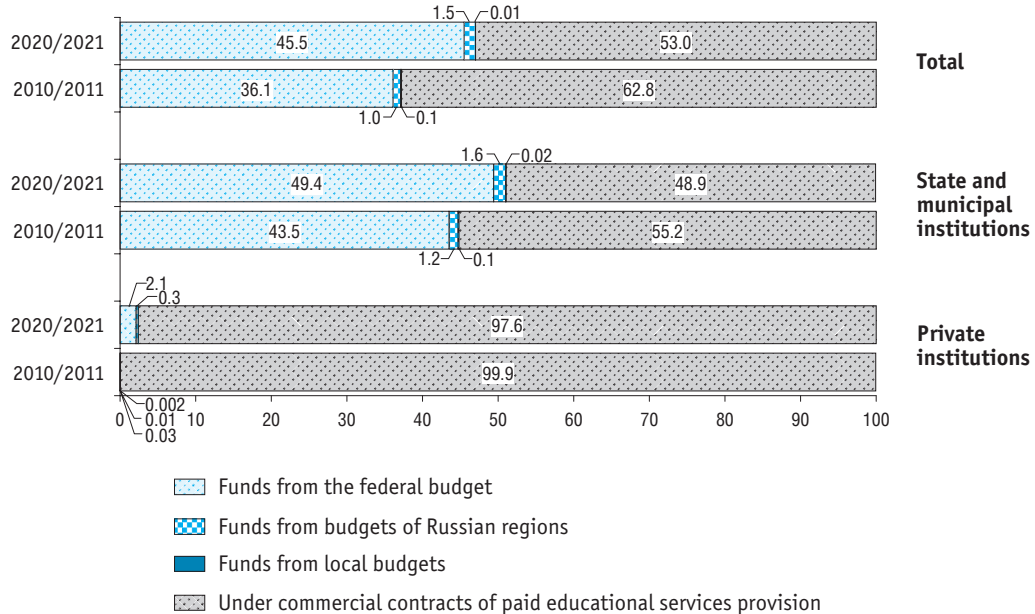
6.33. PERCENTAGE DISTRIBUTION OF ENROLMENT IN PROGRAMMES FOR MID-LEVEL SPECIALISTS BY SOURCE OF FUNDS (at the beginning of the academic year)



6.34. ENROLMENT, ENTRANTS, AND GRADUATES WITHIN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY SOURCE OF FUNDS (thousand persons)

	2000	2005	2010	2015	2017	2018	2019	2020
Enrolment, at the beginning of the academic year	4741.4	7064.6	7049.8	4766.5	4245.9	4161.7	4068.3	4049.3
Of whom studying:								
at the expense of budgetary funds	2802.0	3002.7	2619.8	1933.6	1904.6	1911.7	1890.1	1904.6
at state and municipal institutions	2802.0	3002.7	2619.3	1923.6	1898.5	1905.0	1883.3	1896.6
at private institutions	...	...	0.5	10.0	6.1	6.7	6.8	8.0
under commercial contracts of paid educational services provision	1939.4	4061.9	4430.0	2832.9	2341.3	2249.9	2178.2	2144.8
at state and municipal institutions	1468.8	2982.6	3229.5	2137.8	1924.6	1877.5	1853.0	1818.5
at private institutions	470.6	1079.3	1200.6	695.0	416.7	372.4	325.2	326.3
Entrants	1292.5	1640.5	1399.5	1221.8	1142.0	1147.9	1129.4	1093.3
Of whom studying:								
at the expense of budgetary funds	586.8	613.7	519.2	523.0	515.5	528.0	508.2	521.9
at state and municipal institutions	586.8	613.7	519.0	520.7	513.9	525.8	506.0	518.7
at private institutions	...	...	0.2	2.3	1.6	2.2	2.2	3.3
under commercial contracts of paid educational services provision	705.7	1026.8	880.1	698.8	626.5	620.0	621.2	571.4
at state and municipal institutions	553.5	758.8	676.4	528.8	520.3	515.8	521.0	464.4
at private institutions	152.2	268.0	203.8	169.9	106.1	104.1	100.2	107.0
Graduates	635.1	1151.7	1467.9	1300.5	969.5	933.2	908.6	849.4
Of whom studying:								
at the expense of budgetary funds	451.8	517.2	546.7	536.1	407.1	406.5	413.3	405.8
at state and municipal institutions	451.8	517.2	546.6	535.6	405.1	404.8	411.7	404.3
at private institutions	...	...	0.1	0.5	2.1	1.7	1.6	1.5
under commercial contracts of paid educational services provision	183.3	634.5	921.2	764.4	562.4	526.7	495.3	443.6
at state and municipal institutions	127.1	461.2	631.2	574.4	418.2	406.9	388.8	363.2
at private institutions	56.2	173.3	290.1	190.0	144.2	119.8	106.6	80.4

6.35. PERCENTAGE DISTRIBUTION OF ENROLMENT IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY SOURCE OF FUNDS (at the beginning of the academic year)



6.36. ENROLMENT, ENTRANTS, AND GRADUATES WITHIN POSTGRADUATE, RESIDENCY, AND APPRENTICESHIP PROGRAMMES BY SOURCES OF FUNDS

	2019		2020	
	Thousand persons	Percentage	Thousand persons	Percentage
Enrolment in postgraduate programmes, at the end of the year	84.3	100	87.8	100
Of whom studying:				
at the expense of budgetary funds	53.7	63.8	55.8	63.6
under commercial contracts of paid educational services provision	30.5	36.2	31.0	35.3
at the expense of institutions' own funds	–	–	1.0	1.1
Entrants to postgraduate programmes	24.9	100	27.7	100
Of whom:				
at the expense of budgetary funds	15.2	60.8	17.0	61.2
under commercial contracts of paid educational services provision	9.8	39.2	10.5	37.8
at the expense of institutions' own funds	–	–	0.3	1.0
Graduates of postgraduate programmes	15.5	100	14.0	100
Of whom studying:				
at the expense of budgetary funds	11.3	73.0	9.8	70.1
under commercial contracts of paid educational services provision	4.2	27.0	4.0	29.0
at the expense of institutions' own funds	–	–	0.1	0.9
Enrolment in residency programmes, at the end of the year	50.0	100	55.8	100
Of whom studying:				
at the expense of budgetary funds	24.5	49.1	29.0	52.1
under commercial contracts of paid educational services provision	25.5	50.9	26.7	47.9
at the expense of institutions' own funds	–	–	0.0	0.1

(continued)

	2019		2020	
	Thousand persons	Percentage	Thousand persons	Percentage
Entrants to residency programmes	26.8	100	29.0	100
Of whom:				
at the expense of budgetary funds	13.6	50.6	15.3	52.7
under commercial contracts of paid educational services provision	13.2	49.4	13.7	47.2
at the expense of institutions' own funds	–	–	0.0	0.1
Graduates of residency programmes	19.3	100	24.1	100
Of whom studying:				
at the expense of budgetary funds	8.3	43.0	10.7	44.6
under commercial contracts of paid educational services provision	11.0	57.0	13.3	55.2
at the expense of institutions' own funds	–	–	0.0	0.2
Enrolment in apprenticeship programmes, at the end of the year	0.8	100	1.0	100
Of whom studying:				
at the expense of budgetary funds	0.7	80.8	0.8	76.7
under commercial contracts of paid educational services provision	0.2	19.2	0.2	23.2
at the expense of institutions' own funds	–	–	0.0	0.1
Entrants to apprenticeship programmes	0.4	100	0.5	100
Of whom:				
at the expense of budgetary funds	0.3	79.3	0.4	73.5
under commercial contracts of paid educational services provision	0.1	20.7	0.1	26.5
at the expense of institutions' own funds	–	–	–	–
Graduates of apprenticeship programmes	0.3	100	0.4	100
Of whom studying:				
at the expense of budgetary funds	0.3	77.1	0.3	80.5
under commercial contracts of paid educational services provision	0.1	22.9	0.1	19.0
at the expense of institutions' own funds	–	–	0.0	0.6

6.37. PERCENTAGE DISTRIBUTION OF INDIVIDUALS WHO COMPLETED THEIR STUDIES WITHIN VOCATIONAL TRAINING PROGRAMMES BY PROGRAMME AND SOURCE OF FUNDS

	2017		2018		2019		2020	
	Thousand persons	Percentage	Thousand persons	Percentage	Thousand persons	Percentage	Thousand persons	Percentage
Total	1706.0	100	1793.4	100	1777.9	100	1889.6	100
Of whom studying:								
at the expense of budgetary funds	286.3	16.8	346.8	19.3	344.3	19.4	541.6	28.7
under commercial contracts of paid educational services provision	1419.7	83.2	1446.6	80.7	1433.7	80.6	1348.0	71.3
including at the expense of:								
individuals' funds	920.4	53.9	928.1	51.7	882.5	49.6	858.9	45.5
legal entities' funds	499.4	29.3	518.5	28.9	551.2	31.0	489.2	25.9
Vocational training programmes for skilled workers and employees	1046.9	100	1114.6	100	1165.9	100	1243.4	100
Of whom studying:								
at the expense of budgetary funds	216.4	20.7	248.8	22.3	266.0	22.8	375.8	30.2
under commercial contracts of paid educational services provision	830.4	79.3	865.8	77.7	899.9	77.2	867.6	69.8
including at the expense of:								
individuals' funds	663.1	63.3	688.9	61.8	689.0	59.1	655.1	52.7
legal entities' funds	167.3	16.0	176.9	15.9	210.9	18.1	212.4	17.1
Retraining programmes for skilled workers and employees	248.6	100	249.6	100	257.0	100	241.1	100
Of whom studying:								
at the expense of budgetary funds	18.1	7.3	22.6	9.0	27.7	10.8	35.6	14.8
under commercial contracts of paid educational services provision	230.5	92.7	227.0	91.0	229.3	89.2	205.5	85.2
including at the expense of:								
individuals' funds	118.8	47.8	113.0	45.3	104.8	40.8	96.8	40.1
legal entities' funds	111.7	45.0	114.0	45.7	124.5	48.4	108.7	45.1
Programmes aimed at upgrading professional skills of skilled workers and employees	410.6	100	429.2	100	355.0	100	405.1	100
Of whom studying:								
at the expense of budgetary funds	51.8	12.6	75.4	17.6	50.5	14.2	130.1	32.1
under commercial contracts of paid educational services provision	358.8	87.4	353.8	82.4	304.4	85.8	275.0	67.9
including at the expense of:								
individuals' funds	138.5	33.7	126.2	29.4	88.7	25.0	107.0	26.4
legal entities' funds	220.3	53.7	227.6	53.0	215.7	60.8	168.0	41.5

6.38. PERCENTAGE DISTRIBUTION OF INDIVIDUALS WHO COMPLETED THEIR STUDIES WITHIN ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY PROGRAMME AND SOURCE OF FUNDS

	2017		2018		2019		2020	
	Thousand persons	Percentage	Thousand persons	Percentage	Thousand persons	Percentage	Thousand persons	Percentage
Total	5964.2	100	6024.8	100	6338.4	100	6663.8	100
Of whom studying:								
at the expense of budgetary funds	1850.4	31.0	1759.9	29.2	1924.2	30.4	2468.4	37.0
under commercial contracts of paid educational services provision	4113.7	69.0	4264.8	70.8	4108.8	64.8	3818.3	57.3
including at the expense of:								
individuals' funds	1422.7	23.9	1466.0	24.3	1418.5	22.4	1382.1	20.7
legal entities' funds	2691.0	45.1	2798.9	46.5	2690.3	42.4	2436.2	36.6
at the expense of institutions' own funds	–	–	–	–	305.4	4.8	377.2	5.7
Professional (vocational) development programmes	5331.9	100	5340.6	100	5603.7	100	6014.6	100
Of whom studying:								
at the expense of budgetary funds	1764.7	33.1	1667.8	31.2	1828.6	32.6	2367.7	39.4
under commercial contracts of paid educational services provision	3567.3	66.9	3672.8	68.8	3493.8	62.3	3287.6	54.7
including at the expense of:								
individuals' funds	1053.7	19.8	1071.7	20.1	1037.0	18.5	1027.2	17.1
legal entities' funds	2513.6	47.1	2601.1	48.7	2456.7	43.8	2260.5	37.6
at the expense of institutions' own funds	–	–	–	–	281.3	5.0	359.3	6.0
Professional (vocational) retraining programmes	632.2	100	684.2	100	734.8	100	649.2	100
Of whom studying:								
at the expense of budgetary funds	85.8	13.6	92.1	13.5	95.6	13.0	100.7	15.5
under commercial contracts of paid educational services provision	546.5	86.4	592.0	86.5	615.0	83.7	530.6	81.7
including at the expense of:								
individuals' funds	369.0	58.4	394.2	57.6	381.4	51.9	354.9	54.7
legal entities' funds	177.4	28.1	197.8	28.9	233.6	31.8	175.7	27.1
at the expense of institutions' own funds	–	–	–	–	24.1	3.3	17.9	2.8

6.39. ENROLMENT IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY FIELD OF EDUCATION AND SOURCE OF FUNDS

(thousand persons)

	Total			Of whom studying:											
				at the expense of budgetary funds									under commercial contracts of paid educational services provision		
	federal budget			budgets of Russian regions			local budgets								
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Fields of education:															
technical engineering	2120.2	2401.4	2823.4	54.1	61.3	79.0	1042.2	1201.4	1478.0	777.1	826.0	907.7	246.7	312.8	358.7
natural sciences	2692.7	2773.5	2917.9	51.1	70.9	91.7	1370.6	1385.3	1447.9	667.2	679.4	693.3	603.8	637.9	685.1
tourism and local studies	1135.5	1120.6	1044.9	25.9	25.0	21.9	618.8	596.9	564.0	442.9	433.2	427.2	48.0	65.4	31.8
social and pedagogical	6018.0	6362.9	6189.6	51.1	76.0	72.8	2341.9	2461.8	2353.7	1681.2	1692.1	1705.6	1943.8	2133.0	2057.5
in arts:															
within general development programmes	7456.0	7313.3	6699.5	76.9	72.3	83.5	2666.4	2574.5	2211.1	3280.0	3189.1	3083.9	1432.8	1477.4	1321.0
within pre-vocational education programmes	977.7	1006.2	926.9	9.7	12.5	11.1	303.6	256.6	125.8	639.7	712.1	765.9	24.6	25.0	24.1
in physical training and sports:															
within general development programmes	5100.9	4993.5	4748.5	85.8	89.2	99.9	2259.7	2215.0	2103.0	1920.4	1808.2	1738.9	835.0	881.0	806.7
within pre-vocational education programmes	988.2	742.9	618.2	5.7	4.0	3.8	126.2	51.4	46.0	839.1	669.1	548.9	17.1	18.4	19.5

6.40. AVERAGE CONSUMER PRICES FOR PAID EDUCATIONAL SERVICES

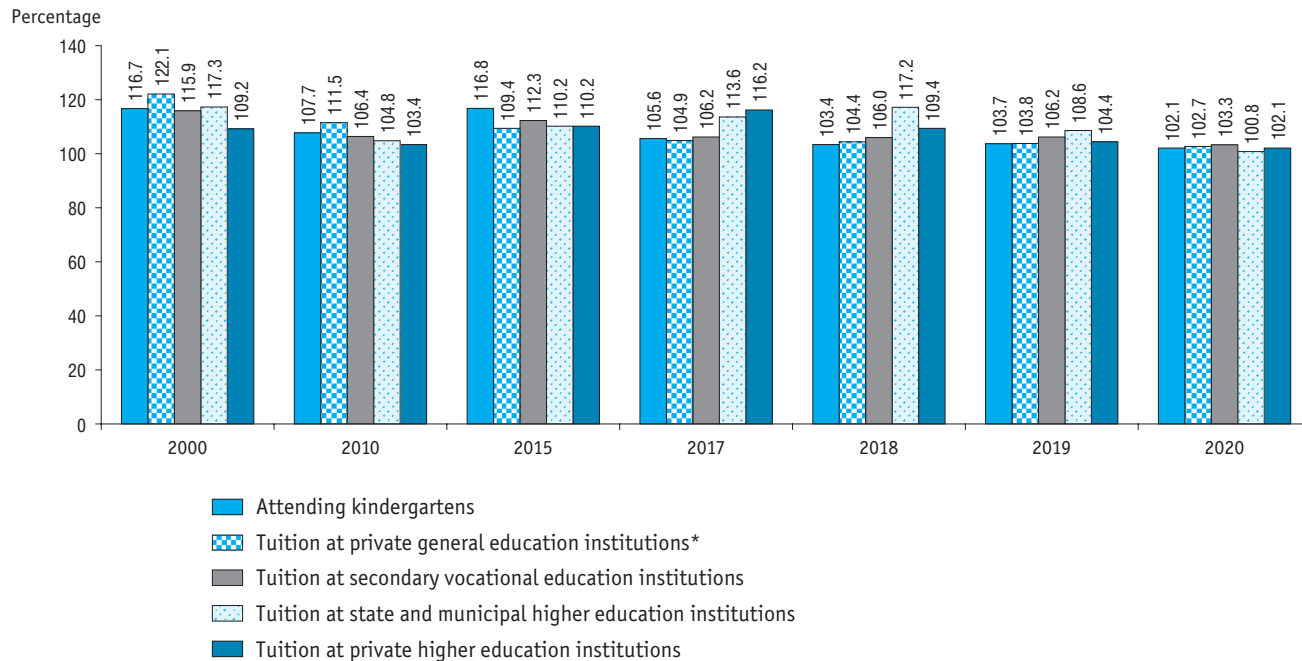
(at the end of the year; roubles)

	2000	2005	2010	2015	2017	2018	2019	2020
Attending kindergartens, <i>per day</i>	9.19	26.53	54.86	85.19	97.94	101.56	105.12	104.88
Additional studies for preschool children, <i>per academic hour</i>	...	...	...	...	187.16	195.89	213.48	223.08
Tuition at private general education institutions, <i>per month*</i>	1703.76	4168.46	9420.77	16029.83	17425.56	20134.79	20612.15	20852.05
Additional studies in state and municipal intramural full-time general education institutions, <i>per academic hour</i>	...	...	79.08	124.85	137.08	140.91	157.95	155.62
Tuition at secondary vocational education institutions, <i>per semester</i>	4232.07	8672.05	13981.85	27371.91	29992.16	31476.27	34143.28	32938.91
Tuition at state and municipal higher education institutions, <i>per semester</i>	7033.69	16026.90	25520.38	47626.92	57702.9	68260.1	74698.98	73170.35
Tuition at private higher education institutions, <i>per semester</i>	8310.66	15153.15	22983.61	38085.28	47292.17	51334.99	57867.67	53247.17
Foreign languages courses, <i>per academic hour</i>	31.09	72.24	148.21	261.77	277.15	281.33	312.05	311.21
Tuition at professional training courses, <i>per academic hour</i>	21.87	49.60	82.21	120.62	133.23	138.15	131.06	136.9
Basic category B driving course, <i>per course</i>	...	...	17725.13	28588.22	25388.78	26077.91	26721.79	27303.98

* In 2000, 2005, tuition at secondary general education institutions.

6.41. CONSUMER PRICE INDICES FOR SELECTED TYPES OF PAID EDUCATIONAL SERVICES

(December to December of the preceding year)



* In 2000, tuition at secondary general education institutions.

TECHNICAL NOTES

Total expenditure on education from all sources of funds is provided on the basis of HSE assessments and represent the sum of public expenditure and non-budgetary funds. The official reports of the Treasury of Russia were used as the source of data on public expenditure, the data on non-budgetary funds was taken from the results of federal statistical monitoring of educational organisations implementing the programmes of preschool education, primary general, basic general, and second-ary general education, secondary vocational education, higher education, vocational training, and additional professional (vocational) education programmes.

Consolidated budget of the Russian Federation aggregates the federal budget and all consolidated budgets of Russian regions (excluding inter-budgetary transfers between these budgets).

Federal extra-budgetary fund is a special fund that is not part of the federal budget or budgets of Russian regions.

Federal budget is intended for the execution of expenditure commitments of the Russian Federation.

Consolidated budget of a Russian region aggregates the budget of a Russian region and all municipal organisations within the region (excluding inter-budgetary transfers between these budgets).

Public expenditure (budget expenditure) are funds appropriated for financial provision of objectives and functions of the state, regional and local governments.

Public expenditure on education (budget expenditure on education in the Russian Federation) are funds appropriated for finan-

cial support of education. The data are taken from Section 0700 'Education' of annual reports on implementation of the consolidated budget of the Russian Federation and federal extra-budgetary funds.

Growth rates of public expenditure on education at constant prices demonstrate the dynamic of these expenses in the current year in comparison with the reference year at constant prices. In order to calculate public expenditure on education at constant prices, the GDP deflator is used.

Public expenditure on education per student by subsection of the budget expenditure classification is estimated by dividing the total public expenditure on each level of education by the number of students enrolled in the corresponding level of state-funded education. For primary general, basic general and secondary general education programmes, secondary vocational education programmes, and higher education programmes, the estimated enrolment is used converted to intramural full-time enrolment.

Paid educational services are monetary equivalent of the following educational services rendered to the population: child care and instruction in preschool education institutions, fee-based learning activities at educational institutions of all forms of ownership, paid courses, extracurricular activities, workshops, study (hobby) groups, studios, services on additional education of children and adults in sports, music, art, choreographic, and other schools, services of private tutors, and other services. This indicator is calculated using the data of federal statistical surveys

and non-observed activities assessment according to the procedure approved by Decree no. 643 of the Russian Federal State Statistics Service (Rosstat) of September 29, 2017.

Growth rates of paid educational services rendered to the population at comparable prices show the dynamic of those services in the current year as opposed to the reference year, excluding price fluctuations.

Household budget surveys are conducted by state statistics authorities in all Russian regions as voluntary sample surveys and involves approximately 48.5 thousand households. The survey programme implies that each household keeps a journal with current expenditures and at the end of the survey period (four months) all members of each household are interviewed.

Since 2001, while conducting household budget surveys, the acquisition and processing of statistical data that provide the rate and breakdown of household consumer expenditure, is conducted on the basis of the Classification of Individual Consumption by Purpose (KIPTS-DKh). The Classification was created by Rosstat on the basis of the Classification of Individual Consumption by Purpose (COICOP), one of classifications by purpose of the United Nations System of National Accounts (UNSNA), which serves as a standard classification of personal consumption expenditure of households.

Household refers to all individuals living in one dwelling or a part thereof, blood-related and not blood-related, who jointly provide themselves with everything they need to be self-sufficient by pooling and spending their finances in full or in part. A household may consist of a single individual living by himself/herself.

Consumer expenditure of households is a part of expenses used for acquiring consumer goods and services. It excludes expenditures on artwork, antiquities, and jewellery purchased as capital investment, payment for materials and construction works, or capital repairs of dwelling units and utility areas, regarded as investments.

Household expenditure on paid educational services includes the following expenses: preschool and primary education (tuition at primary schools, kindergartens, and nursery schools, etc.); secondary general education (tuition at secondary schools, gymnasias, lyceum schools, and other secondary educational institutions, including payments for janitor services, after-school clubs (excluding meals), security, etc.), including secondary extramural education for youth and adults; secondary vocational education (tuition); higher education (tuition). The indicator also includes expenditure on education that is not specified by the level, i.e. payment for educational services in vocational training (not requiring previous specialised education) and other types of education, such as computer courses, foreign languages, accounting courses, etc.

Funds received by educational institutions per student is calculated as the ratio of funds to average annual enrolment, adjusted for the conversion factor of actual enrolment converted to intramural full-time enrolment. When calculating the ratio for primary general, basic general, and secondary general education programmes, the estimated enrolment is calculated as intramural full-time enrolment plus 25% of intramural part-time enrolment plus 10% of extramural enrolment. For secondary vocational education programmes

and higher education programmes – bachelor's, specialist's and master's degree programmes, the estimated enrolment of students is calculated as intramural full-time enrolment plus 25% of intramural part-time enrolment plus 10% of extramural enrolment.

Indicators that characterise the funds received by educational institutions implementing secondary vocational education programmes; information on the enrolment, entrants and graduates within programmes for skilled workers and employees, programmes for mid-level specialists (since 2018) by source of funds are provided excluding the data from vocational education institutions of the Russian Federal Penitentiary Service.

Average consumer prices for the Russian Federation are calculated as the weighted average of prices in Russian regions.

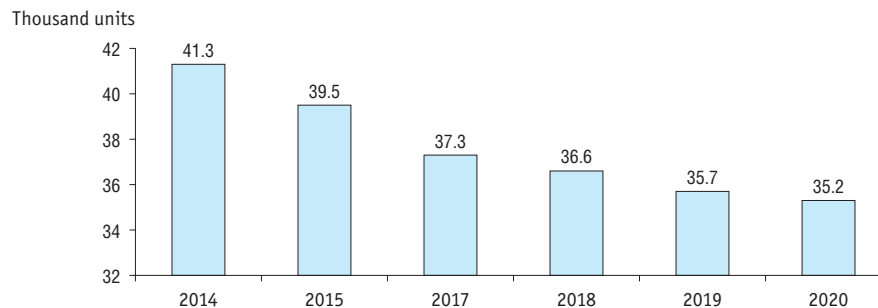
Consumer price (tariffs) index shows the relation between the cost of a consumer goods basket at current prices and the cost thereof at reference year prices and reflects the dynamics of overall level of prices and tariffs for goods and services acquired by the population for unproductive consumption. The monitoring of the price (tariffs) dynamics is conducted for all Russian regions. Information about the prices is gathered in the capitals of the republics, centres of other constituent entities, federal cities and, if necessary, in some district centres.



7

**INSTITUTIONS ENGAGED
IN EDUCATIONAL ACTIVITY**

7.1. PRESCHOOL EDUCATION INSTITUTIONS* (at the end of the year)



* Including institutions under capital repair, as well as which activities have been suspended.

7.2. INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES* (at the beginning of the academic year)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total	68804	63174	50793	43376	41958	41349	40823	40346
State and municipal institutions	68169	62448	50128	42593	41103	40498	39966	39462
Urban areas	22694	21743	19505	17337	17111	17004	16907	16812
Rural areas	45475	40705	30623	25256	23992	23494	23059	22650
Private institutions	635	726	665	783	855	851	857	884
Urban areas	...	...	620	720	763	763	770	792
Rural areas	...	...	45	63	92	88	87	92

* Including institutions under capital repair, as well as which activities have been suspended.

7.3. ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY FIELD OF EDUCATION *

	2000	2005	2010	2015	2017	2018	2019	2020
Total	8699	8876	8539	14360	13407	12735	11726	11474
Fields of education:								
encompassing all types of educational activities	3577	3654	3683	3782	3603	3515	3512	3528
art	371	418	780	4375	4472	4652	4496	4578
ecological and biological	467	445	331	219	196	174	165	157
tourism and local studies	335	331	256	185	170	155	155	149
engineering and technology	570	536	327	217	220	211	213	218
sports	2968	3072	2760	4445	3577	2901	2147	1882
military and technical sports	112	89	101	68	65	48	41	38
other	299	331	293	1068	1104	1079	997	924

*The data refer to additional education institutions that provide reports to the Ministry of Education of the Russian Federation.

7.4. INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY FIELD OF EDUCATION*

	2020
Fields of education:	
technical engineering	22429
natural sciences	22967
tourism and local studies	15661
social and pedagogical	38573
in arts:	
within general development programmes	40735
within pre-vocational education programmes	5473
in physical education and sports:	
within general development programmes	37418
within pre-vocational education programmes	1822

* According to Rosstat data.

7.5. EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES
(at the beginning of the academic year)

	Total			State and municipal institutions			Private institutions		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Vocational education institutions	3311	3300	3273	2961	2922	2890	350	378	383
Separate subdivisions (branches) of vocational education institutions	609	630	608	536	561	537	73	69	71
Higher education institutions	348	342	338	289	292	294	59	50	44
Separate subdivisions (branches) of higher education institutions	443	420	435	383	363	379	60	57	56

7.6. INSTITUTIONS IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES*

(at the beginning of the academic year)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total	965	1068	1115	896	766	741	724	710
State and municipal institutions	607	655	653	530	500	496	495	497
Private institutions	358	413	462	366	266	245	229	213

* Here and below in table 7.7, in the 2000/2001, 2005/2006, 2010/2011, 2015/2016 academic years, higher education institutions; from the 2017/2018 academic year, including research institutes implementing master's programmes.

7.7. BRANCHES OF INSTITUTIONS IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES

(at the beginning of the academic year)

	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total	1621	1668	1079	651	596	563	549
State and municipal institutions	1102	1069	727	480	455	435	430
Private institutions	519	599	352	171	141	128	119

7.8. INSTITUTIONS IMPLEMENTING POSTGRADUATE PROGRAMMES

(at the end of the year)

	2000	2005	2010	2015	2017	2018	2019	2020
Total	1362	1473	1568	1446	1284	1223	1187	1189
Research institutes	797	833	809	771	670	618	599	588
Higher education institutions	565	640	748	661	599	585	567	566
Additional professional (vocational) education institutions	...	...	11	14	15	14	17	18
Other institutions	...	...	...	...	...	6	4	17

7.9. INSTITUTIONS IMPLEMENTING RESIDENCY AND APPRENTICESHIP PROGRAMMES

(at the end of the year)

	Residency programmes		Apprenticeship programmes	
	2019	2020	2019	2020
Total	178	192	36	36
Research institutes	91	91	–	–
Higher education institutions	79	80	36	36
Additional professional (vocational) education institutions	6	7	–	–
Other institutions	2	14	–	–

7.10. INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES

(at the end of the year)

	2016	2018	2019	2020
Vocational education institutions	2682	2768	2885	2971
Separate subdivisions (branches) of vocational education institutions	141	164	202	229
General education institutions	206	159	180	142
Separate subdivisions (branches) of general education institutions	7	4	1	3
Higher education institutions	145	173	188	216
Separate subdivisions (branches) of higher education institutions	82	121	105	121
Additional education institutions	142	143	123	129
Separate subdivisions (branches) of additional education institutions	4	–	–	–
Additional professional (vocational) education institutions	797	925	922	1070
Separate subdivisions (branches) of additional professional (vocational) education institutions	25	32	42	50
Other institutions*	590	535	539	634

* Here and below in table 7.11, including separate subdivisions (branches).

7.11. INSTITUTIONS IMPLEMENTING ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES
(at the end of the year)

	2016	2018	2019	2020
Additional professional (vocational) education institutions	2278	1981	2117	2021
Vocational education institutions	2254	2044	2051	1952
Higher education institutions	1162	1121	1110	1117
Research institutes	98	137	134	136
Other institutions	660	552	623	617

TECHNICAL NOTES

Educational institution is a non-profit organisation undertaking licensed educational activity as its main activity in accordance with the objectives for which it was founded. In the Russian Federation there are several types of educational institutions implementing the following programmes: basic education programmes – preschool education institutions, general education institutions, vocational education institutions, higher education institution; additional education programmes – additional education institutions, additional professional (vocational) education institutions.

Preschool education can be received at institutions engaged in educational activities within preschool education and child care programmes: preschool education institutions, general education institutions, vocational education institutions, higher education institutions, additional education institutions for children, other institutions engaged in educational activities within preschool education and child care programmes as additional to their main activity.

General education can be received at general education institutions, vocational education institutions, higher education institutions, and other institutions. The latter include institutions engaged in educational activities within primary general education programmes, basic general education programmes, and secondary general education programmes as additional to their main activity.

Secondary vocational education under programmes for skilled workers and employees and programmes for mid-level specialists

can be received at vocational education institutions and higher education institutions engaged in educational activities within secondary vocational education programmes – programmes for skilled workers and employees and programmes for mid-level specialists.

Data on educational institutions implementing secondary vocational education programmes are provided excluding vocational education institutions of the Russian Federal Penitentiary Service.

Higher education under bachelor's, specialist's, and master's programmes can be received at higher education institutions and research institutes engaged in educational activities within master's programmes; higher education – highly-qualified personnel training can be received at institutions engaged in educational activities within postgraduate programmes; higher education – residency programmes can be received at higher education institutions, additional professional (vocational) education institutions, and research institutes. Higher education – apprenticeship programmes can be received at higher education institutions.

Preschool education institution is an educational institution engaged in educational activity within preschool education and child care programmes as its main activity.

General education institution is an educational institution engaged in educational activity within primary general, basic general and/or secondary general education programmes as its main activity.

Vocational education institution is an educational institution engaged in educational activity within secondary vocational

education and/or vocational training programmes as its main activity.

Higher education institution is an educational institution engaged in educational activity within higher education programmes and scientific research as its main activity.

The main types of educational institutions implementing additional education programmes are:

- **additional education institution** – an educational institution engaged in educational activity within additional general education programmes as its main activity;
- **additional professional (vocational) education institution** – an educational institution engaged in educational activity within additional professional (vocational) programmes as its main activity.



8

ENROLMENT

8.1. General education programmes

8.1.1. Preschool education programmes

8.1.1.1. ENROLMENT IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES*

(at the end of the year)

	2000	2005	2010	2017	2018	2019	2020
Total, thousand persons	4263.0	4530.4	5388.0	7477.9	7582.4	7606.7	7442.9
Urban areas	3408.5	3611.0	4280.6	5976.5	6083.6	6128.5	6019.6
Rural areas	854.5	919.4	1107.3	1501.5	1498.9	1478.2	1423.4
In the total enrolment – students of private institutions, thousand persons	98.8	86.7	46.1	111.4	112.2	109.2	107.2
As a percentage of the total	2.3	1.9	0.9	1.5	1.5	1.4	1.4
Participation of children in preschool education, as a percentage of all children aged 1–6	53.7	55.3	57.8	65.5	67.2	69.4	70.7
Urban areas	63.3	63.2	65.3	71.7	73.0	75.0	76.1
Rural areas	33.5	37.1	40.0	48.9	50.9	53.0	54.5

* Here and below in this section, in 2000, 2005, and 2010 – preschool education institutions.

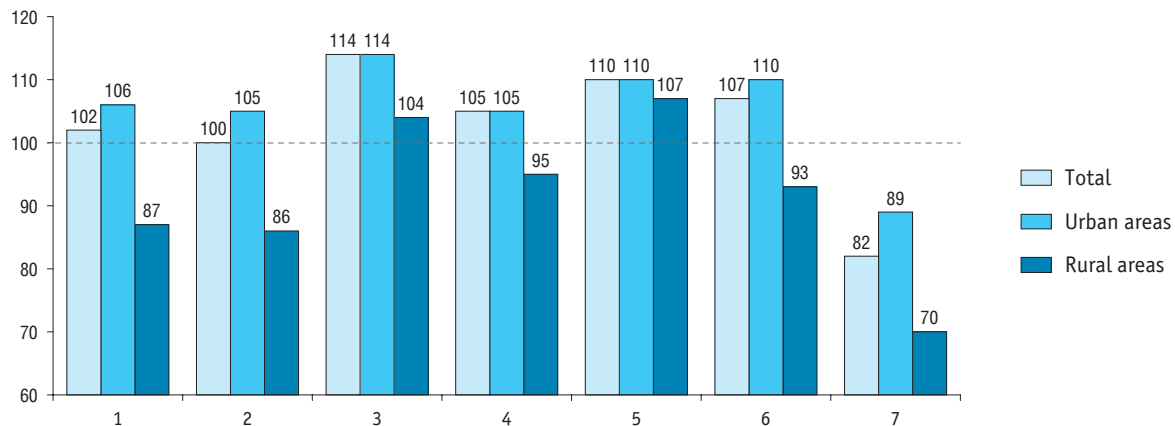
8.1.1.2. ENROLMENT IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES BY GENDER AND AGE

(at the end of the year; completed years as of January, 1; thousand persons)

	Total	Age, years							
		Under 1	1	2	3	4	5	6	7 and over
2010									
Total	5388.0	0.8	105.3	787.2	1082.1	1109.0	1124.0	1056.7	122.8
Boys	2780.9	0.4	55.4	412.3	552.4	568.9	578.1	546.1	67.2
Girls	2607.0	0.4	49.9	374.9	529.7	540.1	545.9	510.6	55.6
2015									
Total	7151.6	1.6	138.2	921.8	1518.0	1521.2	1531.5	1390.8	128.4
Boys	3708.6	0.8	72.2	478.5	783.3	785.9	792.9	721.7	73.2
Girls	3442.9	0.8	66.0	443.3	734.7	735.4	738.6	669.0	55.2
2020									
Total	7442.9	5.4	173.8	894.8	1348.9	1605.2	1672.3	1576.4	166.0
Boys	3853.3	2.9	90.9	463.7	693.5	826.5	860.2	819.1	96.4
Girls	3589.6	2.5	82.9	431.1	655.4	778.7	812.1	757.3	69.6

8.1.1.3. ENROLMENT PER 100 STUDY PLACES IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES: 2020

(at the end of the year; persons)



1 – Total

2 – General development groups

3 – Compensatory groups

4 – Health groups

5 – Combined groups

6 – Early childhood groups

7 – Child care groups

**8.1.1.4. ENROLMENT IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES
BY TYPE OF EDUCATIONAL INSTITUTIONS**
(at the end of the year; thousand persons)

	Total			Urban areas			Rural areas		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total	7582.4	7606.7	7442.9	6083.6	6128.5	6019.6	1498.9	1478.2	1423.4
Preschool education institutions	6363.1	6344.6	6200.2	5241.2	5248.5	5145.9	1121.9	1096.1	1054.3
Separate subdivisions (branches) of preschool education institutions	124.5	131.4	121.5	95.4	102.1	95.7	29.1	29.3	25.8
Separate divisions (branches) of general education institutions	192.3	197.7	195.6	105.3	108.4	104.6	87.1	89.3	90.9
Separate subdivisions (branches) of vocational education institutions and higher education institutions	2.7	1.8	1.6	2.3	1.6	1.5	0.4	0.2	0.1
Institutions with subdivisions (branches) implementing preschool education and child care programmes:									
general education institutions	866.5	894.3	887.4	613.0	638.0	641.4	253.5	256.2	246.0
vocational education institutions and higher education institutions	5.1	5.3	5.2	5.0	5.2	5.0	0.1	0.1	0.2
additional education institutions	2.8	3.4	2.6	2.3	2.9	2.0	0.5	0.5	0.6
other institutions	16.7	18.1	18.9	15.1	16.3	17.1	1.6	1.9	1.8
Institutions implementing child care, without implementing preschool education programmes	8.7	10.1	10.0	4.0	5.4	6.4	4.7	4.6	3.6

**8.1.1.5. ENROLMENT IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES
BY GROUP AND AVERAGE GROUP SIZE
(at the end of the year)**

	2017	2018	2019	2020		
				Total	Urban areas	Rural areas
Enrolment, thousand persons	7477.9	7582.4	7606.7	7442.9	6019.6	1423.4
General development groups	6428.3	6447.4	6358.7	6170.2	4885.9	1284.2
Compensatory groups	400.9	408.2	414.7	416.2	387.3	28.9
Health groups	77.3	72.4	75.1	75.4	70.3	5.1
Combined groups	397.3	476.0	568.0	583.4	524.4	59.0
Early childhood groups	131.3	135.8	146.8	152.9	124.6	28.3
Child care groups	23.4	23.7	23.6	24.4	16.4	7.9
Family preschool groups	19.5	19.0	20.0	20.6	10.7	9.9
Average group size, persons	23	23	23	22	23	19
General development groups	24	24	24	23	25	19
Compensatory groups	15	15	15	14	14	14
Health groups	21	21	20	21	21	20
Combined groups	24	25	25	25	25	22
Early childhood groups	21	22	21	19	20	16
Child care groups	17	13	14	15	17	13
Family preschool groups	9	9	9	8	6	15

8.1.1.6. ENROLMENT IN SHORT-TERM GROUPS AND ROUND-THE-CLOCK STAY GROUPS IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES

(at the end of the year)

	2017	2018	2019	2020		
				Total	Urban areas	Rural areas
Enrolment in short-term groups:						
thousand persons	175.1	169.0	157.7	132.3	94.3	38.0
per group, <i>persons</i>	14	14	14	11	12	10
Enrolment in round-the-clock stay groups:						
thousand persons	22.8	23.0	24.6	23.5	20.3	3.2
per group, <i>persons</i>	16	13	13	11	10	12

8.1.1.7. STUDY PLACES AVAILABLE IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES (at the end of the year)

	2000	2005	2010	2016	2017	2018	2019	2020
Total								
Places in institutions:								
thousand places	5231.9	4765.5	5031.4	7012.1	7117.4	7206.9	7284.7	7320.7
per 1,000 children aged 1–6	675	597	553	635	633	639	665	696
Urban areas								
Places in institutions:								
thousand places	3862.2	3539.1	3796.2	5416.1	5504.2	5589.6	5659.5	5689.2
per 1,000 children aged 1–6	727	630	590	677	667	671	693	719
Rural areas								
Places in institutions:								
thousand places	1369.7	1226.4	1235.2	1596.0	1613.2	1617.4	1625.3	1631.5
per 1,000 children aged 1–6	561	517	463	524	537	549	583	625

8.1.1.8. AVAILABILITY OF PRESCHOOL EDUCATION *

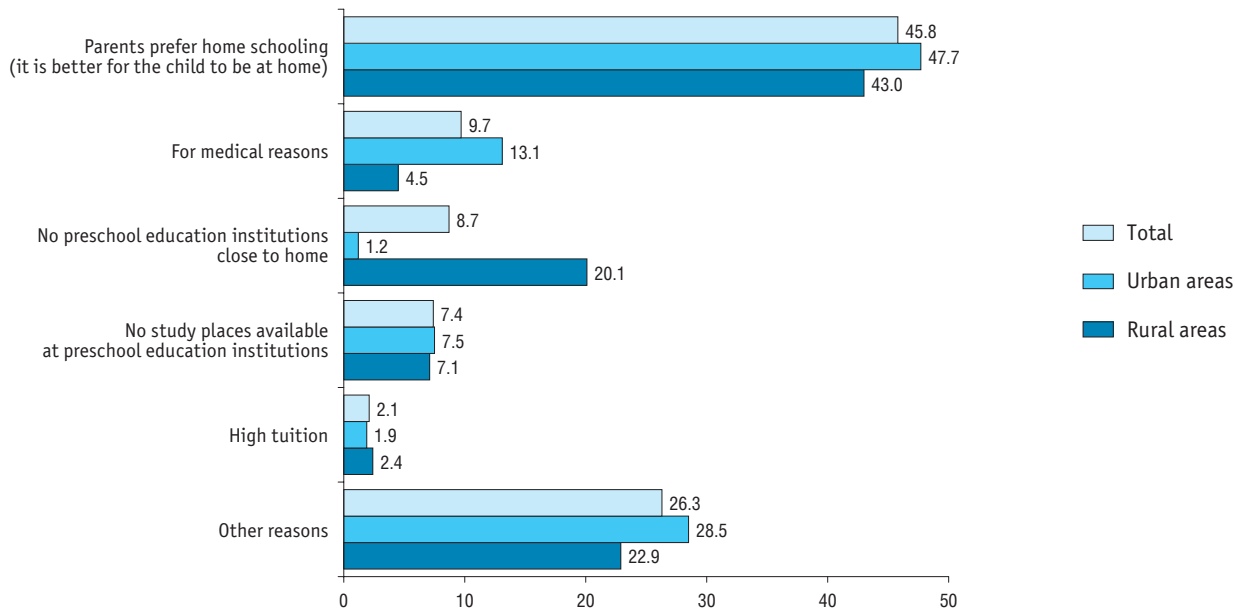
	For children aged, years					
	0–3			3–7		
	As of December 1, 2019	As of December 1, 2020	As of February 1, 2021	As of December 1, 2019	As of December 1, 2020	As of February 1, 2021
Availability of preschool education**, <i>percentage</i>	85.1	89.5	92.2	99.0	99.1	99.2
Number of children who are wait-listed to be provided with a study place in a state or municipal preschool education institution, <i>thousand persons</i>	2224.9	1881.7	1932.0	372.3	324.7	337.4
Number of children who have not been provided with a study place in a state or municipal preschool education institution, <i>thousand persons</i>	194.2	128.9	85.4	63.1	55.9	51.9

* According to the Federal Preschool Education Availability Data System.

** The interpretation of this indicator and its calculation method are given in the Technical Notes.

8.1.1.9. REASONS FOR NON-PARTICIPATION OF CHILDREN AGED 3–8 IN PRESCHOOL EDUCATION: 2020*

(at the end of the year; as a percentage all children aged 3–8** who do not attend any preschool education institutions after having reached the specified age)



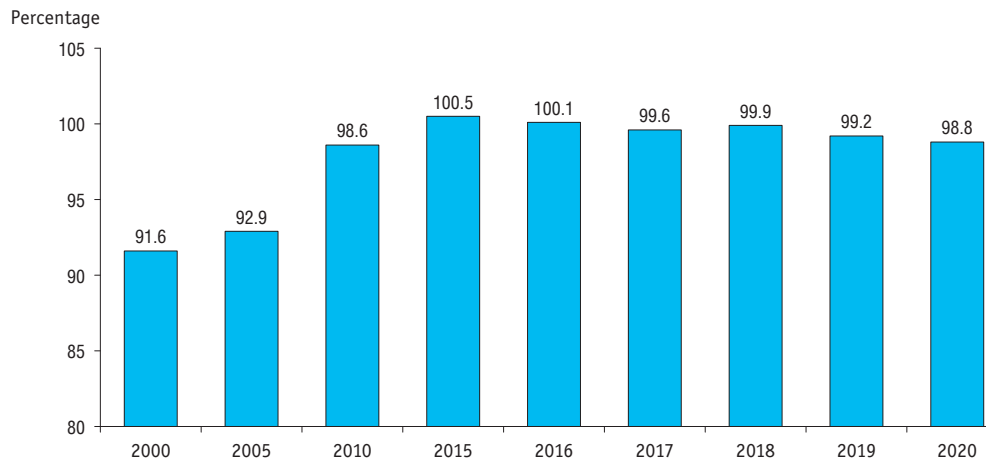
* According to the Comprehensive monitoring of living conditions (see Technical Notes in Section 2). According to parents (legal guardians (representatives)).

** Excluding children enrolled in general education institutions (including home-based modes of study).

8.1.2. Primary general, basic general, and secondary general education programmes

8.1.2.1. PARTICIPATION OF CHILDREN IN PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION

(ratio of enrolment in primary general, basic general, and secondary general education to children aged 7–17)



8.1.2.2. ENROLMENT IN PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(at the beginning of the academic year; thousand persons)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021		
								Total	Boys	Girls
Total	20553.5	15630.9	13642.4	14770.4	15705.9	16137.3	16565.6	16893.7	8625.8	8267.9
State and municipal institutions	20492.9	15558.5	13568.9	14665.9	15587.6	16013.6	16435.1	16749.9	8551.6	8198.4
Urban areas	14389.1	10844.7	9761.3	10911.0	11738.6	12120.5	12506.1	12785.8	6514.0	6271.8
Rural areas	6103.8	4713.7	3807.6	3754.8	3848.9	3893.0	3929.0	3964.1	2037.6	1926.6
Private institutions	60.6	72.3	73.5	104.5	118.4	123.7	130.4	143.8	74.2	69.5
Urban areas	...	...	68.8	96.7	106.9	112.1	118.5	131.2	67.5	63.6
Rural areas	...	...	4.7	7.8	11.5	11.6	12.0	12.6	6.7	5.9

8.1.2.3. ENROLMENT IN PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY MODE OF STUDY

(at the beginning of the academic year; thousand persons)

	2017/2018	2018/2019	2019/2020	2020/2021
	Total			
Total	15705.9	16137.3	16565.6	16893.7
Mode of study:				
intramural full-time	15590.9	16024.5	16451.5	16785.5
intramural part-time	69.1	71.1	78.7	70.2
extramural	45.8	41.7	35.4	38.0
	State and municipal institutions			
Total	15587.6	16013.6	16435.1	16749.9
Mode of study:				
intramural full-time	15476.6	15906.3	16328.8	16656.1
intramural part-time	68.5	70.4	78.1	69.0
extramural	42.5	36.8	28.2	24.8
	Private institutions			
Total	118.4	123.7	130.4	143.8
Mode of study:				
intramural full-time	114.4	118.2	122.7	129.4
intramural part-time	0.7	0.6	0.6	1.2
extramural	3.3	4.9	7.2	13.2

8.1.2.4. ENROLMENT IN PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION BY GROUP OF GRADES*
(at the beginning of the academic year; thousand persons)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total								
Total	19560.2	14755.4	12970.1	14250.1	15509.3	15934.2	16357.6	16685.7
Grades:								
1 st –4 th	5702.3	5164.7	5318.3	6198.8	6852.7	7045.7	7229.2	7340.1
5 th –9 th	11076.5	7131.3	6205.5	6780.6	7238.5	7433.7	7667.3	7907.1
10 th –11 th (12 th)	2781.3	2459.4	1446.3	1270.7	1418.1	1454.8	1461.1	1438.4
State and municipal institutions								
Total	19499.7	14683.1	12896.6	14145.7	15391.1	15810.6	16227.3	16542.1
Grades:								
1 st –4 th	5682.4	5136.1	5285.0	6149.6	6955.0	6986.3	7166.8	7271.5
5 th –9 th	11047.9	7102.1	6174.9	6737.2	7190.4	7383.2	7613.8	7848.0
10 th –11 th (12 th)	2769.4	2444.8	1436.7	1258.9	1405.0	1441.1	1446.7	1422.6
Private institutions								
Total	60.6	72.3	73.5	104.4	118.2	123.6	130.3	143.6
Grades:								
1 st –4 th	20.0	28.6	33.3	49.2	57.1	59.5	62.4	68.6
5 th –9 th	28.7	29.1	30.6	43.4	48.1	50.5	53.5	59.1
10 th –11 th (12 th)	12.0	14.6	9.6	11.8	13.1	13.6	14.4	15.9

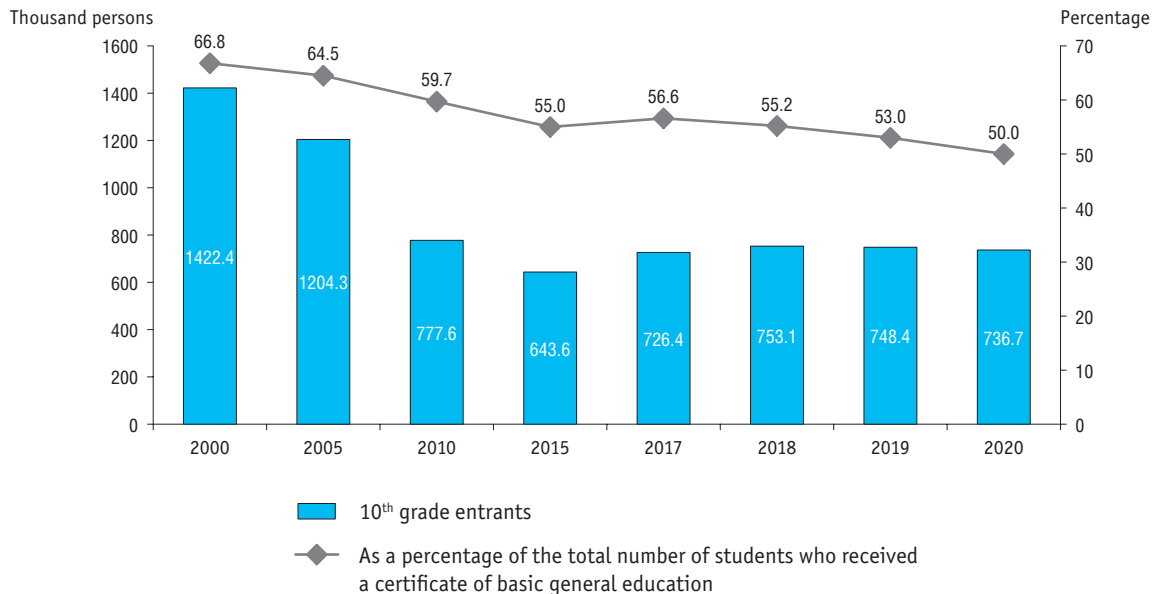
* Here and below in table 8.1.2.5, until the 2017/2018 academic year – excluding separate general education institutions and classes for students with limited health capacities; special (correctional) educational institutions for students with deviant (socially dangerous) behaviour; sanatorium-type education institutions for students with long-term medical care needs; educational institutions for students who need psychological, medical, and social assistance; excluding intramural part-time (shift-based) general education institutions. The data for the 2017/2018 academic year – excluding separate institutions and classes for mentally handicapped students (students with mental development disorders).

**8.1.2.5. AVERAGE CLASS SIZE IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL,
AND SECONDARY GENERAL EDUCATION PROGRAMMES**
(at the beginning of the academic year; persons)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total								
Grades:								
1 st –4 th *	18	18	20	21	20	21	21	21
5 th –9 th	21	18	18	19	19	20	20	20
10 th –11 th (12 th)	21	19	17	17	17	17	17	17
State and municipal institutions								
Grades:								
1 st –4 th *	18	18	20	21	21	21	21	21
5 th –9 th	21	18	18	19	20	20	20	20
10 th –11 th (12 th)	21	19	17	17	17	17	17	17
Private institutions								
Grades:								
1 st –4 th *	10	10	11	13	13	14	14	14
5 th –9 th	11	10	10	12	12	12	13	13
10 th –11 th (12 th)	12	11	9	10	10	10	10	11

* Until the 2017/2018 academic year – including combined classes.

8.1.2.6. 10TH GRADE ENTRANTS TO INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES*



* Before 2017, excluding separate general education institutions and classes for students with limited health capacities; special (correctional) educational institutions for students with deviant (socially dangerous) behaviour; sanatorium-type education institutions for students with long-term medical care needs; educational institutions for students who need psychological, medical, and social assistance; excluding intramural part-time (shift-based) general education institutions. In 2017, excluding separate institutions and classes for mentally handicapped students (students with mental development disorders).

8.1.2.7. ENROLMENT IN CLASSES WITH IN-DEPTH STUDIES OF SELECTED SUBJECTS IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(at the beginning of the academic year)

	Total			Urban areas			Rural areas		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total									
Enrolment in classes with in-depth studies of selected subjects:									
thousand persons	2342.9	2436.3	2543.3	2268.8	2353.1	2452.2	74.1	83.2	91.1
as a percentage of the total	14.9	15.0	15.4	19.0	19.1	19.5	1.9	2.1	2.3
State and municipal institutions									
Enrolment in classes with in-depth studies of selected subjects:									
thousand persons	2314.5	2405.1	2510.2	2242.8	2324.7	2421.9	71.7	80.4	88.3
as a percentage of the total	14.8	15.0	15.3	19.0	19.1	19.4	1.9	2.1	2.3
Private institutions									
Enrolment in classes with in-depth studies of selected subjects:									
thousand persons	28.4	31.2	33.1	26.0	28.4	30.3	2.4	2.8	2.8
as a percentage of the total	23.0	24.0	23.1	23.2	24.0	23.1	21.0	23.3	22.6

8.1.2.8. ENROLMENT IN SUBJECT-ORIENTED CLASSES (GROUPS) IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES
(at the beginning of the academic year)

	Total			Urban areas			Rural areas		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total									
Enrolment in subject-oriented classes (groups) (10 th –11 th (12 th) grade):									
thousand persons	797.2	823.5	906.0	700.6	725.2	785.7	96.5	98.3	120.3
as a percentage of the total enrolment (10 th –11 th (12 th) grade)	54.8	56.4	63.1	60.5	61.8	67.6	32.5	34.4	44.1
State and municipal institutions									
Enrolment in subject-oriented classes (groups) (10 th –11 th (12 th) grade):									
thousand persons	792.2	818.1	899.0	696.0	720.1	779.0	96.2	98.0	119.9
as a percentage of the total enrolment (10 th –11 th (12 th) grade)	55.0	56.5	63.3	60.8	62.1	67.9	32.5	34.4	44.1
Private institutions									
Enrolment in subject-oriented classes (groups) (10 th –11 th (12 th) grade):									
thousand persons	5.0	5.4	7.0	4.7	5.1	6.6	0.3	0.4	0.4
as a percentage of the total enrolment (10 th –11 th (12 th) grade)	38.0	37.7	44.3	37.4	38.3	44.6	26.4	31.6	39.3

**8.1.2.9. SHIFTS IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL,
AND SECONDARY GENERAL EDUCATION PROGRAMMES***
(at the beginning of the academic year)

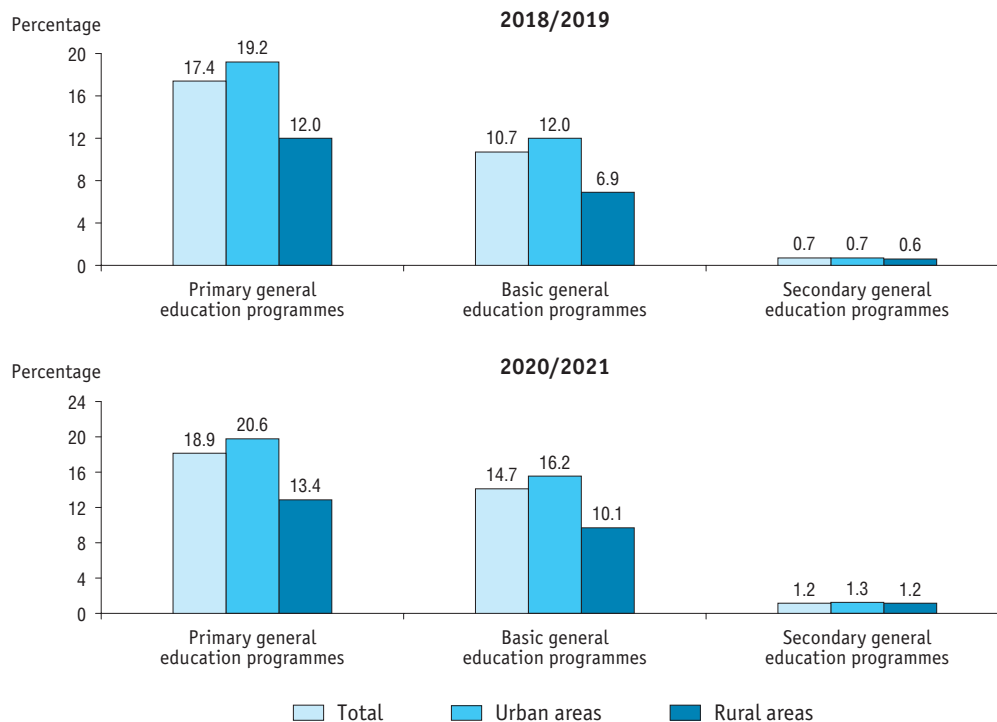
	2000/2001	2005/2006	2010/2011	2017/2018**	2018/2019**	2019/2020**	2020/2021**		
							Total	Urban areas	Rural areas
Enrolment in institutions with:									
one-shift schedule:									
thousand persons	15354.5	12456.1	11203.1	13295.5	13648.9	13952.3	13887.1	10410.4	3476.7
as a percentage of the total	79.2	85.0	86.9	87.4	87.2	86.8	84.6	83.2	89.0
two- or three-shift schedule:									
thousand persons	4033.8	2191.2	1689.8	1924.6	2002.9	2129.0	2530.1	2102.5	427.6
as a percentage of the total	20.8	15.0	13.1	12.6	12.8	13.2	15.4	16.8	11.0

* In the 2010/2011 academic year and earlier, excluding separate general education institutions and classes for students with limited health capacities; special (correctional) educational institutions for students with deviant (socially dangerous) behaviour; sanatorium-type education institutions for students with long-term medical care needs; educational institutions for students who need psychological, medical, and social assistance; excluding intramural part-time (shift-based) general education institutions; excluding private general education institutions.

** Here and below in figure 8.1.2.10, for intramural full-time classes – excluding separate institutions and classes for students with limited health capacities

8.1.2.10. ENROLMENT IN INSTITUTIONS WITH TWO- OR THREE-SHIFT SCHEDULE AS A PERCENTAGE OF THE TOTAL ENROLMENT IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(at the beginning of the academic year)

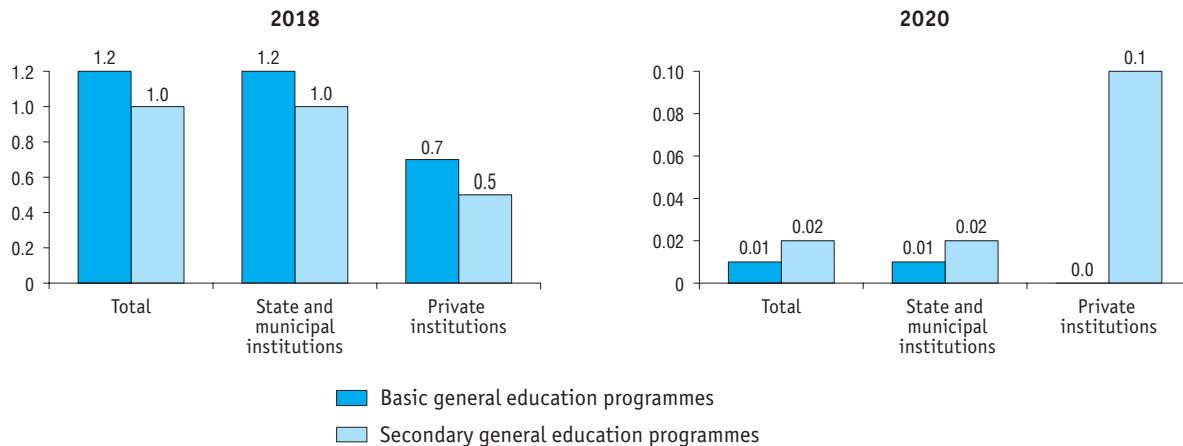


8.1.2.11. GRADUATES OF INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(thousand persons)

	2000	2005	2010	2015	2017	2018	2019	2020
Graduates who have received:								
certificate of basic general education	2199.5	1944.1	1354.1	1198.3	1283.0	1364.6	1411.4	1473.6
certificate of secondary general education	1457.8	1466.0	789.3	647.8	621.2	647.5	659.1	687.8

8.1.2.12. STUDENTS WHO FAILED THE STATE FINAL EXAMINATION AS A PERCENTAGE OF THE TOTAL NUMBER OF STUDENTS WHO TOOK THE STATE FINAL EXAMINATION WITHIN BASIC GENERAL AND SECONDARY GENERAL EDUCATION PROGRAMME



8.2. Secondary vocational education programmes

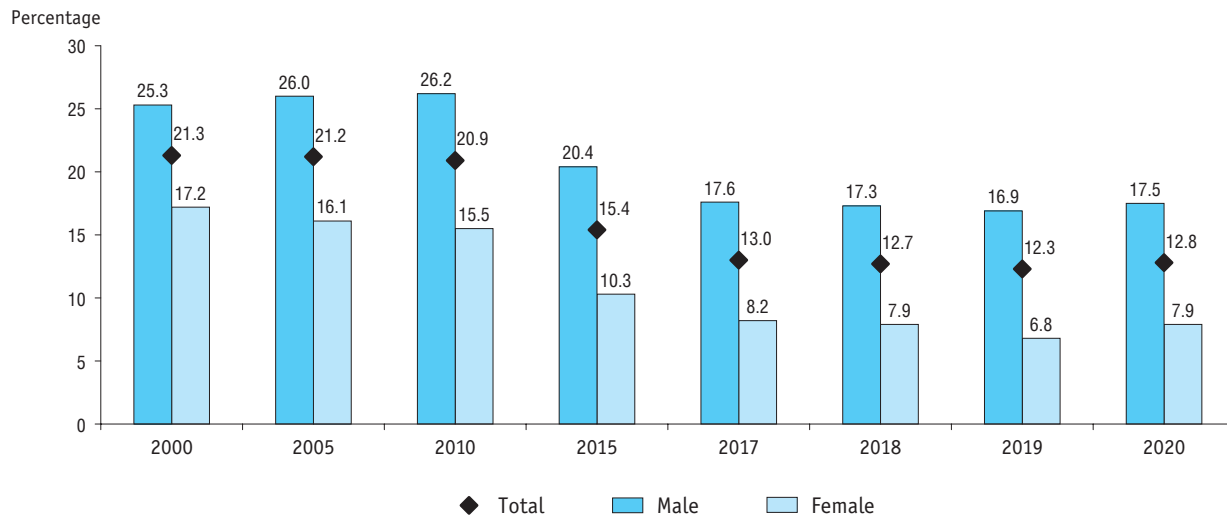
8.2.1. ENROLMENT IN PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES

(at the beginning of the academic year)

	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Total, thousand persons	547.6	543.2	542.1	543.4	576.5
State and municipal institutions	547.3	542.4	540.8	541.7	574.9
Private institutions	0.3	0.8	1.2	1.8	1.6
Enrolment per 10,000 population, persons	37	37	37	37	39
In the total enrolment – by mode of study:					
intramural full-time	543.4	539.4	538.7	539.8	573.1
intramural part-time	4.1	3.8	3.4	3.6	3.4
extramural	0.0	0.0	0.0	0.0	0.0
In the total enrolment – within educational programmes of:					
basic general education	513.0	509.8	509.4	512.3	546.5
secondary general education	34.6	33.4	32.7	31.1	30.0

8.2.2. PARTICIPATION OF YOUNG ADULTS IN PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES BY GENDER

(ratio of enrolment in secondary vocational education – programmes for skilled workers and employees to population aged 15–17)



8.2.3. ENROLMENT IN PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES BY GENDER AND AGE

(at the beginning of the academic year; completed years as of January, 1; thousand persons)

	Total	Age, years											
		15 and under	16	17	18	19	20	21	22	23	24	25	26 and over
2019/2020													
Total	543.4	23.1	121.6	149.8	130.1	51.2	20.7	11.7	7.4	4.4	2.9	2.1	18.5
Male	384.2	16.3	88.5	108.0	94.0	35.7	13.3	7.0	4.4	2.7	1.8	1.3	11.2
Female	159.3	6.8	33.1	41.8	36.1	15.5	7.4	4.6	3.0	1.7	1.1	0.8	7.3
2020/2021													
Total	576.5	25.0	131.9	156.6	139.9	60.5	21.0	10.5	7.0	4.0	2.3	1.6	16.0
Male	402.3	17.8	96.0	112.9	99.5	39.7	12.6	5.9	3.9	2.3	1.4	0.9	9.3
Female	174.2	7.2	35.9	43.7	40.4	20.8	8.4	4.6	3.1	1.7	0.9	0.7	6.7

8.2.4. ENTRANTS TO PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES

	2017	2018	2019	2020
Total, thousand persons	205.5	207.1	209.7	213.8
State and municipal institutions	204.8	206.1	208.2	212.7
Private institutions	0.7	1.0	1.5	1.2
As a percentage of population aged 15 (entrants ratio)	14.3	13.9	13.9	14.3
In the total enrolment – by mode of study:				
intramural full-time	203.5	205.4	207.9	212.2
intramural part-time	2.0	1.7	1.8	1.7
extramural	0.0	0.0	–	–

8.2.5. GRADUATES OF PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES*

	2016	2017	2018	2019	2020
Total, thousand persons	184.4	181.1	168.6	165.5	142.5
State and municipal institutions	184.1	180.6	167.9	164.7	141.9
Private institutions	0.2	0.6	0.7	0.8	0.6
In the total number of graduates – by mode of study:					
intramural full-time	182.0	179.1	166.8	164.0	140.6
intramural part-time	2.1	1.9	1.8	1.4	1.8
extramural	0.0	0.0	–	0.0	0.0

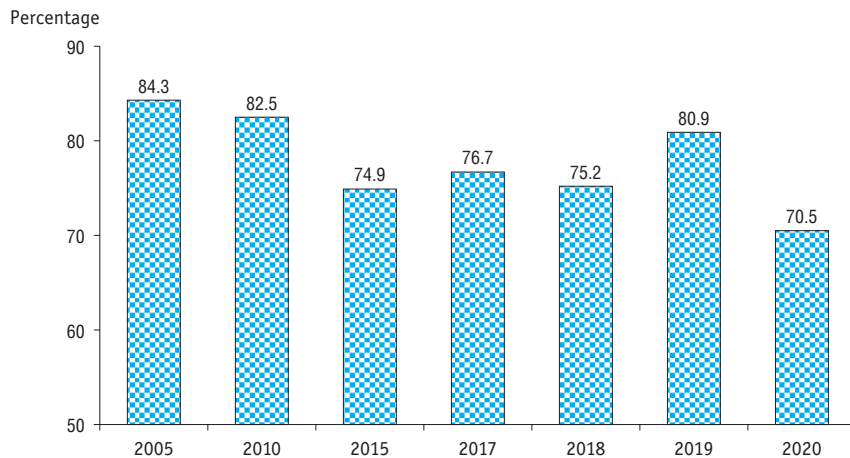
* Here and below in table 8.2.6, including external studies.

8.2.6. GRADUATES OF PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES BY FIELD OF EDUCATION

	2018	2019	2020	
			Thousand persons	Percentage
Total, thousand persons	168.6	165.5	142.5	100
Mathematical and natural sciences	0.1	0.1	0.0	0.0
Earth sciences	0.1	0.1	0.0	0.0
Engineering and industrial technology sciences	129.4	125.0	105.3	73.9
Civil engineering	15.7	15.2	16.5	11.6
Computer science and engineering	6.8	6.5	6.7	4.7
Electronics and communications engineering	1.8	1.8	1.7	1.2
Photonics, instrumentation engineering, optical and biomedical engineering	0.1	0.0	0.0	0.02
Electrical and thermal power engineering	6.5	6.7	6.9	4.8
Mechanical engineering	24.9	24.7	24.9	17.5
Chemical engineering	2.1	2.3	2.6	1.8
Industrial ecology and biotechnology	27.9	25.8	4.4	3.1
Technosphere safety and environmental engineering	0.6	0.6	0.6	0.4
Applied geology, mining and quarrying, oil and gas engineering, geodesy	1.9	1.8	2.0	1.4
Materials engineering	0.6	0.5	0.4	0.3
Surface transport engineering and technology	33.2	32.2	31.7	22.3
Aircraft and aerospace engineering	0.3	0.3	0.3	0.2
Shipbuilding and water-borne transportation engineering and technology	1.3	1.5	1.5	1.1
Light industry technological processes	5.7	5.1	5.1	3.6

(continued)

	2018	2019	2020	
			Thousand persons	Percentage
Health and medical sciences	1.4	1.2	1.1	0.8
Nursing	1.4	1.2	1.1	0.8
Agriculture and agricultural sciences	17.6	15.9	15.9	11.1
Agriculture, forestry and fisheries	17.2	15.6	15.5	10.9
Veterinary science and animal science	0.4	0.3	0.4	0.2
Social sciences	16.8	19.6	16.5	11.6
Economics and management	6.2	5.5	5.5	3.9
Sociology and social work	0.7	0.6	0.7	0.5
Mass media, library and information science	0.2	0.1	0.1	0.1
Services sector and tourism	9.7	13.4	10.1	7.1
Humanities	1.2	1.3	1.1	0.8
History and archaeology	1.2	1.3	1.1	0.8
Arts and culture	2.5	2.5	2.7	1.9
Fine and applied arts	2.5	2.5	2.7	1.9

8.2.7. DROPOUT RATIO WITHIN PROGRAMMES FOR SKILLED WORKERS AND EMPLOYEES*

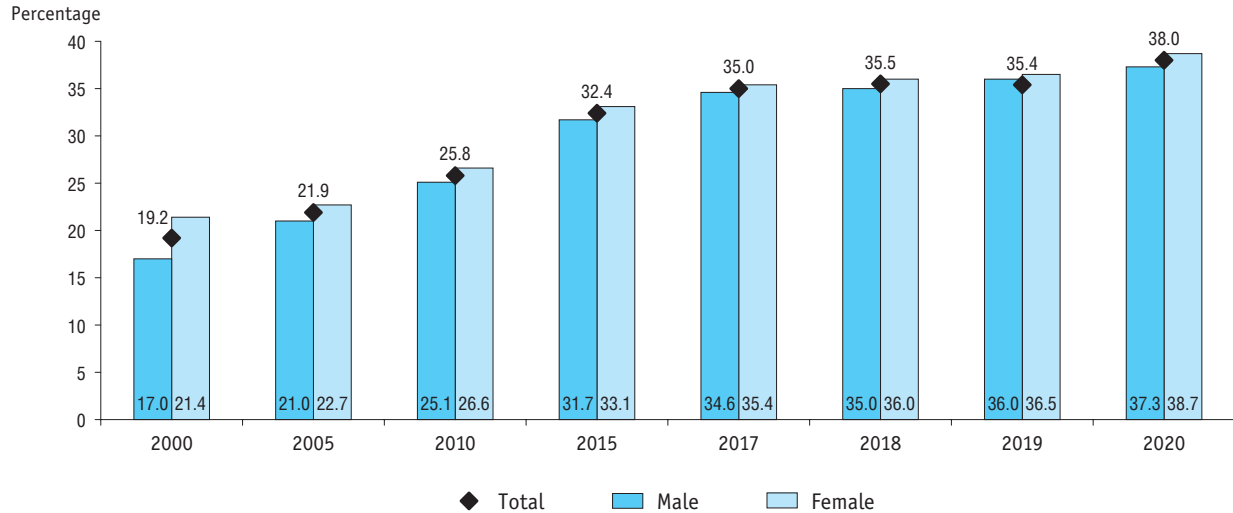
* The interpretation of this indicator and its calculation method are given in the Technical Notes.

8.2.8. ENROLMENT IN PROGRAMMES FOR MID-LEVEL SPECIALISTS

(at the beginning of the academic year)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total, thousand persons	2360.8	2590.7	2125.7	2180.2	2387.7	2464.3	2576.2	2759.8
State and municipal institutions	2308.6	2473.0	2026.8	2031.3	2210.1	2264.6	2343.6	2470.0
Private institutions	52.2	117.7	98.9	148.9	177.6	199.7	232.7	289.8
Enrolment per 10,000 population, persons	161	181	149	149	163	168	176	189
In the total enrolment – by mode of study:								
intramural full-time	1721.5	1960.3	1578.2	1746.9	1935.2	2016.3	2134.4	2318.6
intramural part-time	93.4	70.7	54.3	48.6	53.4	56.2	57.0	57.8
extramural*	545.9	559.7	493.2	384.7	399.0	391.8	384.9	383.5
In the total enrolment – within educational programmes of:								
basic general education	907.9	1095.6	1129.1	1493.9	1667.9	1756.9	1885.3	2061.3
secondary general education	1452.9	1495.1	996.6	686.3	719.7	707.4	690.9	698.5

* Here and below in tables 8.2.13 and 8.2.14, until 2015 – including external studies. Since the enactment of Federal Law no. 273-FL of December 29, 2012, 'On Education in the Russian Federation', the external programme was abolished.

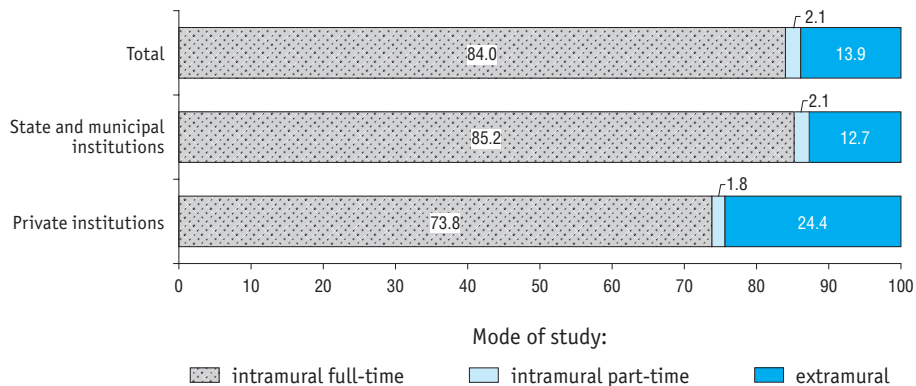
8.2.9. PARTICIPATION OF YOUNG ADULTS IN PROGRAMMES FOR MID-LEVEL SPECIALISTS BY GENDER*(ratio of enrolment in secondary vocational education – programmes for mid-level specialists to population aged 15–19)*

8.2.10. ENROLMENT IN PROGRAMMES FOR MID-LEVEL SPECIALISTS BY GENDER AND AGE

(at the beginning of the academic year; completed years as of January, 1; thousand persons)

	Total	Age, years											
		15 and under	16	17	18	19	20	21	22	23	24	25	26 and over
2019/2020													
Total	2464.3	87.0	397.6	457.2	480.2	360.1	170.3	80.3	47.6	34.6	29.6	26.2	293.4
Male	1243.0	41.2	205.6	235.9	242.8	186.6	81.9	39.5	24.9	18.2	15.9	13.6	137.0
Female	1221.3	45.8	192.1	221.4	237.4	173.6	88.4	40.9	22.7	16.4	13.7	12.6	156.4
2020/2021													
Total	2759.8	100.7	488.5	547.9	569.2	403.9	168.2	73.5	43.4	30.0	24.1	22.0	288.1
Male	1383.6	49.4	246.4	277.1	282.9	208.9	81.8	34.7	22.0	15.7	12.8	11.7	140.1
Female	1376.2	51.3	242.1	270.8	286.3	195.0	86.4	38.8	21.4	14.3	11.3	10.3	148.0

**8.2.11. PERCENTAGE DISTRIBUTION OF ENROLMENT IN PROGRAMMES FOR MID-LEVEL SPECIALISTS
BY MODE OF STUDY: 2020/2021**
(at the beginning of the academic year)



8.2.12. ENROLMENT OF INTERNATIONAL STUDENTS IN PROGRAMMES FOR MID-LEVEL SPECIALISTS

(at the beginning of the academic year)

	2000/2001	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total							
Total, thousand persons*	...	12.1	39.4	26.9	27.5	26.7	23.9
Including citizens of:							
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia**	...	10.9	27.1	25.5	26.4	25.6	22.6
of whom enrolled on general terms	...	10.6	24.1	25.2	26.3	25.6	22.6
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	...	0.3	0.5	0.7	0.8	0.8	1.0
of whom enrolled on general terms	...	–	0.5	0.7	0.7	0.5	1.0
As a percentage of the total enrolment	...	0.6	1.8	1.1	1.1	1.0	0.9
State and municipal institutions							
Total, thousand persons*	5.1	10.8	35.9	23.2	23.6	22.6	19.4
Including citizens of:							
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia**	4.9	9.6	24.5	22.0	22.6	21.6	18.4
of whom enrolled on general terms	...	9.3	21.5	21.8	22.5	21.5	18.4
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	0.2	0.2	0.5	0.6	0.7	0.7	0.8
of whom enrolled on general terms	–	–	0.5	0.6	0.7	0.5	0.8
As a percentage of the total enrolment	0.2	0.5	1.8	1.1	1.0	1.0	0.8
Private institutions							
Total, thousand persons*	...	1.3	3.5	3.6	3.9	4.1	4.5
Including citizens of:							
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia**	...	1.3	2.6	3.5	3.8	4.0	4.2
of whom enrolled on general terms	...	1.3	2.6	3.5	3.8	4.0	4.2
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	...	0.0	0.0	0.1	0.1	0.1	0.2
of whom enrolled on general terms	...	–	0.0	0.1	0.1	0.1	0.2
As a percentage of the total enrolment	...	1.3	2.3	2.0	2.0	1.8	1.6

* Since the 2010/2011 academic year, individuals without citizenship.

** Until the 2015/2016 academic year, excluding citizens of Abkhazia and South Ossetia.

8.2.13. ENTRANTS TO PROGRAMMES FOR MID-LEVEL SPECIALISTS

	2000	2005	2010	2015	2017	2018	2019	2020
Total, thousand persons	867.2	854.1	705.3	699.3	744.0	783.0	832.4	900.2
State and municipal institutions	842.4	810.9	671.8	639.8	675.4	703.1	736.7	775.8
Private institutions	24.8	43.2	33.5	59.5	68.6	79.9	95.7	124.4
As a percentage of population aged 15 (entrants ratio)	35.1	39.7	49.0	50.8	51.8	52.6	55.3	60.0
In the total number of entrants – by mode of study:								
intramural full-time	625.1	662.0	537.9	567.7	612.7	653.5	702.7	771.4
intramural part-time	35.5	20.9	19.2	16.9	17.3	17.7	17.6	17.7
extramural	206.7	171.2	148.2	114.7	114.1	111.7	112.1	111.1

8.2.14. GRADUATES OF PROGRAMMES FOR MID-LEVEL SPECIALISTS*

	2000	2005	2010	2015	2017	2018	2019	2020
Total, thousand persons	579.3	684.4	572.1	446.0	506.9	531.5	539.8	552.8
State and municipal institutions	567.7	651.4	535.7	410.9	462.5	484.7	492.0	501.2
Private institutions	11.6	33.0	36.5	35.0	44.4	46.9	47.9	51.6
In the total number of graduates – by mode of study:								
intramural full-time	426.4	493.4	418.0	354.4	405.2	428.4	435.4	449.6
intramural part-time	25.7	22.7	15.2	9.8	11.2	11.2	12.9	12.2
extramural	127.2	168.3	139.0	81.8	89.9	91.6	90.7	90.4

* Here and below in table 8.2.15, since 2017, including external studies.

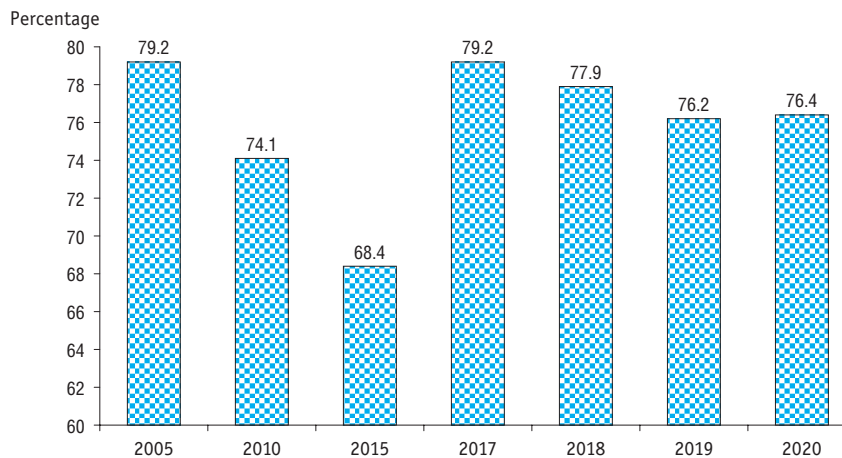
8.2.15. GRADUATES OF PROGRAMMES FOR MID-LEVEL SPECIALISTS BY FIELD OF EDUCATION

	2017	2018	2019	2020	
				Thousand persons	Percentage
Total, thousand persons	506.9	531.5	539.8	552.8	100
Mathematical and natural sciences	0.2	0.2	0.2	0.3	0.1
Earth sciences	0.2	0.2	0.2	0.3	0.1
Engineering and industrial technology sciences	211.2	223.3	230.7	237.5	43.0
Architecture	1.9	2.0	2.2	2.2	0.4
Civil engineering	28.0	29.4	30.5	30.1	5.4
Computer science and engineering	28.1	29.5	30.3	32.5	5.9
Information security	1.8	1.7	2.0	2.5	0.4
Electronics and communications engineering	6.4	6.8	7.0	7.4	1.3
Photonics, instrumentation engineering, optical and biomedical engineering	0.6	0.6	0.6	0.7	0.1
Electrical and thermal power engineering	16.4	17.0	17.6	17.9	3.2
Nuclear power engineering and technology	0.3	0.3	0.2	0.3	0.0
Mechanical engineering	18.6	20.1	20.6	21.5	3.9
Chemical engineering	3.5	3.5	4.0	4.2	0.8
Industrial ecology and biotechnology	17.9	18.6	19.7	19.7	3.6
Technosphere safety and environmental engineering	4.7	6.1	7.3	7.7	1.4
Applied geology, mining and quarrying, oil and gas engineering, geodesy	20.6	22.5	22.3	22.0	4.0
Materials engineering	5.2	5.6	5.8	6.1	1.1
Surface transport engineering and technology	43.8	45.7	45.7	46.5	8.4
Aircraft and aerospace engineering	0.9	1.0	1.0	1.1	0.2
Flight navigation and aircraft and aerospace equipment operation	1.6	1.8	1.8	2.3	0.4
Shipbuilding and water-borne transportation engineering and technology	5.8	5.9	6.8	6.9	1.3
Engineering systems management	2.8	2.9	2.9	3.2	0.6
Light industry technological processes	2.3	2.3	2.4	2.7	0.5

(continued)

	2017	2018	2019	2020	
				Thousand persons	Percentage
Health and medical sciences	61.4	65.2	68.8	70.6	12.7
Clinical medicine	19.0	20.4	20.8	21.6	3.9
Health sciences and preventive medicine	0.1	0.1	0.1	0.1	0.0
Pharmacology and pharmacy	9.6	9.9	11.7	10.7	1.9
Nursing	32.7	34.8	36.2	38.2	6.9
Agriculture and agricultural sciences	19.8	21.6	22.5	24.3	4.4
Agriculture, forestry and fisheries	17.2	18.4	19.2	20.3	3.7
Veterinary science and animal science	2.6	3.2	3.3	4.0	0.7
Social sciences	145.9	148.2	143.5	144.0	26.1
Economics and management	77.2	75.8	70.4	66.7	12.1
Sociology and social work	1.8	2.0	2.0	2.2	0.4
Law	42.7	46.7	48.1	51.7	9.4
Mass media, library and information science	2.4	2.3	1.9	1.9	0.4
Services sector and tourism	21.8	21.4	21.1	21.5	3.9
Education and pedagogical sciences	35.0	37.6	37.0	38.1	6.9
Education and pedagogical sciences	35.0	37.6	37.0	38.1	6.9
Humanities	11.8	13.1	13.9	14.3	2.6
History and archaeology	3.9	4.0	3.8	3.8	0.7
Physical training and sport	7.9	9.1	10.1	10.5	1.9
Arts and culture	21.8	22.3	22.9	23.7	4.3
Art (arts, history of arts, etc.)	0.0	0.0	0.0	0.0	0.0
Cultural studies and sociocultural projects	5.2	5.3	5.5	5.6	1.0
Performing arts and creative writing	0.8	0.7	0.8	0.9	0.2
Musical arts	6.7	7.1	7.0	7.3	1.3
Fine and applied arts	8.7	8.8	9.1	9.2	1.7
Screen arts	0.4	0.4	0.5	0.6	0.1

8.2.16. DROPOUT RATIO WITHIN PROGRAMMES FOR MID-LEVEL SPECIALISTS*



* The interpretation of this indicator and its calculation method are given in the Technical Notes.

8.3. Higher education programmes

8.3.1. Higher education programmes – bachelor's, specialist's, and master's programmes

8.3.1.1. ENROLMENT IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES

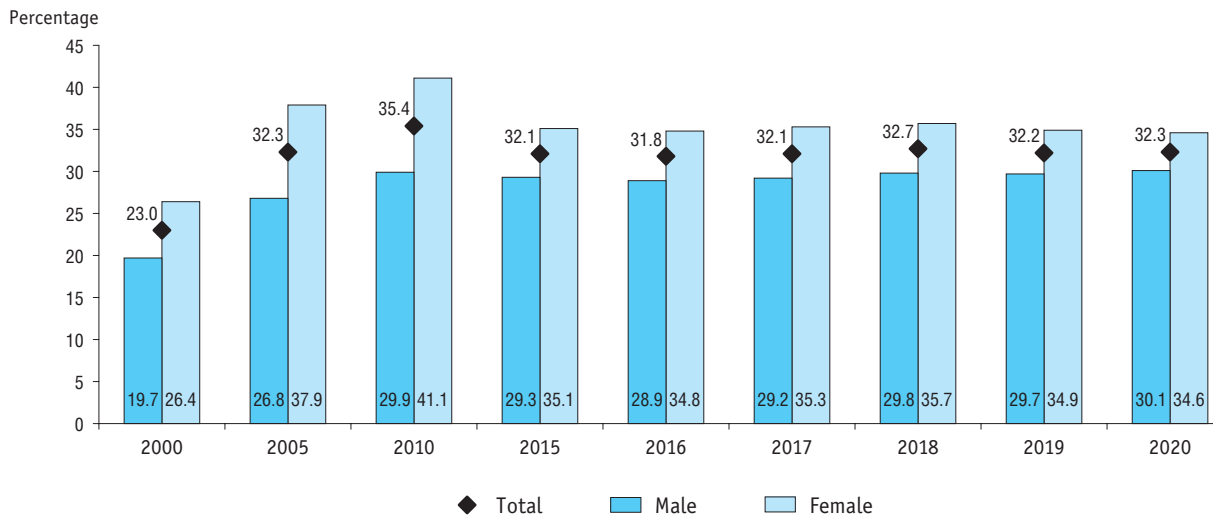
(at the beginning of the academic year)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total, thousand persons	4741.4	7064.6	7049.8	4766.5	4245.9	4161.7	4068.3	4049.3
State and municipal institutions	4270.8	5985.3	5848.7	4061.4	3823.1	3782.5	3736.3	3715.1
Private institutions	470.6	1079.3	1201.1	705.1	422.8	379.1	332.0	334.2
Enrolment per 10,000 population, persons	324	493	493	325	289	284	277	277
In the total enrolment – by mode of study:								
intramural full-time	2625.1	3508.0	3073.7	2379.6	2380.5	2369.8	2386.6	2429.3
intramural part-time	302.2	371.2	304.7	149.1	135.0	155.6	181.5	206.1
extramural*	1814.1	3185.4	3671.3	2237.8	1730.4	1636.3	1500.3	1413.9

* Here and below in tables 8.3.1.8 and 8.3.1.10, until 2015 – including external studies. Since the enactment of Federal Law no. 273-FL of December 29, 2012, 'On Education in the Russian Federation', the external programme was abolished.

8.3.1.2. PARTICIPATION OF YOUNG ADULTS IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY GENDER

(ratio of enrolment in higher education – bachelor's, specialist's, and master's programmes to population aged 17–25)



8.3.1.3. ENROLMENT IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES*(at the beginning of the academic year; thousand persons)*

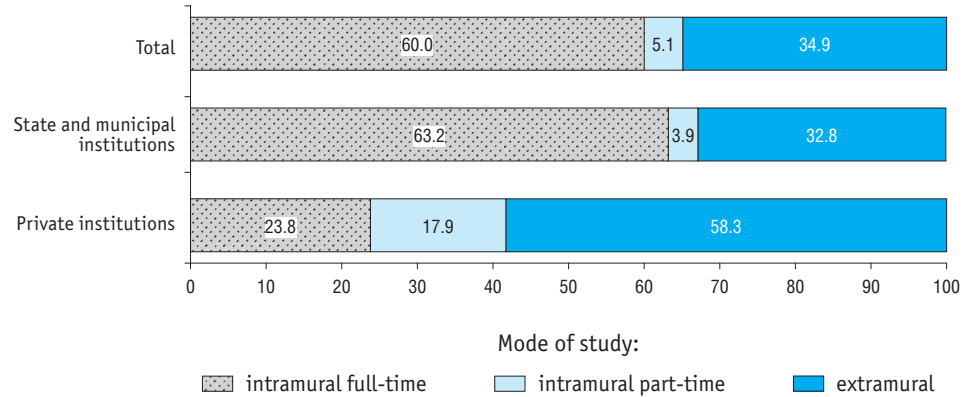
	Total	Of whom within programmes:		
		bachelor's	specialist's	master's
		Total		
2015/2016	4766.5	3530.9	904.9	330.7
2017/2018	4245.9	3032.7	703.7	509.4
2018/2019	4161.7	2902.2	723.3	536.2
2019/2020	4068.3	2796.2	746.6	525.5
2020/2021	4049.3	2773.4	770.4	505.5
		State and municipal institutions		
2015/2016	4061.4	2924.8	823.3	313.3
2017/2018	3823.1	2659.1	674.8	489.2
2018/2019	3782.5	2574.2	695.0	513.3
2019/2020	3736.3	2516.1	717.6	502.6
2020/2021	3715.1	2489.6	741.7	483.8
		Private institutions		
2015/2016	705.1	606.1	81.6	17.4
2017/2018	422.8	373.7	28.9	20.2
2018/2019	379.1	328.0	28.3	22.9
2019/2020	332.0	280.1	29.0	22.9
2020/2021	334.2	283.8	28.7	21.7

8.3.1.4. ENROLMENT IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY GENDER AND AGE

(at the beginning of the academic year; completed years as of January, 1; persons)

	Total	Age, years									
		17 and under	18	19	20	21	22	23	24	25	26 and over
2019/2020											
Total	4068327	98204	434615	510717	545508	564626	469179	355729	227392	146251	716106
Male	1913076	45058	197161	224223	238491	249964	216816	171171	114181	78679	377332
Female	2155251	53146	237454	286494	307017	314662	252363	184558	113211	67572	338774
2020/2021											
Total	4049333	89519	421579	512604	568485	549159	473648	353870	225032	144497	710940
Male	1922220	39511	191425	228313	252372	245990	219123	173065	113839	78777	379805
Female	2127113	50008	230154	284291	316113	303169	254525	180805	111193	65720	331135

**8.3.1.5. PERCENTAGE DISTRIBUTION OF ENROLMENT IN BACHELOR'S, SPECIALIST'S AND MASTER'S PROGRAMMES
BY MODE OF STUDY: 2020/2021**
(at the beginning of the academic year)



8.3.1.6. ENROLMENT OF INTERNATIONAL STUDENTS IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES (at the beginning of the academic year)

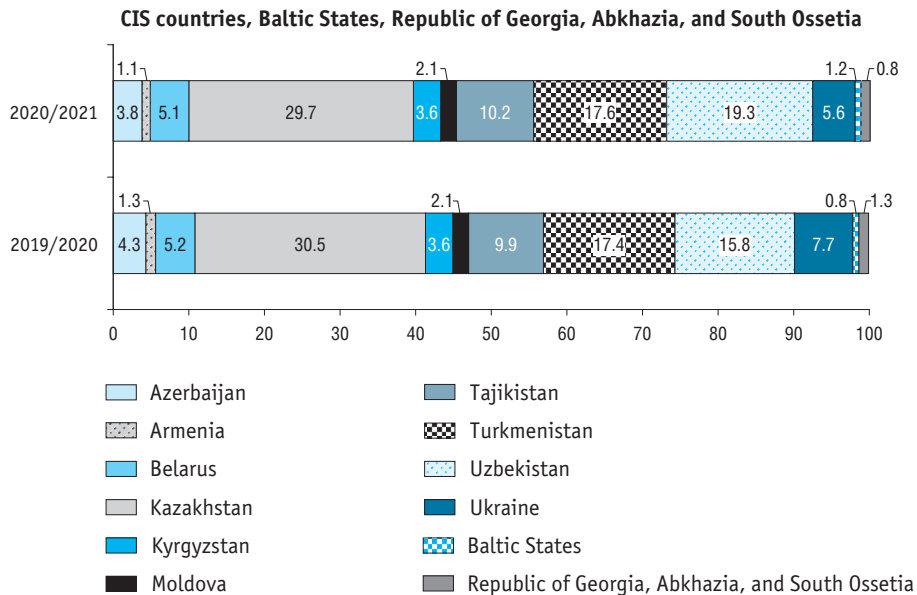
	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
Total					
Total, thousand persons*	160.9	260.1	278.0	298.0	315.1
Including citizens of:					
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia**	116.7	193.9	200.9	207.9	207.2
of whom enrolled on general terms	105.3	177.5	185.9	193.7	192.4
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	37.1	66.2	76.5	89.6	107.4
of whom enrolled on general terms	–	51.4	61.5	73.1	88.8
As a percentage of the total enrolment	2.3	6.1	6.6	7.3	7.7
State and municipal institutions					
Total, thousand persons*	130.6	229.4	246.5	269.7	285.9
Including citizens of:					
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia**	86.7	164.0	170.3	180.7	179.2
of whom enrolled on general terms	75.3	147.5	155.3	166.5	164.5
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	36.8	65.5	75.7	88.6	106.3
of whom enrolled on general terms	–	50.8	60.7	72.0	87.6
As a percentage of the total enrolment	2.2	6.0	6.5	7.2	7.6
Private institutions					
Total, thousand persons*	30.3	30.6	31.5	28.3	29.2
Including citizens of:					
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia**	30.0	30.0	30.6	27.2	27.9
of whom enrolled on general terms	30.0	29.9	30.6	27.2	27.9
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	0.2	0.7	0.8	1.1	1.2
of whom enrolled on general terms	–	0.7	0.8	1.0	1.2
As a percentage of the total enrolment	2.5	7.2	8.3	8.5	8.7

* Including individuals without citizenship.

** In the 2010/2011 academic year, excluding citizens of Abkhazia and South Ossetia.

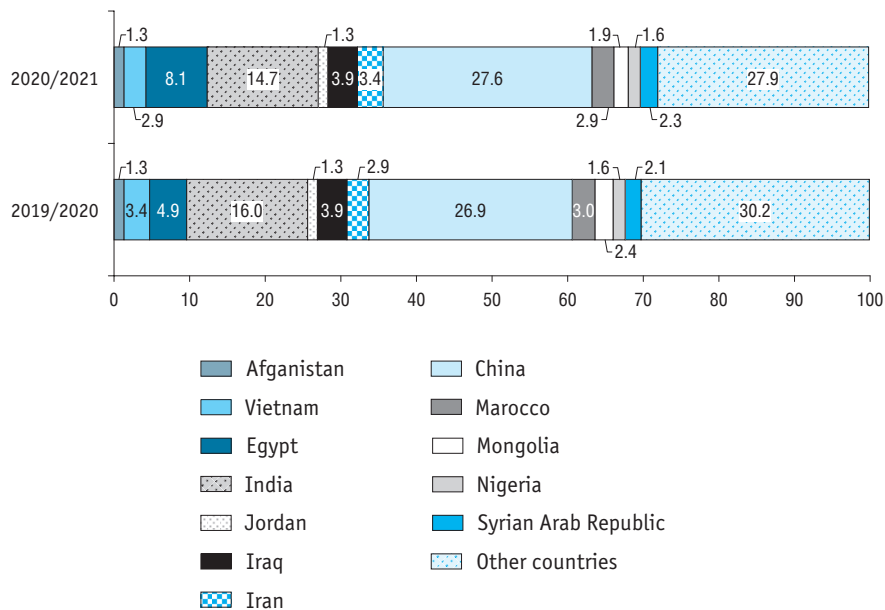
8.3.1.7. PERCENTAGE DISTRIBUTION OF ENROLMENT OF INTERNATIONAL STUDENTS IN BACHELOR'S, SPECIALIST'S AND MASTER'S PROGRAMMES BY CITIZENSHIP

(at the beginning of the academic year)



(continued)

Foreign countries excluding the CIS countries, Baltic States, Republic of Georgia



8.3.1.8. ADMISSION TO BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES

	2000	2005	2010	2015	2017	2018	2019	2020
Total, thousand persons	1292.5	1640.5	1399.5	1221.8	1142.0	1147.9	1129.4	1093.3
State and municipal institutions	1140.3	1372.5	1195.4	1049.6	1034.3	1041.6	1027.0	983.1
Private institutions	152.2	268.0	204.0	172.2	107.7	106.4	102.4	110.3
As a percentage of population aged 17 (entrants ratio)	50.1	68.0	91.1	90.1	82.8	85.1	78.5	73.4
In the total number of entrants – by mode of study:								
intramural full-time	687.5	830.7	659.6	676.2	669.5	688.4	688.7	690.9
intramural part-time	81.9	86.1	52.4	36.3	45.4	60.1	63.3	62.9
extramural	523.1	723.7	687.5	509.3	427.2	399.5	377.3	339.6

8.3.1.9. ENTRANTS TO BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES

(thousand persons)

	Total	Of whom within programmes:		
		bachelor's	specialist's	master's
		Total		
2015	1221.8	866.6	147.7	207.5
2017	1142.0	745.0	154.0	243.0
2018	1147.9	741.1	162.4	244.5
2019	1129.4	735.1	167.5	226.8
2020	1093.3	707.3	166.0	220.1
		State and municipal institutions		
2015	1049.6	713.6	138.8	197.2
2017	1034.3	654.7	147.0	232.6
2018	1041.6	653.5	155.0	233.1
2019	1027.0	651.3	159.8	215.8
2020	983.1	617.3	157.8	207.9
		Private institutions		
2015	172.2	153.1	8.9	10.3
2017	107.7	90.3	7.0	10.4
2018	106.4	87.6	7.4	11.4
2019	102.4	83.8	7.7	10.9
2020	110.3	89.9	8.2	12.2

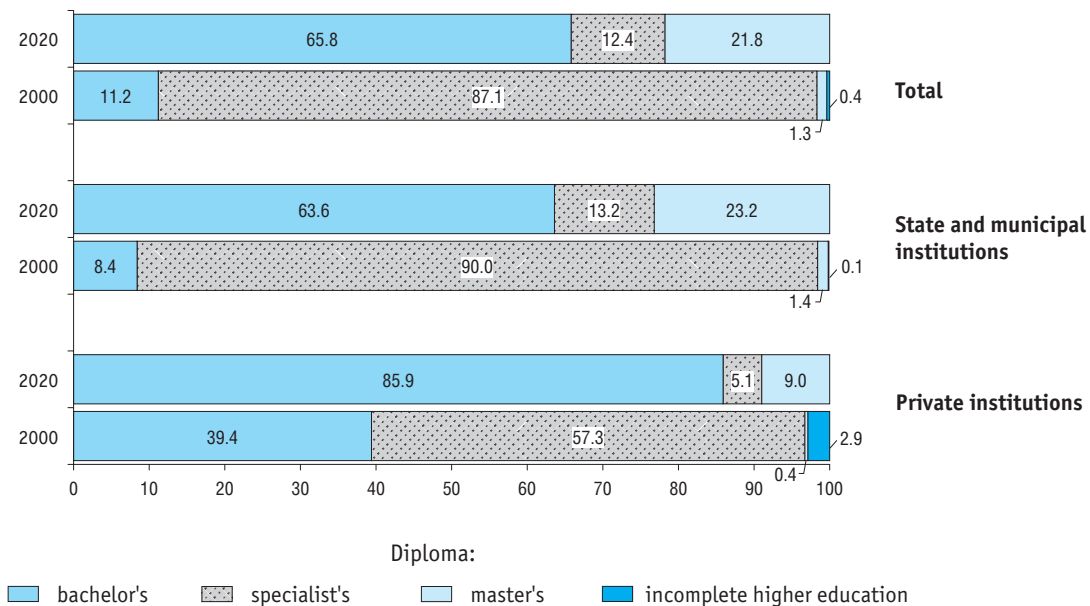
8.3.1.10. GRADUATES OF BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES*

(thousand persons)

	2000	2005	2010	2015	2017	2018	2019	2020
Total	635.1	1151.7	1467.9	1300.5	969.5	933.2	908.6	849.4
State and municipal institutions	578.9	978.4	1177.8	1109.9	823.3	811.7	800.4	767.5
Private institutions	56.2	173.3	290.1	190.5	146.2	121.4	108.2	81.9
In the total number of graduates – by mode of study:								
intramural full-time	375.3	570.5	689.8	698.2	521.1	526.1	496.3	486.5
intramural part-time	39.8	59.9	68.0	38.5	23.9	24.6	25.1	26.7
extramural	220.0	521.3	710.0	563.8	418.9	377.5	387.2	331.8

* Since 2017, including certification of students within external studies.

8.3.1.11. PERCENTAGE DISTRIBUTION OF GRADUATES BY DIPLOMA



8.3.1.12. GRADUATES OF BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY FIELD OF EDUCATION

	2018	2019	2020	
			Thousand persons	Percentage
Total, thousand persons	933.2	908.6	849.4	100
Mathematical and natural sciences	35.9	35.1	34.9	4.1
Engineering mathematics	7.9	7.9	8.1	0.9
Computer and information sciences	3.2	3.2	3.4	0.4
Physics and astronomy	5.5	5.5	5.2	0.6
Chemistry	4.0	3.9	3.8	0.5
Earth sciences	8.9	8.7	8.5	1.0
Biological sciences	6.3	6.0	5.9	0.7
Engineering and industrial technology sciences	245.4	250.4	241.6	28.4
Architecture	4.8	5.0	5.0	0.6
Civil engineering	31.5	31.9	29.5	3.5
Computer science and engineering	31.2	31.0	30.3	3.6
Information security	4.4	4.5	4.6	0.5
Electronics and communications engineering	12.3	13.0	12.5	1.5
Photonics, instrumentation engineering, optical and biomedical engineering	4.4	4.6	4.4	0.5
Electrical and thermal power engineering	24.1	25.3	24.0	2.8
Nuclear power engineering and technology	1.7	1.7	1.6	0.2
Mechanical engineering	21.5	22.5	21.6	2.5
Engineering physics and technology	1.3	1.2	1.3	0.2
Weapons and armaments systems	0.4	0.4	0.4	0.1
Chemical engineering	9.5	9.8	9.7	1.1
Industrial ecology and biotechnology	9.1	9.5	9.1	1.1
Technosphere safety and environmental engineering	10.9	10.8	10.9	1.3

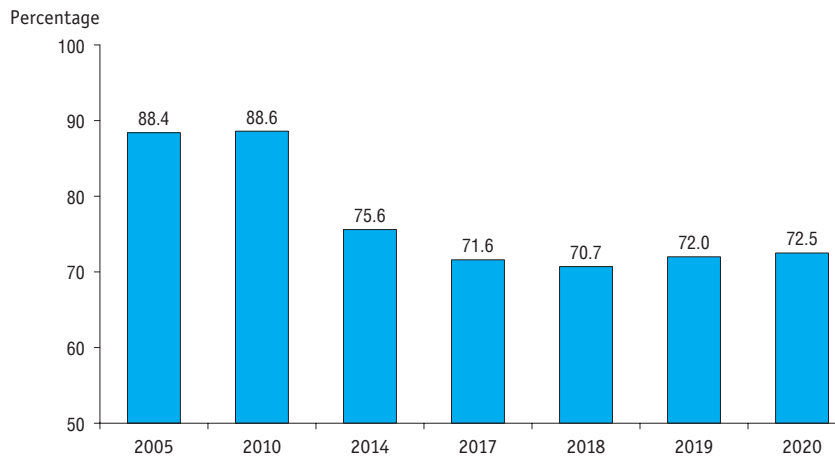
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	2018	2019	2020	
			Thousand persons	Percentage
Applied geology, mining and quarrying, oil and gas engineering, geodesy	23.2	24.1	22.4	2.6
Materials engineering	4.0	4.1	4.1	0.5
Surface transport engineering and technology	26.8	26.1	25.4	3.0
Aircraft and aerospace engineering	3.5	3.5	3.6	0.4
Flight navigation and aircraft and aerospace equipment operation	2.5	2.6	2.5	0.3
Shipbuilding and water-borne transportation engineering and technology	4.2	4.4	4.4	0.5
Engineering systems management	11.5	11.7	11.4	1.3
Nanotechnologies and nanomaterials	0.7	0.7	0.8	0.1
Light industry technological processes	2.1	2.0	2.1	0.3
Health and medical sciences	41.4	42.5	42.3	5.0
Basic medicine	0.4	0.4	0.5	0.1
Clinical medicine	32.9	34.2	35.0	4.1
Health sciences and preventive medicine	1.7	1.5	1.5	0.2
Pharmacology and pharmacy	5.3	5.3	4.6	0.5
Nursing	1.2	1.1	0.8	0.1
Agriculture and agricultural sciences	31.7	32.3	30.7	3.6
Agriculture, forestry and fisheries	23.3	23.7	22.3	2.6
Veterinary science and animal science	8.4	8.5	8.4	1.0
Social sciences	431.3	395.6	349.7	41.2
Psychology	14.6	13.4	13.5	1.6
Economics and management	254.4	222.4	184.4	21.7
Sociology and social work	9.6	10.1	9.0	1.1

(continued)

	2018	2019	2020	
			Thousand persons	Percentage
Law	120.2	117.8	110.8	13.1
Political sciences and area studies	8.3	8.4	8.7	1.0
Mass media, library and information science	12.7	12.6	13.6	1.6
Services sector and tourism	11.4	10.8	9.6	1.1
Education and pedagogical sciences	89.0	92.2	88.9	10.5
Education and pedagogical sciences	89.0	92.2	88.9	10.5
Humanities	36.2	38.2	39.1	4.6
Linguistics and literary studies	17.2	18.1	19.0	2.2
History and archaeology	5.6	5.7	5.9	0.7
Philosophy, ethics and religion	1.1	1.1	1.2	0.1
Theology	1.0	1.1	1.1	0.1
Physical training and sport	10.7	11.0	10.7	1.3
Oriental and African studies	0.5	1.2	1.2	0.2
Arts and culture	22.2	22.4	22.3	2.6
Art (arts, history of arts, etc.)	1.2	1.2	1.4	0.2
Cultural studies and sociocultural projects	6.6	6.5	6.1	0.7
Performing arts and creative writing	2.5	2.6	2.7	0.3
Musical arts	4.0	4.4	4.2	0.5
Fine and applied arts	7.0	6.8	6.9	0.8
Screen arts	0.9	0.8	0.9	0.1

8.3.1.13. DROPOUT RATE WITHIN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES*



* The interpretation of this indicator and its calculation method are given in Technical Notes.

**8.3.1.14. ENROLMENT (INTRAMURAL FULL-TIME MODE OF STUDIES) OF STUDENTS IN BACHELOR'S, SPECIALIST'S,
AND MASTER'S PROGRAMMES WHO RECEIVE EDUCATION ALLOWANCES AND SCHOLARSHIPS
BY TYPE OF EDUCATION ALLOWANCE
(at the beginning of the academic year)**

	Total		Of whom students within programmes:					
			bachelor's		specialist's		master's	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Thousand persons								
Education allowances and scholarships:								
State academic scholarship	1015.1	1052.4	618.7	646.7	215.3	233.7	181.0	172.0
Bursary	222.8	226.0	157.2	161.0	49.7	50.3	15.8	14.6
Scholarship of the President of the RF	2.4	2.7	0.9	1.1	0.5	0.5	1.0	1.1
Scholarship of the Russian Government	4.0	4.5	1.8	1.9	0.9	1.0	1.3	1.6
Personal scholarship established by federal public authorities	0.9	1.5	0.5	0.9	0.2	0.6	0.1	0.1
Personal scholarship established by authorities of Russian regions	4.4	4.5	2.9	3.0	1.0	1.2	0.4	0.3
Personal scholarship of local self-government bodies	1.0	0.3	0.8	0.2	0.1	0.1	0.2	0.0

(continued)

	Total		Of whom students within programmes:					
	2019/2020	2020/2021	bachelor's		specialist's		master's	
			2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Percentage								
Education allowances and scholarships:								
State academic scholarship	42.5	43.3	41.0	42.0	36.1	37.8	64.3	63.2
Bursary	9.3	9.3	10.4	10.5	8.3	8.1	5.6	5.4
Scholarship of the President of the RF	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4
Scholarship of the Russian Government	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.6
Personal scholarship established by federal public authorities	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Personal scholarship established by authorities of Russian regions	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Personal scholarship of local self-government bodies	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0

8.3.2. Higher education – postgraduate, residency, and apprenticeship programmes

8.3.2.1. POSTGRADUATE PROGRAMMES

(persons)

	Enrolment, <i>at the end of the year</i>	Entrants	Graduates	Of whom defended their thesis
2000	117714	43100	24828	7503
2005	142899	46896	33561	10650
2010	157437	54558	33763	9611
2015	109936	31647	25826	4651
2016	98352	26421	25992	3730
2017	93523	26081	18069	2320
2018	90823	27008	17729	2198
2019	84265	24912	15453	1629
2020	87751	27710	13957	1245

8.3.2.2. ENROLMENT IN POSTGRADUATE PROGRAMMES BY GENDER AND AGE (at the end of the year; persons)

	Total	Age, years										
		22 and under	23	24	25	26	27	28	29	30–34	35–39	40 and over
2019												
Total	84265	630	3943	11077	14285	12749	8391	5248	3838	11319	6050	6735
Male	46890	380	2549	7410	9314	7808	4552	2457	1715	5027	2729	2949
Female	37375	250	1394	3667	4971	4941	3839	2791	2123	6292	3321	3786
2020												
Total	87751	573	3758	11230	13887	14155	9586	5392	3735	11549	6492	7394
Male	49296	352	2373	7502	9011	8926	5510	2634	1642	5137	2948	3261
Female	38455	221	1385	3728	4876	5229	4076	2758	2093	6412	3544	4133

8.3.2.3. ENROLMENT OF INTERNATIONAL STUDENTS IN POSTGRADUATE PROGRAMMES (at the end of the year)

	2019	2020
Total, persons*	7871	9464
Including citizens of:		
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia	2883	3031
of whom enrolled on general terms	2022	2094
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	4988	6433
of whom enrolled on general terms	2237	3181
As a percentage of the total enrolment	9.3	10.8

* In 2019, including individuals without citizenship.

8.3.2.4. GRADUATES OF POSTGRADUATE PROGRAMMES BY FIELD OF EDUCATION

	2019	2020		
		Total	Of whom defended their thesis	
		persons	persons	percentage
Total, persons	15453	13957	1245	8.9
Engineering mathematics	409	301	32	10.6
Computer and information sciences	37	35	3	8.6
Physics and astronomy	801	738	108	14.6
Chemistry	517	456	66	14.5
Earth sciences	524	564	27	4.8
Biological sciences	818	671	56	8.3
Architecture	62	72	–	–
Civil engineering	326	211	9	4.3
Computer science and engineering	1164	841	98	11.7
Information security	48	45	1	2.2
Electronics and communications engineering	277	274	22	8.0
Photonics, instrumentation engineering, optical and biomedical engineering	137	131	24	18.3
Electrical and thermal power engineering	284	252	27	10.7
Nuclear power engineering and technology	33	34	–	–
Mechanical engineering	348	306	19	6.2
Engineering physics and technology	6	3	–	–
Weapons and armaments systems	6	1	–	–
Chemical engineering	238	202	16	7.9
Industrial ecology and biotechnology	168	106	18	17.0
Technosphere safety and environmental engineering	59	64	6	9.4
Applied geology, mining and quarrying, oil and gas engineering, geodesy	153	167	37	22.2
Materials engineering	184	203	28	13.8
Surface transport engineering and technology	106	94	14	14.9
Aircraft and aerospace engineering	146	117	9	7.7

(continued)

	2019	2020		
		Total	Of whom defended their thesis	
		persons	persons	percentage
Flight navigation and aircraft and aerospace equipment operation	13	11	1	9.1
Shipbuilding and water-borne transportation engineering and technology	48	47	–	–
Engineering systems management	137	147	18	12.2
Nanotechnologies and nanomaterials	7	8	3	37.5
Light industry technological processes	46	39	3	7.7
Basic medicine	228	235	22	9.4
Clinical medicine	1390	1323	119	9.0
Health sciences and preventive medicine	144	129	3	2.3
Pharmacology and pharmacy	68	63	10	15.9
Agriculture, forestry and fisheries	518	538	80	14.9
Veterinary science and animal science	308	243	66	27.2
Psychology	361	315	17	5.4
Economics and management	1332	1229	60	4.9
Sociology and social work	212	171	9	5.3
Law	810	757	39	5.2
Political sciences and area studies	256	242	4	1.7
Mass media, library and information science	77	52	3	5.8
Education and pedagogical sciences	831	811	47	5.8
Linguistics and literary studies	717	616	56	9.1
History and archaeology	440	422	33	7.8
Philosophy, ethics and religion	251	228	14	6.1
Theology	1	3	–	–
Physical training and sport	131	144	7	4.9
Art (arts, history of arts, etc.)	167	181	6	3.3
Cultural studies and sociocultural projects	109	115	5	4.3

8.3.2.5. RESIDENCY PROGRAMMES

(persons)

	2019	2020
Enrolment, <i>at the end of the year</i>	49990	55753
Entrants	26819	29036
Graduates	19344	24060

8.3.2.6. ENROLMENT IN RESIDENCY PROGRAMMES BY GENDER AND AGE

(at the end of the year; persons)

	Total	Age, years										
		22 and under	23	24	25	26	27	28	29	30–34	35–39	40 and over
2019												
Total	49990	1024	6770	15492	13375	5242	2080	1205	899	2267	882	754
Male	15766	309	2062	4450	4019	1751	792	483	364	880	373	283
Female	34224	715	4708	11042	9356	3491	1288	722	535	1387	509	471
2020												
Total	55753	1247	6708	16424	14657	6484	2856	1713	1233	2586	1013	832
Male	17520	407	1570	4863	4455	2188	1061	700	533	1029	398	316
Female	38233	840	5138	11561	10202	4296	1795	1013	700	1557	615	516

8.3.2.7. ENROLMENT OF INTERNATIONAL STUDENTS IN RESIDENCY PROGRAMMES

(at the end of the year)

	2019	2020
Total, persons*	3692	4049
Including citizens of:		
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia	2520	2454
of whom enrolled on general terms	2280	2143
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	1172	1595
of whom enrolled on general terms	996	1371
As a percentage of the total enrolment	7.4	7.3

* In 2019, including individuals without citizenship.

8.3.2.8. GRADUATES OF RESIDENCY PROGRAMMES BY FIELD OF EDUCATION AND SPECIALISATION

(persons)

	2019	2020
Total	19344	24060
Clinical medicine	19075	23533
Of which by specialisation:		
obstetrics and gynaecology	1223	1530
anaesthesiology and intensive-care medicine	1236	1340
radiology	688	808
paediatrics	418	1040
psychiatry	462	569
dermatology and venerology	742	1062

(continued)

	2019	2020
cardiology	565	712
neurology	940	1153
therapy	962	1683
endocrinology	494	636
oncology	473	551
otorhinolaryngology	516	699
ophthalmology	558	692
traumatology and orthopaedics	729	721
surgery	884	1053
oral medicine	642	808
oral surgery	668	799
dental orthopaedics	966	1170
orthodontics	772	840
Health sciences and preventive medicine	150	240
Of which by specialisation:		
general hygiene	7	63
social hygiene and state sanitary and epidemiological service system	10	10
epidemiology	81	122
bacteriology	22	20
Pharmacology and pharmacy	119	287
Of which by specialisation:		
pharmaceutical engineering	12	38
pharmaceutical management and economics	93	212
pharmaceutical chemistry and pharmacognosy	14	37

8.3.2.9. APPRENTICESHIP PROGRAMMES

(persons)

	2019	2020
Enrolment, <i>at the end of the year</i>	828	1013
Entrants	411	533
Graduates	328	353

8.3.2.10. ENROLMENT IN APPRENTICESHIP PROGRAMMES BY GENDER AND AGE

(at the end of the year; persons)

	Total	Age, years										
		22 and under	23	24	25	26	27	28	29	30–34	35–39	40 and over
2019												
Total	828	10	46	77	133	106	107	68	48	133	59	41
Male	377	3	16	35	62	48	44	40	22	61	28	18
Female	451	7	30	42	71	58	63	28	26	72	31	23
2020												
Total	1013	12	46	97	168	166	107	78	60	155	74	50
Male	472	2	21	44	82	79	48	37	33	74	30	22
Female	541	10	25	53	86	87	59	41	27	81	44	28

8.3.2.11. ENROLMENT OF INTERNATIONAL STUDENTS IN APPRENTICESHIP PROGRAMMES

(at the end of the year)

	2019	2020
Total, persons*	249	351
Including citizens of:		
CIS countries, Baltic States, Republic of Georgia, Abkhazia, and South Ossetia	49	44
of whom enrolled on general terms	31	24
foreign countries excluding the CIS countries, Baltic States, Republic of Georgia	200	307
of whom enrolled on general terms	189	289
As a percentage of the total enrolment	30.1	34.6

* Since 2019, including individuals without citizenship.

8.3.2.12. GRADUATES OF APPRENTICESHIP PROGRAMMES BY FIELD OF EDUCATION AND SPECIALISATION

(persons)

	2019	2020
Total	328	353
Architecture	4	1
Performing arts and creative writing	16	14
Musical arts	292	306
Of which by specialisation:		
musical and instrumental performance (by type)	188	199
vocal performance (by type)	58	57
conducting (by type)	30	31
Fine and applied arts	11	28
Screen arts	5	4

8.4. Vocational training programmes

8.4.1. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN VOCATIONAL TRAINING PROGRAMMES BY MODE OF STUDY

	Total		Of which by mode of study					
			intramural full-time		intramural part-time		extramural	
	2019	2020	2019	2020	2019	2020	2019	2020
Thousand persons								
Programmes:								
vocational training programmes for skilled workers and employees	1165.9	1243.4	966.8	986.3	159.8	191.0	39.3	66.1
retraining programmes for skilled workers and employees	257.0	241.1	186.8	171.0	63.0	62.3	7.2	7.8
programmes aimed at upgrading professional skills of skilled workers and employees	355.0	405.1	269.9	288.3	66.2	68.3	18.9	48.5
Percentage								
Programmes:								
vocational training programmes for skilled workers and employees	100	100	82.9	79.3	13.7	15.4	3.4	5.3
retraining programmes for skilled workers and employees	100	100	72.7	70.9	24.5	25.9	2.8	3.2
programmes aimed at upgrading professional skills of skilled workers and employees	100	100	76.0	71.2	18.7	16.9	5.3	12.0

8.4.2. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN VOCATIONAL TRAINING PROGRAMMES BY EDUCATIONAL ATTAINMENT

	Total		Educational attainment													
			higher		incomplete higher		secondary vocational – programmes for mid-level specialists		secondary vocational – programmes for skilled workers and employees		secondary general		basic general		no basic general education	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Thousand persons																
Programmes:																
vocational training programmes for skilled workers and employees	1165.9	1243.4	129.2	152.2	10.6	7.1	138.0	140.9	184.2	196.0	292.6	282.8	370.1	403.0	41.1	61.4
retraining programmes for skilled workers and employees	257.0	241.1	36.2	32.5	1.3	1.4	48.8	46.2	80.7	68.7	43.4	40.1	45.7	51.3	1.0	0.8
programmes aimed at upgrading professional skills of skilled workers and employees	355.0	405.1	65.9	68.1	1.4	1.8	66.8	62.2	93.3	92.0	54.6	56.0	72.1	111.1	0.9	13.8
Percentage																
Programmes:																
vocational training programmes for skilled workers and employees	100	100	11.1	12.2	0.9	0.6	11.8	11.3	15.8	15.8	25.1	22.7	31.7	32.4	3.5	4.9
retraining programmes for skilled workers and employees	100	100	14.1	13.5	0.5	0.6	19.0	19.2	31.4	28.5	16.9	16.6	17.8	21.3	0.4	0.3
programmes aimed at upgrading professional skills of skilled workers and employees	100	100	18.6	16.8	0.4	0.5	18.8	15.4	26.3	22.7	15.4	13.8	20.3	27.4	0.2	3.4

8.4.3. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN VOCATIONAL TRAINING PROGRAMMES BY GENDER

	Total		Male		Female	
	2019	2020	2019	2020	2019	2020
Thousand persons						
Vocational training programmes for skilled workers and employees	1165.9	1243.4	768.3	824.2	397.6	419.2
Retraining programmes for skilled workers and employees	257.0	241.1	216.3	205.0	40.7	36.2
Programmes aimed at upgrading professional skills of skilled workers and employees	355.0	405.1	307.2	330.2	47.7	74.9
Percentage						
Vocational training programmes for skilled workers and employees	100	100	65.9	66.3	34.1	33.7
Retraining programmes for skilled workers and employees	100	100	84.2	85.0	15.8	15.0
Programmes aimed at upgrading professional skills of skilled workers and employees	100	100	88.6	81.5	13.4	18.5

8.4.4. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN VOCATIONAL TRAINING PROGRAMMES BY AGE: 2020 (completed years as of January, 1)

	Total	Age, years						
		Under 25	25–29	30–34	35–39	40–49	50–59	60 and over
Thousand persons								
Vocational training programmes for skilled workers and employees	1243.4	568.4	191.1	133.9	108.3	147.8	76.4	17.4
Retraining programmes for skilled workers and employees	241.1	49.5	44.1	41.3	35.0	47.1	20.8	3.5
Programmes aimed at upgrading professional skills of skilled workers and employees	405.1	36.2	74.1	71.9	58.3	108.3	47.2	9.2
Percentage								
Vocational training programmes for skilled workers and employees	100	45.7	15.4	10.8	8.7	11.9	6.1	1.4
Retraining programmes for skilled workers and employees	100	20.5	18.3	17.1	14.5	19.5	8.6	1.4
Programmes aimed at upgrading professional skills of skilled workers and employees	100	8.9	18.3	17.7	14.4	26.7	11.6	2.3

8.4.5. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN VOCATIONAL TRAINING PROGRAMMES BY CATEGORY

	Vocational training programmes for skilled workers and employees		Retraining programmes for skilled workers and employees		Programmes aimed at upgrading professional skills of skilled workers and employees	
	2019	2020	2019	2020	2019	2020
Thousand persons						
Total	1165.9	1243.4	257.0	241.1	355.0	405.1
Of whom:						
unemployed	45.4	38.6	15.2	13.0	2.6	1.8
organisations' employees at the expense of the organisation	100.7	96.2	63.7	61.1	129.6	120.6
students who studied upon the request of organisations	16.8	19.2	5.4	4.0	8.0	13.2
women during their maternity leave (until the child is 3 years old)	2.8	2.7	1.0	0.9	0.4	0.1
Percentage						
Total	100	100	100	100	100	100
Of whom:						
unemployed	3.9	3.1	5.9	5.4	0.7	0.5
organisations' employees at the expense of the organisation	8.6	7.7	24.8	25.3	36.5	29.8
students who studied upon the request of organisations	1.4	1.5	2.1	1.7	2.3	3.3
women during their maternity leave (until the child is 3 years old)	0.2	0.2	0.4	0.4	0.1	0.0

8.5. Additional education programmes

8.5.1. Additional general education programmes

8.5.1.1. ENROLMENT IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN*

(thousand persons)

	2000	2005	2010	2015	2018	2019	2020
Total	7905.8	8443.7	8083.3	11010.0	10449.8	10110.4	9887.3
Urban areas	6447.1	6733.7	6364.7	8888.0	8305.4	8037.2	7859.8
Rural areas	1458.7	1710.0	1718.6	2122.0	2144.4	2073.2	2027.6

* Here and below in tables 8.5.1.2 and 8.5.1.3, additional education institutions providing reports to the Ministry of Education of the Russian Federation.

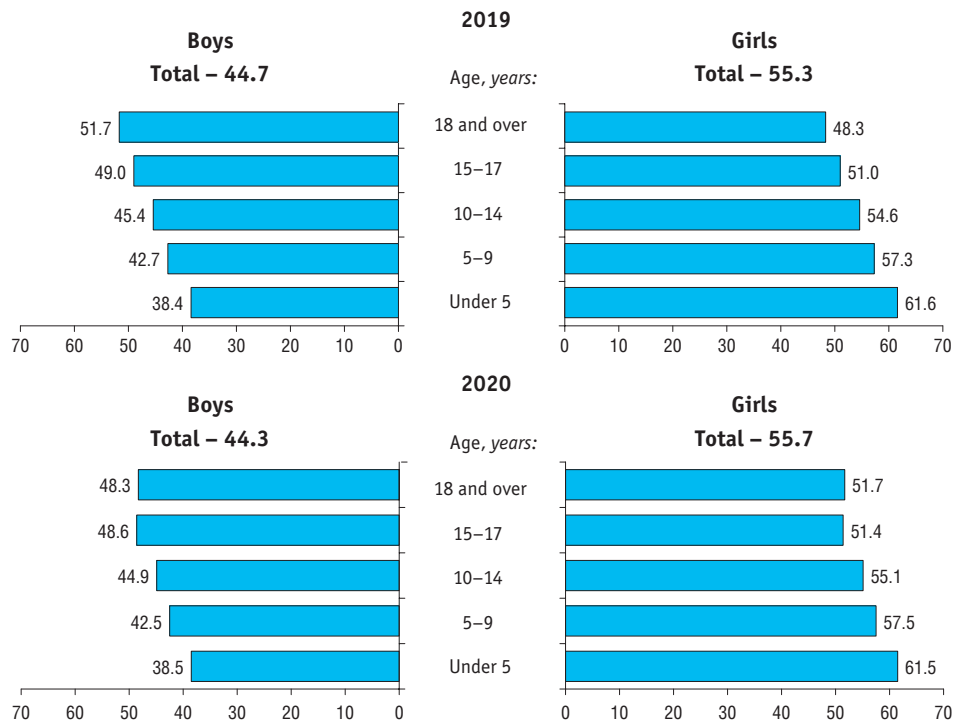
8.5.1.2. ENROLMENT IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY INSTITUTION

(thousand persons)

	2010	2015	2017	2018	2019	2020
Total	8083.3	11010.0	10825.4	10449.8	10110.4	9887.3
Of which:						
encompassing all types of educational activities	4645.5	5097.4	5238.5	5298.1	5453.1	5467.7
art	627.2	1736.7	1973.5	2109.9	2100.1	2085.6
ecological and biological	281.2	206.6	189.4	172.6	170.4	160.8
technical engineering	268.4	200.8	229.1	219.1	232.0	268.7
tourism and local studies	175.3	149.6	154.8	137.7	143.6	137.5
sports	1790.5	2978.8	2444.0	1968.7	1452.0	1272.4
military and patriotic	35.6	27.4	23.0	23.3	24.9	28.6
technical sports	34.4	32.9	25.9	20.3	13.5	12.7
others	225.0	579.8	547.0	500.0	520.7	453.3

8.5.1.3. PERCENTAGE DISTRIBUTION OF ENROLMENT IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY GENDER AND AGE

(completed years as of January, 1)



**8.5.1.4. ENROLMENT IN INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN
BY FIELD OF EDUCATION***
(thousand persons)

	2018		2019		2020	
	Total	Of whom girls	Total	Of whom girls	Total	Of whom girls
Fields of education:						
technical engineering	2120.2	805.5	2401.4	920.9	2823.4	1099.4
natural sciences	2692.7	1390.5	2773.5	1424.8	2917.9	1477.3
tourism and local studies	1135.5	560.6	1120.6	549.5	1044.9	509.9
social and pedagogical	6018.0	3124.3	6362.9	3303.9	6189.6	3192.8
in arts:						
within general development programmes	7456.0	4859.4	7313.3	4753.0	6699.5	4337.9
within pre-vocational education programmes	977.7	699.8	1006.2	727.2	926.9	679.2
in physical education and sports:						
within general development programmes	5100.9	1994.3	4993.5	1990.1	4748.5	1905.0
within pre-vocational education programmes	988.2	286.3	742.9	226.6	618.2	189.7

* Here and below in table 8.5.1.5, according to Rosstat data.

8.5.1.5. ENROLMENT IN INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY FIELD OF EDUCATION AND AGE: 2020

(thousand persons; completed years as of January, 1)

	Age, years			
	under 5	5–9	10–14	15–17
Fields of education:				
technical engineering	82.2	965.3	1290.3	485.5
natural sciences	78.5	1001.9	1160.5	677.0
tourism and local studies	11.4	267.6	581.0	185.0
social and pedagogical	512.3	2770.4	1962.5	944.4
in arts:				
within general development programmes	484.1	3306.2	2384.6	524.7
within pre-vocational education programmes	2.9	346.2	512.7	65.1
in physical education and sports:				
within general development programmes	231.2	1823.8	1941.4	752.1
within pre-vocational education programmes	3.7	146.8	343.2	124.6

8.5.2. Additional professional (vocational) programmes

8.5.2.1. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY MODE OF STUDY

	Total		Of whom by mode of study:			
			intramural part-time		extramural	
	2019	2020	2019	2020	2019	2020
Thousand persons						
Programmes:						
professional (vocational) development	5603.7	6014.6	2029.1	1864.6	712.5	1380.0
professional (vocational) retraining	734.8	649.2	283.2	226.1	130.9	141.9
Percentage						
Programmes:						
professional (vocational) development	100	100	36.2	31.0	12.7	22.9
professional (vocational) retraining	100	100	38.5	34.8	17.8	21.9

8.5.2.2. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY GENDER

	Total		Male		Female	
	2019	2020	2019	2020	2019	2020
Thousand persons						
Programmes:						
professional (vocational) development	5603.7	6014.6	2479.5	2335.7	3124.2	3679.0
professional (vocational) retraining	734.8	649.2	324.5	267.6	410.3	381.6
Percentage						
Programmes:						
professional (vocational) development	100	100	44.3	38.8	55.8	61.2
professional (vocational) retraining	100	100	44.2	41.2	55.8	58.8

8.5.2.3. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY AGE: 2020 (completed years as of January, 1)

	Total	Age, years						
		under 25	25–29	30–34	35–39	40–49	50–59	60 and over
Thousand persons								
Programmes:								
professional (vocational) development	6014.6	404.8	572.0	849.8	951.3	1784.5	1078.6	373.6
professional (vocational) retraining	649.2	86.7	75.9	109.5	113.5	167.2	77.5	19.0
Percentage								
Programmes:								
professional (vocational) development	100	6.7	9.5	14.1	15.8	29.7	17.9	6.2
professional (vocational) retraining	100	13.4	11.7	16.9	17.5	25.7	11.9	2.9

8.5.2.4. STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY CATEGORY

	Professional (vocational) development programmes, <i>thousand persons</i>		As a percentage of the total		Professional (vocational) retraining programmes, <i>thousand persons</i>		As a percentage of the total	
	2019	2020	2019	2020	2019	2020	2019	2020
Total	5603.7	6014.6	100	100	734.8	649.2	100	100
Of whom:								
employees of enterprises and organisations	3237.4	3486.0	57.8	58.0	398.1	348.4	54.2	53.7
of whom holders of managerial positions	477.2	473.4	8.5	7.9	47.5	39.1	6.5	6.0
personnel of educational institutions	1712.7	1860.8	30.6	30.9	153.0	135.3	20.8	20.8
of whom:								
managers	147.4	188.6	2.6	3.1	19.5	14.4	2.7	2.2
teaching personnel	1474.8	1594.6	26.3	26.5	121.5	111.8	16.5	17.2
public servants and Civil Service officers	186.9	172.1	3.3	2.9	9.7	8.6	1.3	1.3
holders of municipal public offices and municipal services positions	67.1	58.5	1.2	1.0	4.8	5.4	0.7	0.8
staff dismissed from military service	1.9	1.5	0.0	0.0	0.9	1.1	0.1	0.2
individuals who received a work placement from employment agency	29.9	27.3	0.5	0.5	29.6	26.1	4.0	4.0
students enrolled in secondary vocational education programmes	65.4	70.1	1.2	1.2	23.4	21.4	3.2	3.3
students enrolled in higher education programmes	71.4	73.6	1.3	1.2	25.8	26.1	3.5	4.0
others	231.0	264.7	4.1	4.4	89.6	76.8	12.2	11.8

TECHNICAL NOTES

Participation of children in preschool education is calculated as the ratio of the number of children attending educational institutions implementing preschool education and child care programmes to the number of children aged 1–6 as of January 1 of the year following the reporting year, based on the annual assessment of age-sex composition of the Russian population according to census and current records of births, deaths, and migration.

Available study places for preschool children in educational institutions implementing preschool education and child care programmes (places per 1,000 children) is the ratio of the total number of study places in institutions implementing preschool education and child care programmes to the number of children aged 1–6 as of January 1 of the year following the reporting year, based on the annual assessment of age-sex composition of the Russian population according to census and current records of births, deaths, and migration, adjusted for the number of children aged 5–6 enrolled in general education institutions, and multiplied by 1,000.

General development groups are groups with implementation of preschool education programmes.

Compensatory groups are groups with implementation of a preschool education programme for students with limited health capacities, adapted to their psychophysical condition and personal abilities as to correct developmental disorders and improve social integration.

Health groups are groups where preschool education programmes are implemented together with sanitary, health improving activities and preventive treatment. These groups are created for pupils with tuberculous intoxication, sickly children, and other categories of individuals who need long-term medical care and health improving technologies and assistance.

Combined groups are groups where both healthy children and children with limited health capacities are attending a preschool education programme adapted for students with limited health capacities according to their psychophysical condition and personal abilities as to correct developmental disorders and improve social integration.

Early childhood groups are groups that do not implement any preschool education programme. They provide child care and instruction and improve health of infants and toddlers from 2 months to 3 years old.

Child care groups are groups that do not implement preschool education programmes. They implement a set of measures related to feeding and tending to domestic needs of children, including their personal hygiene and daily routines.

Family preschool groups are groups created to meet the demand of the population in domestic preschool education. They may be aimed at either general development or babysitting and providing child care without implementation of a preschool education programme.

Short-term groups are part-time groups working for three to five hours a day, providing systematic educational activity for the children attending the educational institution according to preschool education programmes, as well as for the purposes of baby-sitting and child care.

Average group size is determined as a ratio of the number of students (including individuals who receive only child care) listed as members of educational institutions implementing preschool education and child care programmes, to the number of groups.

Availability of preschool education is determined as a ratio of children in a specific age group (0–2 years; 3–7 years) who attend institutions implementing preschool education programmes to the sum of the number of children in that age group who attend institutions implementing preschool education programmes and the number of children in that age group who have not been provided a study place and need to receive a study place in a state or municipal institution implementing preschool education programmes. The number of children in a specific age group (0–2 years; 3–7 years) who have not been provided a study place and need to receive a study place in a state or municipal institution implementing preschool education programmes, whose parents (legal guardians/representatives) have applied for the state (municipal) service 'Application acceptance, and enrolment of children in educational institutions implementing the basic education programme of preschool education (kindergartens)', whilst indicating in the application the preferred date of obtaining a place in a preschool edu-

cation institution – September, 1 of the current academic year and earlier, excluding children who want to transfer from one preschool education institution to another.

Participation of children in primary general, basic general, and secondary general education is determined as the ratio of the number of 1st–11th (12th) grade students at educational institutions implementing primary education, basic general, and secondary general education programmes; the number of students receiving secondary general education within secondary vocational education programmes, to the number of children aged 7–17 as of January 1 of the year following the reporting year, based on the annual assessment of age-sex composition of the Russian population according to census and current records of births, deaths, and migration.

Average class size is determined as the ratio of the number of students in a certain group of classes to the number of classes in this group; a complete set of classes (a student group from two or more classes instructed by one teacher at a small school) is equal to one class.

Enrolment in classes with in-depth studies of certain subjects is a ratio of the number of students enrolled in primary general, basic general and secondary general education who study in-depth individual academic subjects to the total number of students (without separate organisations and classes for students with limited health capacities).

Subject-oriented education (training) refers to educational activity within general education programmes usually organised

around a more subject-oriented curriculum based on educational needs and interests of students, which provides an advanced study of certain subjects within corresponding educational programmes. Students of secondary general education programmes choose a specialisation (field of education), and, accordingly, a course of advanced studies for certain subjects; other subjects are taught at a common level required for this type of educational institution. Specialised training groups can be created within a single class or, conversely, combine students of several classes. An entire subject-oriented class (with one specialisation (field of education)) may be created. In this case a 'class' and a 'group' have the same meaning.

Total enrolment in secondary vocational education programmes, higher education programmes – bachelor's, specialist's and master's programmes, as well as the total number of entrants and graduates do not include the number of foreign citizens, individuals without citizenship studying in the Russian Federation under education quota regulated by the Government of the Russian Federation.

Entrants to secondary vocational education programmes, higher education programmes – bachelor's, specialist's, and master's programmes is an indicator showing the number of people who have been enrolled at educational institutions. This procedure is carried out in accordance with approved rules and regulations. The number of entrants does not include students who repeat a year or resume their studies.

Dropout ratio within secondary vocational and higher education programmes is the ratio of the number of graduates who have

completed their education within educational programmes at a certain level in the reporting year (t) to the number of entrants of the same year ($t-p$), where (p) is a theoretical duration of education.

Theoretical duration of education within educational programmes is as follows:

- programmes for skilled workers and employees, implemented within basic general education – 3 years; within secondary general education – 1 year;
- programmes for mid-level specialists, implemented within basic general education – 4 years; within secondary general education – 3 years;
- higher education programmes: bachelor's programmes – 4 years; specialist's programmes – 5 years; master's programmes – 2 years.

Since statistical data regarding fee-paying students within educational programmes for skilled workers and employees are available only after the 2010 report, the dropout ratio for the said category of students was included later into this data book: for programmes within secondary general education – in 2011; for programmes within basic general education – in 2013.

It is, however, impossible to accurately calculate the dropout ratio for the programmes of 2015–2016 academic year, since wide implementation of bachelor's programmes in 2011 caused a great decrease in the number of entrants for specialist's programmes.

A **postgraduate** is an individual who has attained a higher education level and enrolled in postgraduate courses within postgraduate programmes.

A **resident** is an individual who has a higher medical and / or higher pharmaceutical education and is enrolled in a residency programme.

An **apprentice** is an individual who has a higher education in arts and is enrolled in an apprenticeship programme.

Since 2019, **enrolment, entrants, and graduates within post-graduate programmes** are determined at the end of the year and

include foreign citizens and individuals without citizenship enrolled on general terms of enrolment.

Enrolment, entrants, and graduates within residency and apprenticeship programmes are determined at the end of the year and include foreign citizens and individuals without citizenship enrolled on general terms of enrolment.



9

PERSONNEL

9.1. Employment in education

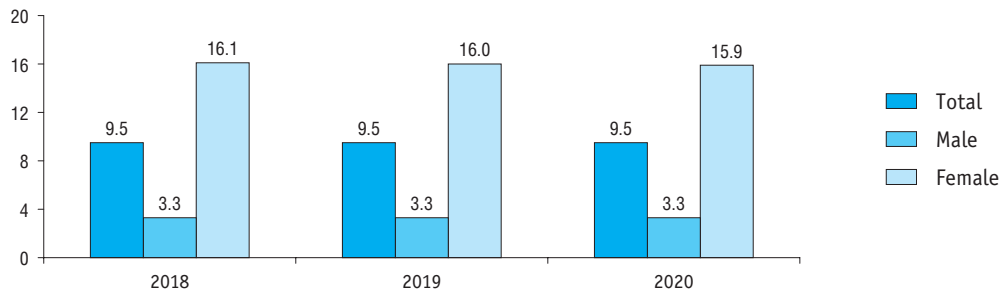
9.1.1. AVERAGE ANNUAL EMPLOYMENT BY TYPE OF ECONOMIC ACTIVITY*

(thousand persons)

	2018	2019	2020
Employment in the national economy	71562	71064	69550
Agriculture, forestry and fishing	4937	4781	4554
Mining and quarrying	1142	1153	1143
Manufacturing	10067	9963	9714
Electricity, gas, steam and air-conditioning supply	1622	1607	1588
Water supply; sewerage, waste management, and remediation activities	722	701	687
Construction	6391	6416	6157
Wholesale and retail trade; repair of motor vehicles and motorcycles	13670	13497	13046
Transportation and storage	5353	5373	5440
Accommodation and food service activities	1722	1763	1734
Information and communication	1464	1474	1495
Financial and insurance activities	1386	1369	1316
Real estate activities	1927	1923	1881
Professional, scientific and technical activities	2884	2827	2737
Administrative and support service activities	1900	1963	1935
Public administration and defence; compulsory social security	3651	3627	3644
Education	5456	5393	5332
Human health and social work activities	4404	4400	4396
Art, entertainment and recreation	1149	1136	1114
Other service activities	1645	1627	1574

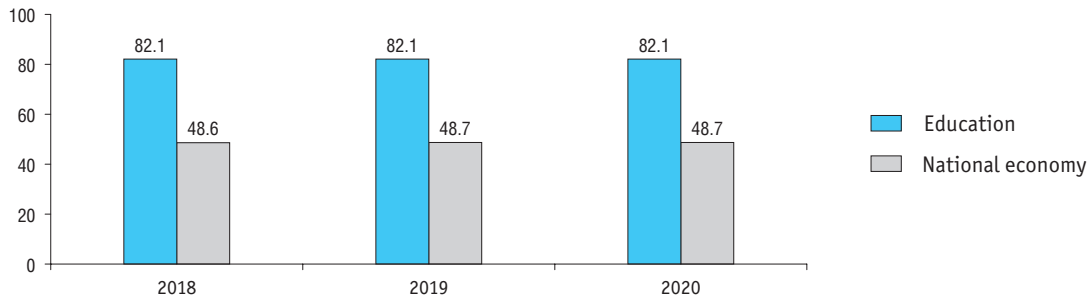
* In accordance with the OKVED2.

9.1.2. EMPLOYMENT IN EDUCATION AS A PERCENTAGE OF THE TOTAL EMPLOYMENT IN THE NATIONAL ECONOMY*

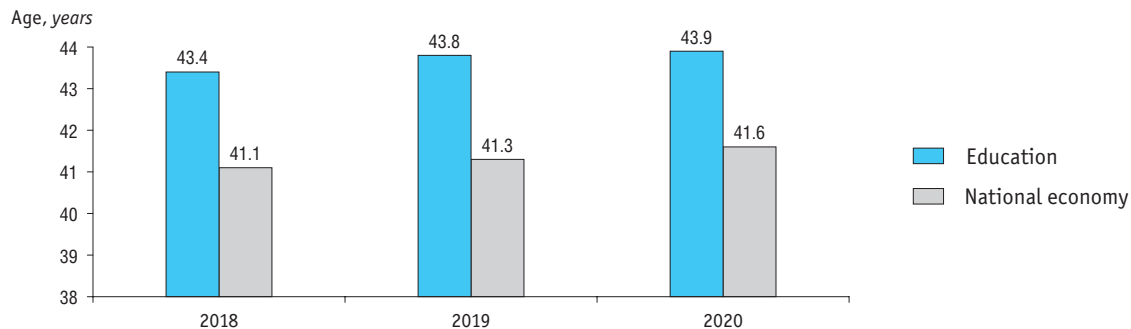


* Here and below in figures 9.1.3–9.1.4, according to the results of national labour force surveys.

9.1.3. FEMALE EMPLOYEES AS A PERCENTAGE OF THE TOTAL EMPLOYMENT IN THE NATIONAL ECONOMY AND IN EDUCATION



9.1.4. AVERAGE AGE OF EMPLOYMENT IN THE NATIONAL ECONOMY AND IN EDUCATION

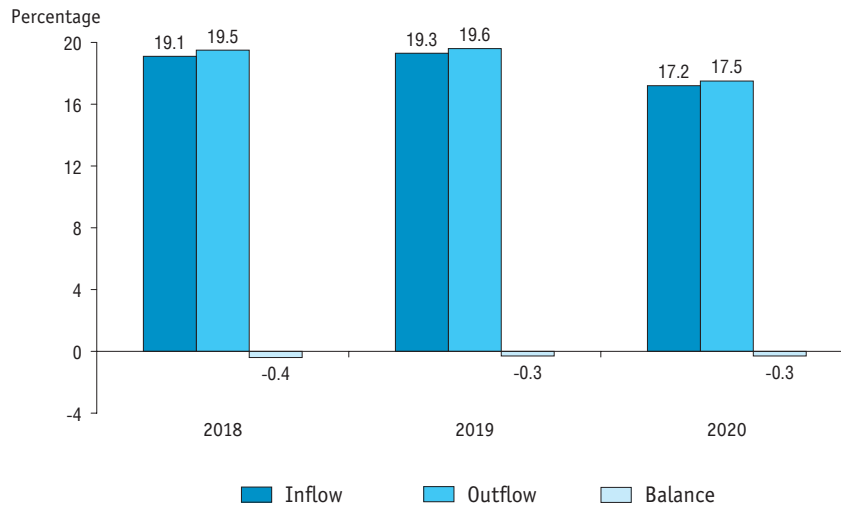


9.1.5. AVERAGE EMPLOYMENT IN EDUCATION*

	2019		2020	
	Thousand persons	As a percentage of the total	Thousand persons	As a percentage of the total
Total	4883	100	4847	100
Preschool education	1434	29.4	1431	29.5
Primary general education	40	0.8	39	0.8
Basic general education	329	6.7	328	6.8
Secondary general education	1696	34.7	1700	35.1
Secondary vocational education	359	7.3	355	7.3
Higher education	546	11.2	530	10.9
Vocational training	5.1	0.1	4.7	0.1
Additional education of children and adults	382	7.8	369	7.6
Additional professional (vocational) education	72	1.5	71	1.5

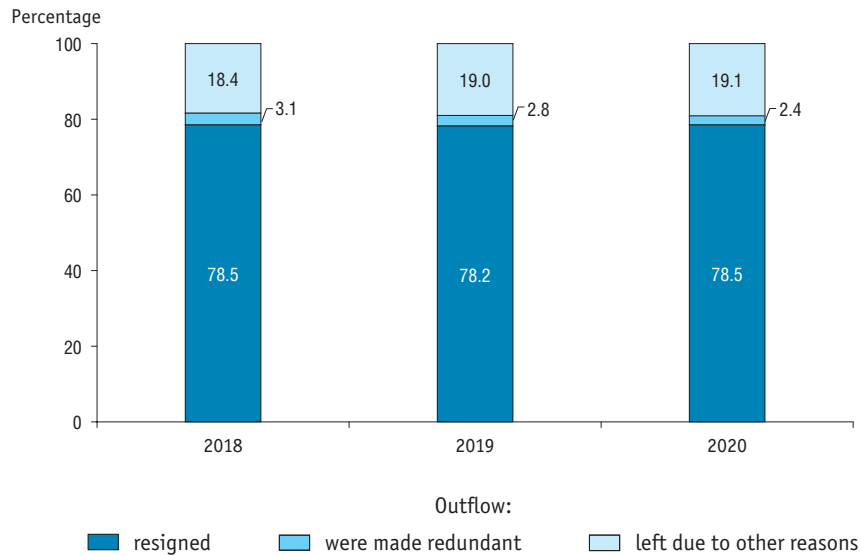
* In accordance with the OKVED2.

9.1.6. PERSONNEL TURNOVER IN EDUCATION*



* Excluding small enterprises. The indices of inflow and outflow are calculated as a percentage of the average employment.

9.1.7. PERSONNEL OUTFLOW FROM EDUCATIONAL INSTITUTIONS*



* Excluding small enterprises.

9.2. Personnel in institutions implementing preschool education and child care programmes

9.2.1. TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES BY POSITION

(at the end of the year; thousand persons)

	Teaching personnel (excluding part-timers and independent contractors)						Part-timers					
	2010	2015	2017	2018	2019	2020	2010	2015	2017	2018	2019	2020
Total	605.1	642.8	662.7	669.8	676.7	683.0	21.2	18.4	18.5	17.8	17.8	16.8
Of whom:												
senior educators	17.9	21.2	23.1	23.6	24.1	24.6	0.6	0.5	0.5	0.4	0.4	0.4
educators	467.3	500.2	510.7	513.5	515.8	518.6	2.6	2.2	2.0	1.9	1.9	1.9
music instructors	43.2	44.0	44.4	44.2	44.1	43.8	8.3	7.8	7.7	7.3	7.2	6.5
physical training instructors	19.3	20.8	22.2	22.6	23.2	23.6	1.6	1.8	1.9	1.8	1.8	1.7
speech therapists	27.9	28.2	30.9	32.3	33.7	35.0	2.8	2.5	2.6	2.5	2.5	2.4
special needs teachers	4.9	4.5	5.1	5.6	6.2	6.6	0.3	0.2	0.3	0.3	0.4	0.4
educational psychologists	14.9	14.7	16.0	16.9	18.1	18.9	1.7	1.5	1.6	1.6	1.6	1.5
child and youth councillors	1.6	1.1	1.1	1.2	1.4	1.5	0.1	0.1	0.1	0.1	0.1	0.1
teachers with organisational duties	0.4	0.2	0.3	0.3	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.0
teachers of additional education	7.5	5.4	5.3	5.4	5.2	5.1	1.7	1.5	1.5	1.5	1.5	1.4

9.2.2. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES BY POSITION

(excluding part-timers and independent contractors; at the end of the year; percentage)

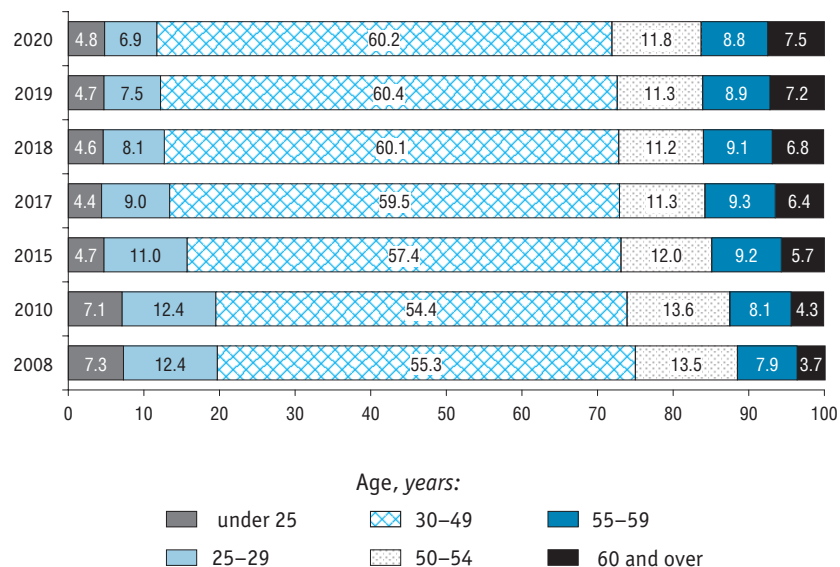
	Total		Educational attainment							
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Total	100	100	56.4	57.1	53.8	54.4	43.0	42.3	41.2	40.5
Of whom:										
senior educators	100	100	87.5	88.3	85.2	85.9	12.1	11.3	11.8	11.0
educators	100	100	50.1	50.7	47.6	48.0	49.3	48.6	47.4	46.7
music instructors	100	100	49.9	51.0	46.7	47.8	49.5	48.5	46.2	45.3
physical training instructors	100	100	63.0	63.5	59.7	60.2	36.3	35.9	34.8	34.4
speech therapists	100	100	98.4	98.2	97.6	97.2	1.5	1.6	1.4	1.5
special needs teachers	100	100	98.6	98.5	97.8	97.5	1.3	1.3	1.2	1.2
educational psychologists	100	100	97.1	97.0	94.5	94.4	2.5	2.6	2.3	2.4
child and youth councillors	100	100	80.0	78.9	74.5	72.8	19.1	20.9	17.2	18.8
teachers with organisational duties	100	100	69.9	65.4	61.6	57.7	29.4	33.8	24.9	28.6
teachers of additional education	100	100	71.3	72.0	65.5	66.1	27.6	26.6	24.4	24.2

9.2.3. FEMALE TEACHING PERSONNEL AS A PERCENTAGE OF THE TOTAL TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES BY POSITION (excluding part-timers and independent contractors; at the end of the year)

	Total, thousand persons						As a percentage of the total					
	2010	2015	2017	2018	2019	2020	2010	2015	2017	2018	2019	2020
Total	602.5	638.7	657.7	664.2	670.3	676.6	99.6	99.3	99.2	99.2	99.1	99.1
Of whom:												
senior educators	17.7	21.2	23.0	23.4	23.9	24.4	99.2	99.6	99.3	99.3	99.1	99.1
educators	465.5	498.9	509.1	511.8	513.9	516.8	99.6	99.7	99.7	99.7	99.6	99.6
music instructors	41.8	43.0	43.4	43.2	43.1	42.8	96.8	97.6	97.8	97.7	97.6	97.7
physical training instructors	18.6	19.7	20.7	20.9	21.3	21.6	96.5	94.8	93.3	92.6	91.9	91.6
speech therapists	27.7	28.1	30.7	32.1	33.5	34.8	99.3	99.5	99.6	99.4	99.4	99.4
special needs teachers	4.8	4.5	5.1	5.6	6.1	6.5	99.5	99.8	99.7	99.5	99.3	99.4
educational psychologists	14.7	14.6	15.8	16.6	17.8	18.6	98.4	99.0	98.6	98.6	98.4	98.5
child and youth counsellors	1.6	1.1	1.1	1.2	1.3	1.4	98.1	97.4	98.7	97.7	96.7	94.5
teachers with organisational duties	0.4	0.2	0.3	0.3	0.4	0.4	94.9	95.8	96.6	96.2	96.9	93.0
teachers of additional education	7.3	5.2	5.0	5.0	4.8	4.7	97.1	96.4	94.4	93.2	92.9	91.8

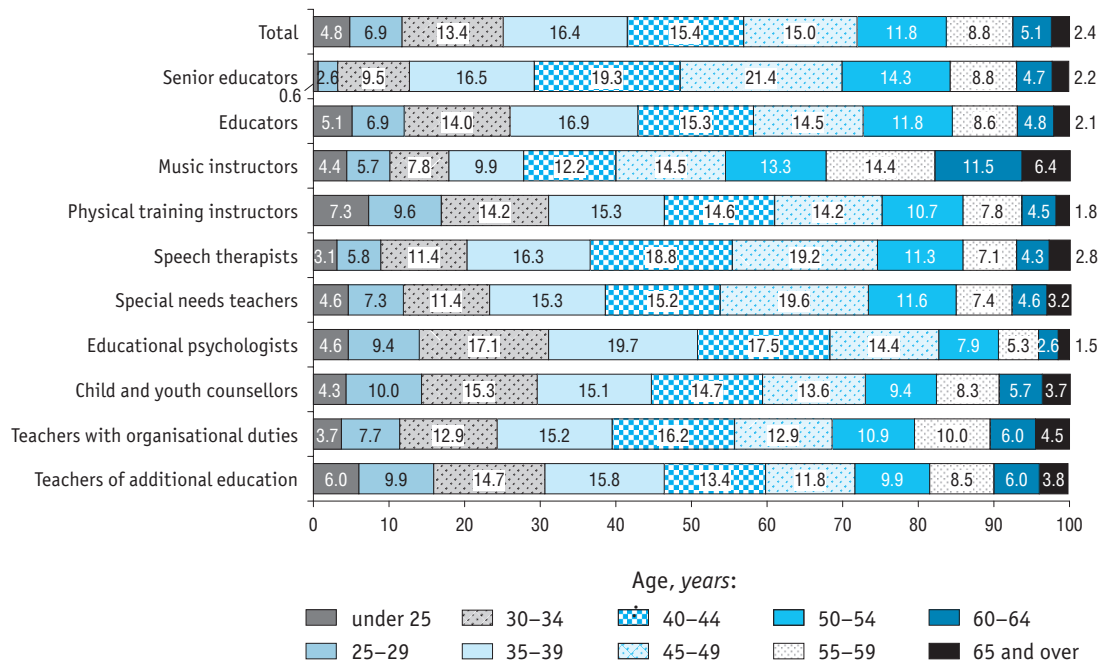
9.2.4. PERCENTAGE DISTRIBUTION OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES BY AGE

(excluding part-timers and independent contractors; at the end of the year; completed years as of January, 1)



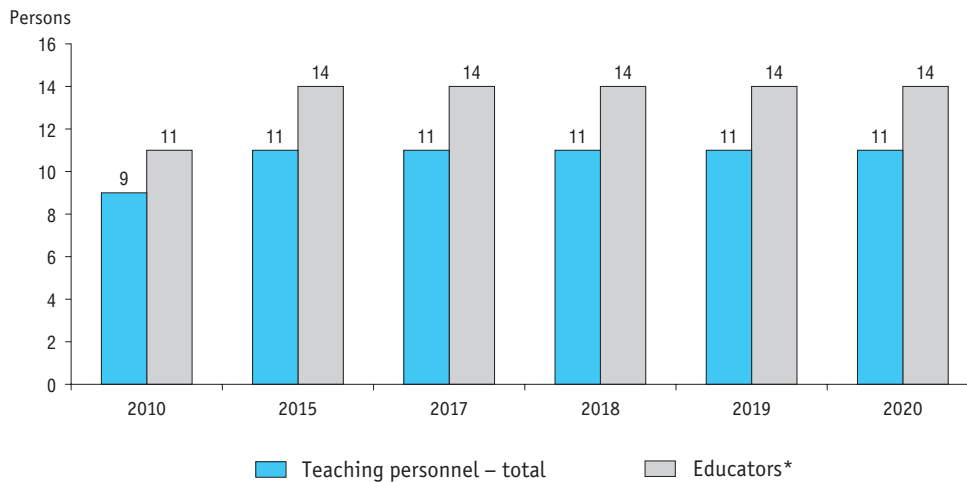
9.2.5. PERCENTAGE DISTRIBUTION OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES BY POSITION AND AGE: 2020

(excluding part-timers and independent contractors; at the end of the year; completed years as of January, 1)



9.2.6. CHILDREN ATTENDING INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES PER MEMBER OF TEACHING PERSONNEL

(at the end of the year)



* Including senior educators.

9.3. Personnel in institutions implementing primary general, basic general, and secondary general education programmes

9.3.1. PERSONNEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY CATEGORY

(*t* the beginning of the academic year; thousand persons)

	Personnel (excluding part-timers and independent contractors)						Part-timers					
	2013/2014	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021	2013/2014	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total												
Total	2136.2	2202.2	2154.0	2163.8	2169.9	2179.1	126.1	114.5	163.0	126.7	124.4	118.4
Managerial personnel	178.5	165.9	151.8	149.8	147.7	147.0	2.0	1.9	5.0	2.1	1.9	1.7
Teaching personnel	1265.5	1321.0	1324.7	1333.2	1339.5	1347.9	80.0	70.7	104.8	81.6	80.6	75.1
Educational support staff	113.4	130.2	142.3	143.1	142.3	137.6	7.6	7.4	10.6	8.4	8.4	8.2
Maintenance personnel	578.9	585.0	535.2	537.7	540.4	546.5	36.4	34.5	42.5	34.6	33.5	33.5
State and municipal institutions												
Total	2104.9	2167.9	2120.9	2130.4	2136.8	2144.3	121.6	110.1	155.4	121.8	119.4	114.0
Managerial personnel	175.0	162.2	148.4	146.4	144.4	143.6	1.8	1.7	4.5	1.8	1.6	1.5
Teaching personnel	1246.4	1300.2	1303.9	1311.9	1318.1	1325.2	76.5	67.2	99.3	77.8	76.8	71.6
Educational support staff	111.8	128.4	140.0	140.6	140.0	135.3	7.5	7.3	10.3	8.2	8.1	8.0
Maintenance personnel	571.8	577.2	528.6	531.5	534.3	540.2	35.9	33.9	41.3	33.9	32.9	32.9
Private institutions												
Total	31.3	34.2	33.1	33.3	33.0	34.8	4.4	4.4	7.6	4.9	5.0	4.5
Managerial personnel	3.5	3.8	3.3	3.4	3.3	3.5	0.2	0.2	0.5	0.3	0.3	0.2
Teaching personnel	19.1	20.8	20.9	21.2	21.5	22.7	3.5	3.5	5.5	3.7	3.9	3.5
Educational support staff	1.6	1.8	2.3	2.5	2.2	2.4	0.2	0.1	0.4	0.2	0.2	0.2
Maintenance personnel	7.2	7.9	6.6	6.3	6.0	6.3	0.6	0.6	1.2	0.7	0.7	0.6

**9.3.2. TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL,
AND SECONDARY GENERAL EDUCATION PROGRAMMES BY POSITION**
(at the beginning of the academic year; thousand persons)

	Teaching personnel (excluding part-timers and independent contractors)						Part-timers					
	2013/2014	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021	2013/2014	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Total												
Total	1265.5	1321.0	1324.7	1333.2	1339.5	1347.9	80.0	70.7	104.8	81.6	80.6	75.1
Teachers	1056.2	1077.3	1079.9	1082.8	1083.3	1087.3	57.7	50.0	76.5	56.5	55.5	51.6
Speech therapists	11.1	13.4	14.0	14.6	15.5	16.5	1.2	1.0	1.5	1.4	1.5	1.5
Educational psychologists	20.9	23.0	24.3	25.6	26.8	28.0	1.4	1.3	2.1	1.6	1.6	1.7
Child and youth counsellors	17.7	17.6	18.0	18.3	18.6	18.9	0.4	0.3	0.7	0.4	0.4	0.3
Educators	98.5	114.2	115.3	115.7	114.8	114.5	1.5	1.1	3.6	1.7	1.5	1.2
Tutors	0.6	1.4	2.4	3.2	4.1	5.5	0.1	0.1	0.2	0.2	0.2	0.3
Industrial training instructors	2.2	1.6	1.2	1.1	1.0	1.0	0.2	0.2	0.2	0.2	0.1	0.1
Others	58.2	72.5	42.9	44.2	46.5	46.8	17.5	16.7	5.2	4.7	4.4	4.6
State and municipal institutions												
Total	1246.4	1300.2	1303.9	1311.9	1318.1	1325.2	76.5	67.2	99.3	77.8	76.8	71.6
Teachers	1041.7	1061.8	1064.6	1067.2	1067.4	1070.3	54.7	47.0	72.2	53.5	52.3	48.8
Speech therapists	10.8	13.1	13.7	14.3	15.2	16.1	1.1	1.0	1.4	1.3	1.4	1.5
Educational psychologists	20.4	22.4	23.8	25.0	26.2	27.3	1.4	1.3	2.0	1.5	1.6	1.6
Child and youth counsellors	17.7	17.5	17.9	18.2	18.5	18.8	0.3	0.3	0.7	0.4	0.4	0.3
Educators	95.7	111.5	112.1	112.4	111.7	111.4	1.5	1.1	3.2	1.5	1.3	1.1
Tutors	0.5	1.3	2.3	3.1	4.0	5.3	0.1	0.1	0.2	0.2	0.2	0.2
Industrial training instructors	2.2	1.6	1.2	1.1	1.0	1.0	0.2	0.2	0.2	0.1	0.1	0.1
Others	57.3	71.0	42.5	43.8	46.0	46.4	17.2	16.3	5.0	4.6	4.4	4.5

(continued)

	Teaching personnel (excluding part-timers and independent contractors)						Part-timers					
	2013/2014	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021	2013/2014	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Private institutions												
Total	19.1	20.8	20.9	21.2	21.5	22.7	3.5	3.5	5.5	3.7	3.9	3.5
Teachers	14.5	15.5	15.3	15.6	15.9	17.0	3.0	2.9	4.3	3.0	3.1	2.9
Speech therapists	0.3	0.3	0.3	0.3	0.3	0.4	0.1	0.1	0.1	0.1	0.1	0.1
Educational psychologists	0.5	0.6	0.6	0.6	0.6	0.6	0.1	0.1	0.1	0.1	0.1	0.1
Child and youth councillors	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Educators	2.7	2.6	3.3	3.3	3.1	3.1	0.0	0.0	0.4	0.1	0.1	0.1
Tutors	0.0	0.1	0.1	0.1	0.1	0.2	0.0	0.2	0.0	0.0	0.0	0.0
Industrial training instructors	0.0	0.0	–	0.0	0.0	–	–	–	0.0	0.0	0.0	0.0
Others	0.9	1.5	0.4	0.4	0.4	0.4	0.3	0.4	0.1	0.1	0.1	0.1

9.3.3. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(excluding part-timers and independent contractors; at the beginning of the academic year; percentage)

	2013/2014	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
	Total					
Total	100	100	100	100	100	100
Of whom have attained education:						
higher	81.6	82.7	83.8	84.0	84.1	84.2
of which pedagogical	76.3	77.5	79.6	80.2	80.3	80.4
secondary vocational – programmes for mid-level specialists	16.9	16.2	15.0	15.0	14.9	14.9
of which pedagogical	14.4	14.0	13.4	13.5	13.5	13.6
	State and municipal institutions					
Total	100	100	100	100	100	100
Of whom have attained education:						
higher	81.5	82.6	83.7	83.9	84.0	84.0
of which pedagogical	76.3	77.4	79.6	80.1	80.2	80.4
secondary vocational – programmes for mid-level specialists	17.0	16.3	15.1	15.1	15.0	15.0
of which pedagogical	14.5	14.1	13.5	13.6	13.7	13.7
	Private institutions					
Total	100	100	100	100	100	100
Of whom have attained education:						
higher	88.7	89.5	90.5	90.9	91.4	91.5
of which pedagogical	79.9	80.6	84.4	85.0	85.4	85.2
secondary vocational – programmes for mid-level specialists	10.0	9.6	8.1	7.8	7.1	7.3
of which pedagogical	7.9	7.8	7.0	6.6	6.3	6.3

9.3.4. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY POSITION

(excluding part-timers and independent contractors; at the beginning of the academic year; percentage)

	Total		Educational attainment							
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
	Total									
Total	100	100	84.1	84.2	80.3	80.4	14.9	14.9	13.5	13.6
Teachers	100	100	87.0	87.0	84.2	84.3	12.3	12.3	11.5	11.5
Speech therapists	100	100	97.7	97.6	95.3	93.8	1.9	2.1	1.7	1.8
Special needs teachers	100	100	96.5	96.2	93.6	91.8	2.9	3.5	2.7	3.1
Educational psychologists	100	100	96.9	96.8	90.1	90.1	2.4	2.5	2.0	2.1
Child and youth counsellors	100	100	83.5	83.3	73.9	73.4	14.9	15.2	12.1	12.3
Teachers of additional education	100	100	74.5	74.4	57.9	58.3	21.9	22.2	15.0	15.3
Educators	100	100	58.4	58.9	53.4	54.3	39.0	38.9	35.8	35.7
Tutors	100	100	82.4	82.4	74.4	74.6	15.6	15.6	13.0	13.4
Industrial training instructors	100	100	48.7	46.9	32.8	31.9	37.6	38.9	13.9	16.7
Others	100	100	72.4	72.2	60.0	59.7	24.4	24.3	18.1	18.2

(continued)

	Total		Educational attainment							
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
State and municipal institutions										
Total	100	100	84.0	84.0	80.2	80.4	15.0	15.0	13.6	13.7
Teachers	100	100	86.9	86.9	84.1	84.2	12.4	12.4	11.6	11.6
Speech therapists	100	100	97.7	97.5	95.3	93.8	1.9	2.1	1.7	1.9
Special needs teachers	100	100	96.5	96.2	93.6	91.8	2.9	3.5	2.7	3.1
Educational psychologists	100	100	96.8	96.8	90.2	90.1	2.4	2.5	2.0	2.1
Child and youth counsellors	100	100	83.4	83.2	73.9	73.4	15.0	15.2	12.2	12.3
Teachers of additional education	100	100	74.3	74.1	57.7	58.1	22.2	22.5	15.2	15.5
Educators	100	100	57.9	58.4	52.9	53.8	39.6	39.5	36.3	36.2
Tutors	100	100	82.4	82.1	74.7	74.7	15.8	15.9	13.2	13.7
Industrial training instructors	100	100	48.6	46.9	32.6	31.9	37.6	38.9	13.9	16.7
Others	100	100	72.3	72.1	59.9	59.5	24.5	24.5	18.2	18.3

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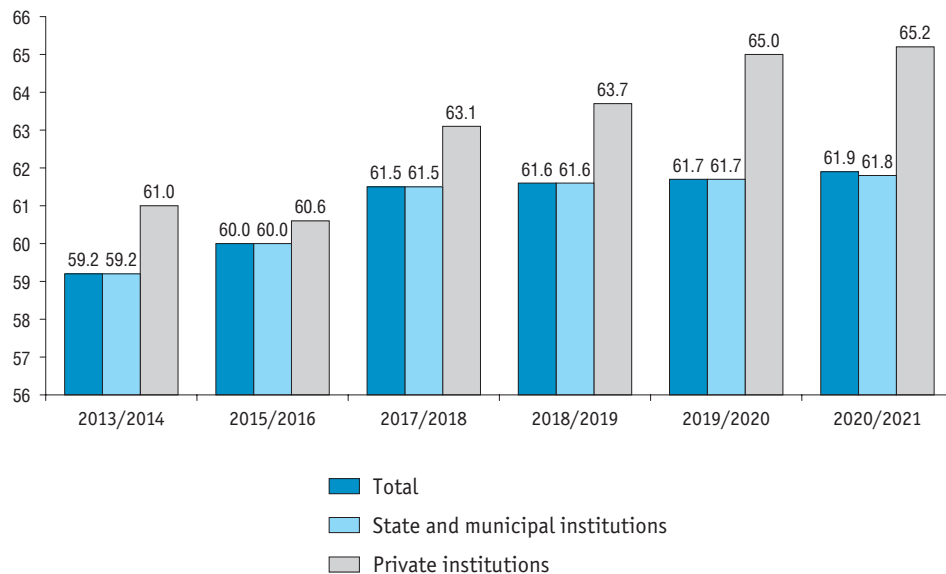
	Total		Educational attainment							
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Private institutions										
Total	100	100	91.4	91.5	85.4	85.2	7.1	7.3	6.3	6.3
Teachers	100	100	94.2	94.3	89.5	88.9	4.9	5.0	4.5	4.5
Speech therapists	100	100	97.7	98.9	94.6	94.4	0.6	1.1	0.3	1.1
Special needs teachers	100	100	100	94.6	95.3	91.1	–	5.4	–	5.4
Educational psychologists	100	100	98.1	98.4	87.5	88.6	0.5	1.1	–	0.9
Child and youth councillors	100	100	97.1	88.2	75.0	64.5	2.9	10.5	2.9	9.2
Teachers of additional education	100	100	81.8	82.6	62.4	64.0	13.1	15.6	8.9	10.2
Educators	100	100	78.6	77.9	72.2	72.4	18.1	19.5	15.9	16.8
Tutors	100	100	84.5	90.9	65.5	72.7	7.3	7.5	5.5	5.9
Industrial training instructors	100	100	100	–	100	–	–	–	–	–
Others	100	100	84.8	82.6	67.7	72.5	12.3	9.7	10.3	7.4

9.3.5. FEMALE TEACHING PERSONNEL AS A PERCENTAGE OF THE TOTAL TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY POSITION
(excluding part-timers and independent contractors; at the beginning of the academic year)

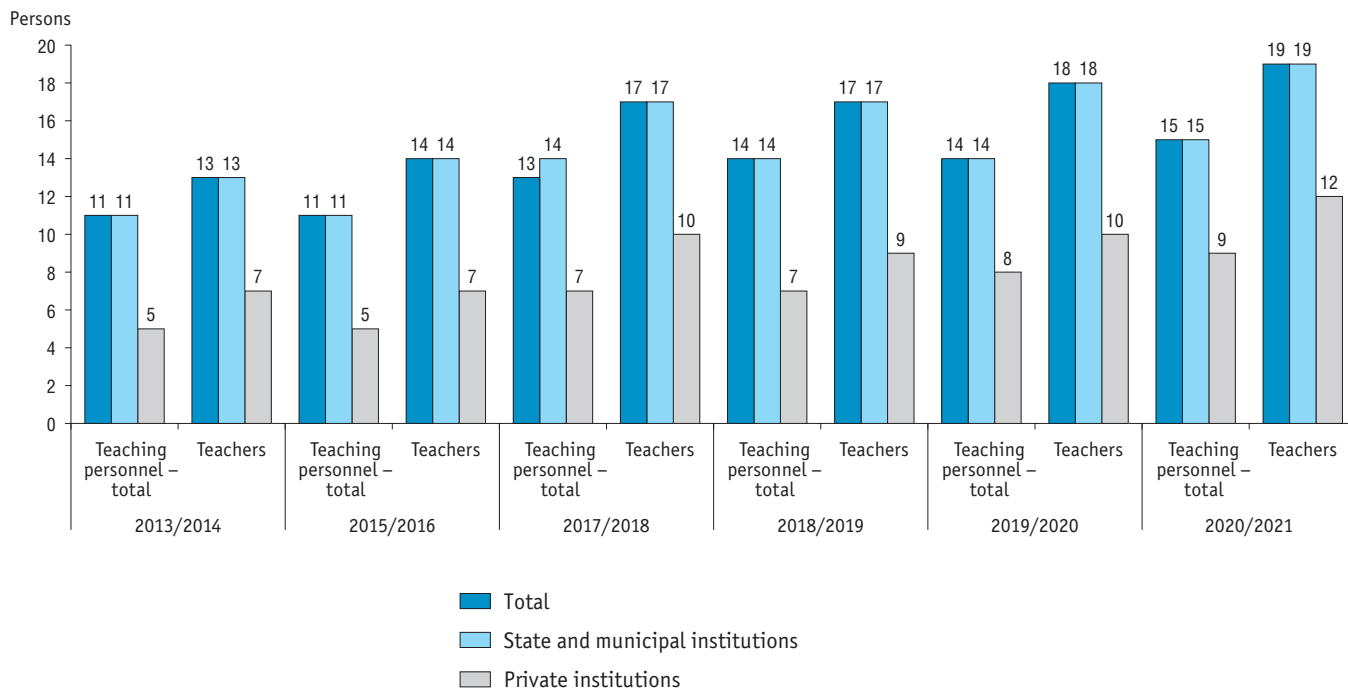
	Total				State and municipal institutions				Private institutions			
	2015/2016	2018/2019	2019/2020	2020/2021	2015/2016	2018/2019	2019/2020	2020/2021	2015/2016	2018/2019	2019/2020	2020/2021
Thousand persons												
Total	1165.7	1185.3	1191.9	1199.2	1147.4	1166.5	1172.9	1179.3	18.2	18.8	19.0	19.9
Teachers	943.3	955.6	956.8	960.0	930.0	942.0	942.9	945.4	13.4	13.6	13.9	14.6
Speech therapists	13.3	14.6	15.5	16.4	12.9	14.3	15.1	16.0	0.3	0.3	0.3	0.4
Educational psychologists	21.9	24.5	25.7	26.8	21.4	23.9	25.1	26.2	0.5	0.5	0.5	0.6
Child and youth counsellors	16.7	17.4	17.7	18.0	16.6	17.3	17.7	17.9	0.1	0.1	0.1	0.1
Educators	109.8	111.5	110.7	110.4	107.2	108.4	107.7	107.3	2.6	3.2	3.0	3.1
Tutors	1.2	2.9	3.8	5.0	1.1	2.8	3.7	4.8	0.1	0.1	0.1	0.2
Industrial training instructors	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	–	–	0.0	–
Others	59.1	37.2	39.3	39.8	57.9	36.9	38.9	39.5	1.2	0.3	0.4	0.4
As a percentage of the total												
Total	88.2	88.9	89.0	89.0	88.3	88.9	89.0	89.0	87.8	88.6	88.5	87.4
Teachers	87.6	88.3	88.3	88.3	87.6	88.3	88.3	88.3	86.3	87.2	87.3	85.9
Speech therapists	98.9	99.5	99.6	99.5	98.9	99.5	99.6	99.5	97.4	99.1	99.7	98.9
Educational psychologists	95.1	95.8	96.0	95.9	95.3	95.9	96.1	96.0	89.3	92.4	92.2	92.1
Child and youth counsellors	95.0	95.3	95.4	95.3	95.0	95.3	95.4	95.3	92.4	87.8	89.7	90.8
Educators	96.1	96.4	96.4	96.3	96.1	96.4	96.4	96.3	97.3	97.1	97.5	97.0
Tutors	87.0	89.4	91.1	91.0	86.5	89.6	91.4	91.4	97.1	83.5	80.0	81.8
Industrial training instructors	21.9	27.5	28.7	29.8	21.9	27.5	28.6	29.8	–	–	100	–
Others	81.6	84.3	84.5	85.1	81.6	84.2	84.5	85.1	83.2	84.8	79.8	86.6

9.3.6. TEACHING PERSONNEL AS A PERCENTAGE OF THE TOTAL PERSONNEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(excluding part-timers and independent contractors; at the beginning of the academic year)



**9.3.7. ENROLMENT IN PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES
PER MEMBER OF TEACHING PERSONNEL**
(at the beginning of the academic year)



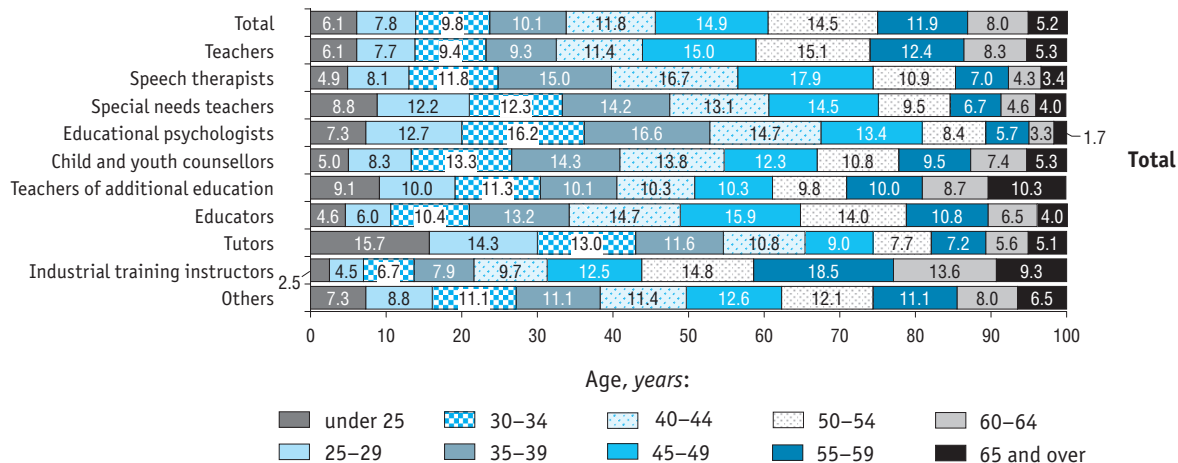
9.3.8. PARTICIPATION OF MANAGERIAL AND TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES IN ADDITIONAL PROFESSIONAL (VOCATIONAL) EDUCATION PROGRAMMES WITHIN THE LAST THREE YEARS

(excluding part-timers and independent contractors; at the beginning of the academic year)

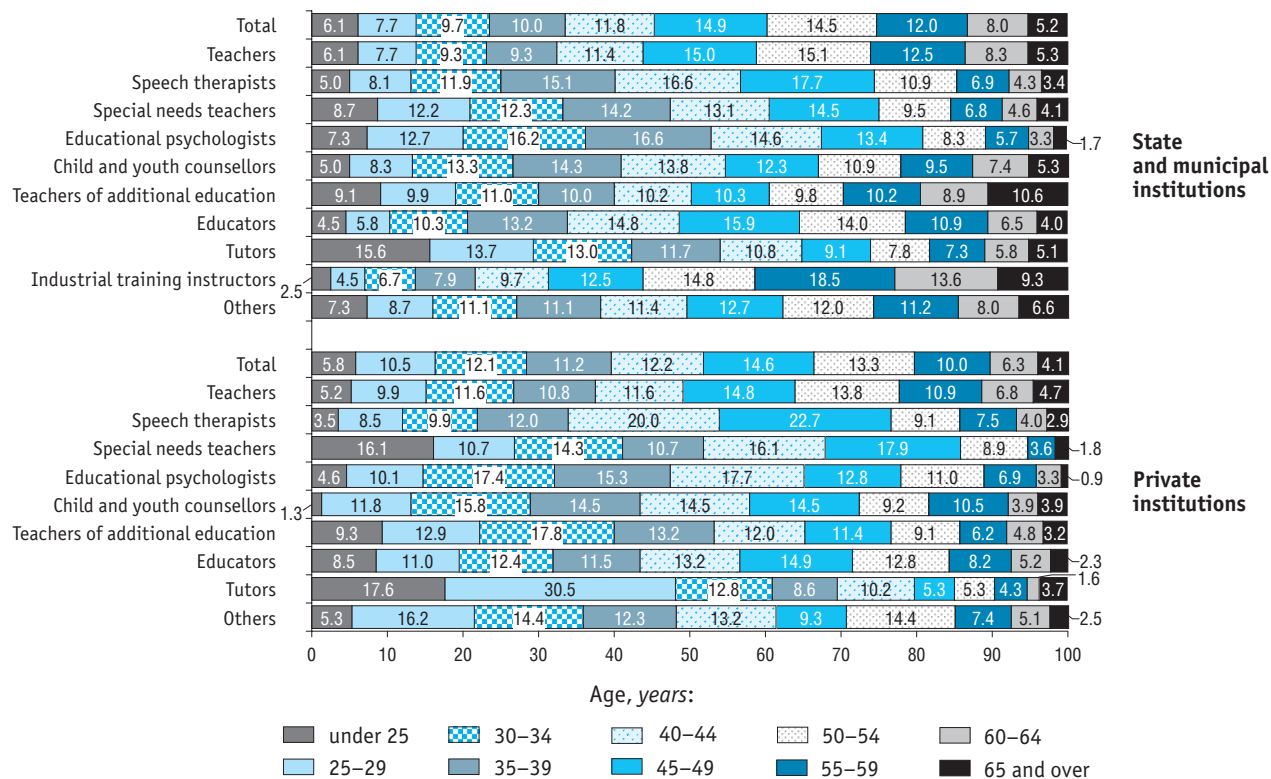
	Individuals who undertook professional (vocational) development and/or retraining							
	managerial personnel – total		of whom school principals		teaching personnel – total		of whom teachers	
	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total
2019/2020								
Total	96629	65.4	29916	75.2	975203	72.8	745234	68.8
State and municipal institutions	95183	65.9	29493	75.7	964425	73.2	737446	69.1
Private institutions	1446	44.1	423	51.9	10778	50.2	7787	48.9
2020/2021								
Total	100248	68.2	30902	78.5	1032630	76.6	790919	72.7
State and municipal institutions	98740	68.8	30481	79.1	1020645	77.0	782236	73.1
Private institutions	1508	43.5	421	49.7	11985	52.8	8683	51.1

9.3.9. PERCENTAGE DISTRIBUTION OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY AGE AND POSITION: 2020/2021

(excluding part-timers and independent contractors; at the beginning of the academic year; completed years as of January, 1)

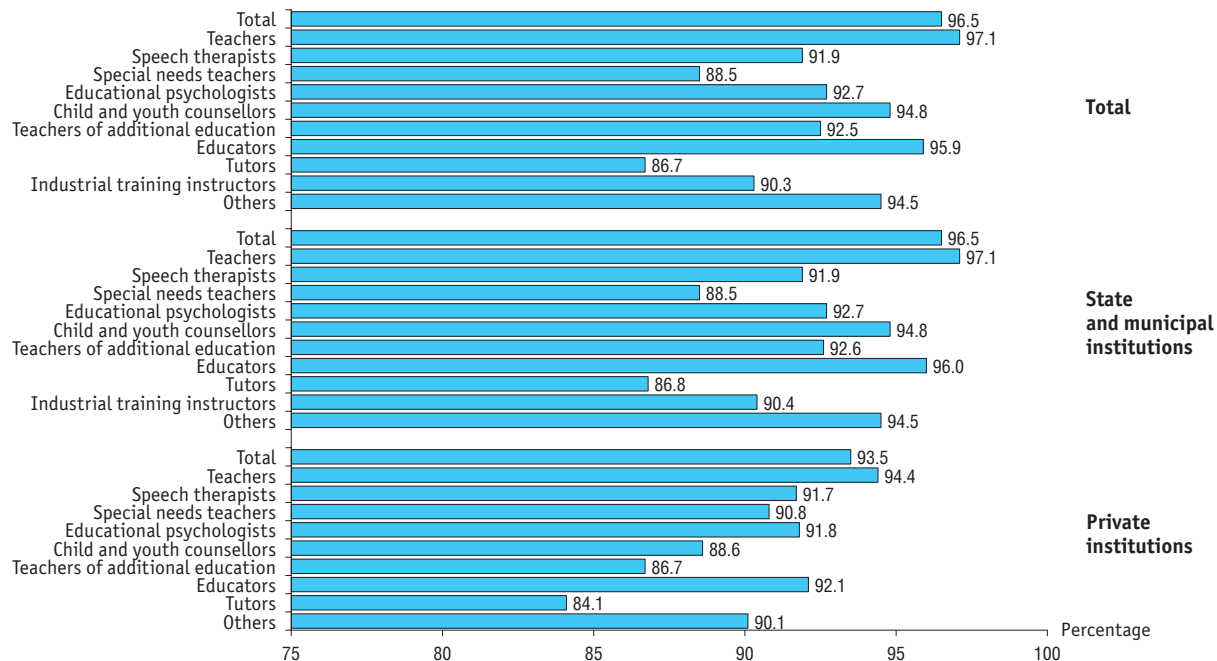


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9.3.10. TEACHING PERSONNEL STAFFING LEVEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY POSITION: 2020/2021

(at the beginning of the academic year)



9.3.11. TEACHERS IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY SPECIALISATION: 2020/2021
(at the beginning of the academic year)

	Teachers (excluding part-timers and independent contractors), persons	Of whom have attained education, percentage					Part-timers, persons	
		higher	of which pedagogical	secondary vocational – programmes for mid-level specialists	of which pedagogical	female		under 35
Total	1087325	87.0	84.3	12.3	11.5	88.3	23.1	51640
Teachers engaged in implementation of educational programmes:								
primary general education	321853	75.2	74.0	24.1	23.7	99.4	21.8	3647
Russian language and literature	127201	96.8	95.7	2.8	2.6	97.8	18.1	3080
languages and literature of the peoples of the RF	15931	91.6	91.0	8.0	7.8	95.3	14.9	504
history, economics, law, social science	66726	97.2	94.5	2.3	2.0	80.0	27.3	3408
computer science and ICT	28116	94.3	85.8	5.1	4.0	71.5	36.2	2930
physics	32083	98.2	93.7	1.3	1.0	75.8	17.0	3700
mathematics	98909	97.4	94.6	2.2	2.0	93.3	18.5	3094
chemistry	23900	98.6	94.9	1.0	0.7	92.8	16.4	3351
geography	31095	96.8	94.2	2.8	2.5	88.1	17.2	1675
biology	32129	97.7	94.8	1.9	1.6	93.8	18.5	2078
foreign languages	123188	95.8	92.9	3.7	3.5	95.6	35.2	6639
of whom:								
English	105575	95.3	91.8	3.5	3.2	95.5	37.1	4466
German	13034	93.1	90.6	5.6	5.1	96.1	22.1	1525
French	3504	98.1	96.2	0.9	0.7	96.4	24.5	364

(continued)

	Teachers (excluding part-timers and independent contractors), persons	Of whom have attained education, percentage						Part-timers, persons
		higher	of which pedagogical	secondary vocational – programmes for mid-level specialists	of which pedagogical	female	under 35	
physical training	78903	80.0	76.8	19.0	17.8	44.6	34.4	4225
labour training (handicrafts)	43260	74.9	66.9	23.1	17.5	63.7	12.2	2610
music and singing	20663	66.4	61.7	32.3	28.6	92.2	18.8	3951
art, drawing	15960	75.8	69.4	23.0	20.0	93.1	20.2	1331
health and safety	12187	86.0	73.3	12.5	10.1	24.8	18.5	878
other subjects	15221	82.1	75.9	16.1	14.0	87.8	24.7	4539
State and municipal institutions								
Total	1070347	86.9	84.2	12.4	11.6	88.3	23.1	48751
Teachers engaged in implementation of educational programmes:								
primary general education	317426	75.0	73.9	24.3	23.9	99.4	21.8	3521
Russian language and literature	125421	96.8	95.7	2.8	2.7	97.9	18.0	2911
languages and literature of the peoples of the RF	15877	91.6	91.0	8.0	7.8	95.3	14.8	488
history, economics, law, social science	65682	97.2	94.5	2.3	2.0	80.2	27.2	3191
computer science and ICT	27665	94.3	85.8	5.2	4.0	71.7	36.2	2733
physics	31574	98.1	93.8	1.3	1.0	75.9	17.0	3485
mathematics	97396	97.4	94.7	2.2	2.0	93.4	18.5	2934
chemistry	23481	98.7	94.9	1.0	0.7	92.9	16.3	3145
geography	30643	96.8	94.2	2.8	2.5	88.2	17.1	1501
biology	31674	97.6	94.9	1.9	1.7	93.8	18.5	1951

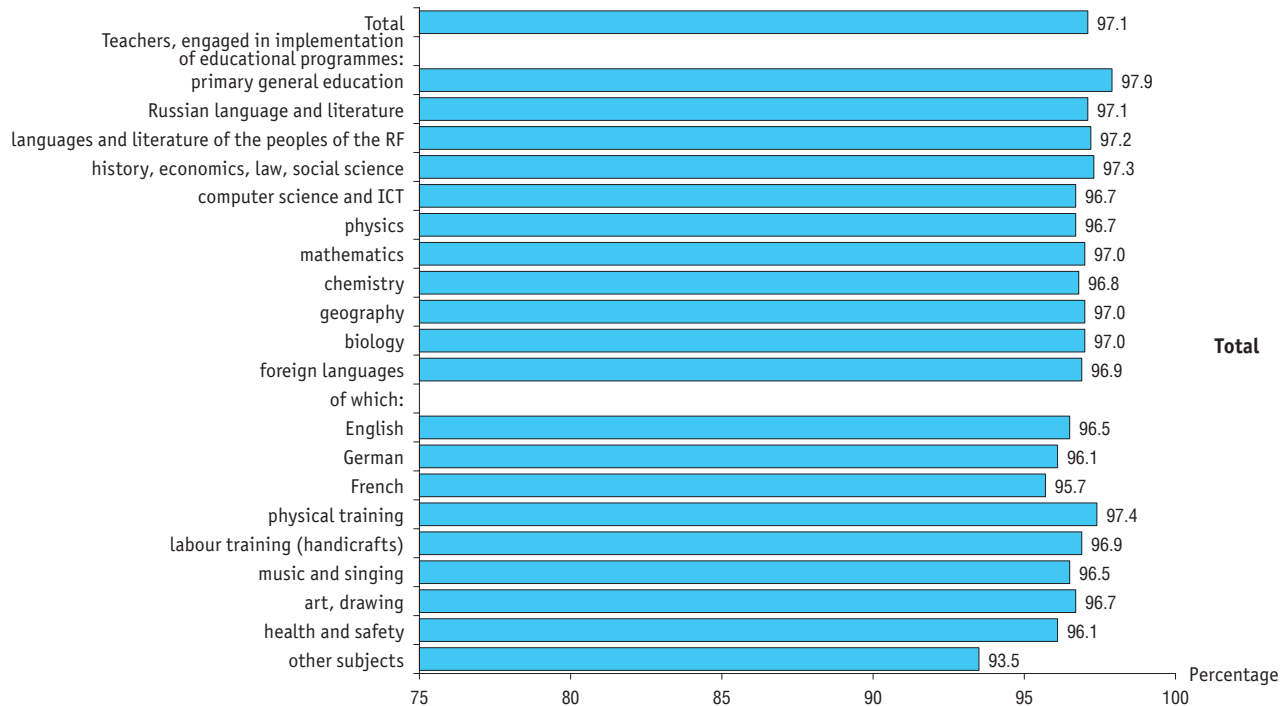
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	Teachers (excluding part-timers and independent contractors), persons	Of whom have attained education, percentage						Part-timers, persons
		higher	of which pedagogical	secondary vocational – programmes for mid-level specialists	of which pedagogical	female	under 35	
foreign languages	120230	95.7	92.9	3.8	3.5	95.7	35.2	6324
of whom:								
English	103121	95.2	91.8	3.5	3.3	95.5	37.1	4267
German	12810	93.0	90.4	5.7	5.2	96.2	22.0	1470
French	3322	98.1	96.4	1.0	0.8	96.4	24.1	327
physical training	77905	79.8	76.7	19.2	17.9	44.6	34.3	4013
labour training (handicrafts)	42885	74.8	66.8	23.1	17.5	63.6	12.2	2470
music and singing	20130	66.0	61.4	32.7	29.0	92.1	18.5	3721
art, drawing	15486	75.5	69.2	23.4	20.3	93.1	20.0	1213
health and safety	12090	85.9	73.3	12.6	10.2	24.7	18.4	811
other subjects	14782	81.7	75.8	16.5	14.4	88.4	24.4	4339
		Private institutions						
Total	16978	94.3	88.9	5.0	4.5	85.9	22.3	2889
Teachers engaged in implementation of educational programmes:								
primary general education	4427	88.7	86.7	10.7	10.5	98.4	17.9	126
Russian language and literature	1780	99.5	96.3	0.3	0.3	94.7	16.3	169
languages and literature of the peoples of the RF	54	94.4	94.4	3.7	3.7	98.1	37.0	16
history, economics, law, social science	1044	99.6	93.7	0.2	0.1	65.2	27.1	217
computer science and ICT	451	97.3	85.6	2.0	1.3	60.8	37.0	197

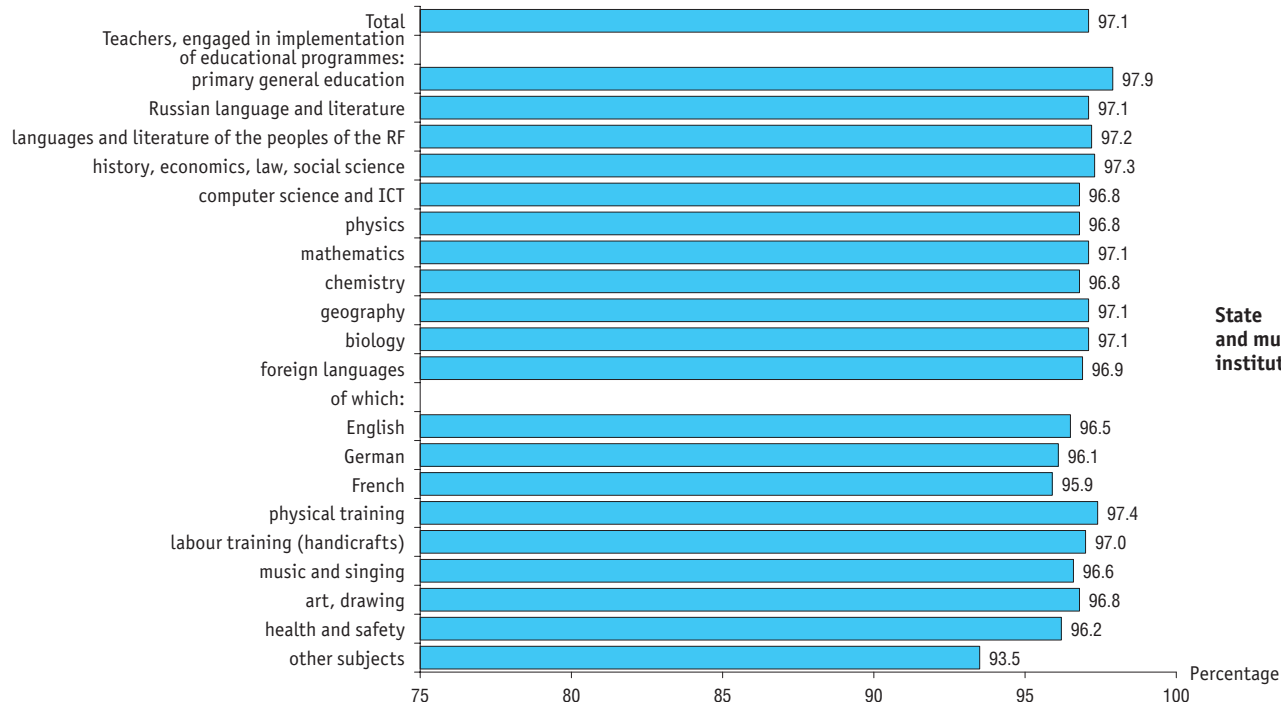
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	Teachers (excluding part-timers and independent contractors), persons	Of whom have attained education, <i>percentage</i>						Part-timers, persons
		higher	of which pedagogical	secondary vocational – programmes for mid-level specialists	of which pedagogical	female	under 35	
physics	509	98.8	90.0	0.4	0.2	67.2	14.7	215
mathematics	1513	99.0	92.5	0.7	0.6	86.5	13.2	160
chemistry	419	97.9	91.9	1.0	0.2	87.8	16.5	206
geography	452	98.5	94.7	0.4	0.4	76.3	20.4	174
biology	455	98.9	93.0	0.2	0.2	88.1	19.6	127
foreign languages	2958	98.4	93.2	1.2	1.1	93.2	33.5	315
of whom:								
English	2454	97.5	91.4	1.3	1.3	92.7	35.4	199
German	224	99.6	96.9	–	–	94.6	18.8	55
French	182	99.5	94.0	–	–	95.6	24.7	37
physical training	998	89.0	83.2	9.3	7.6	44.4	30.6	212
labour training (handicrafts)	375	83.5	70.7	14.9	10.1	74.1	15.7	140
music and singing	533	83.5	74.7	15.2	13.9	93.6	22.5	230
art, drawing	474	86.9	75.7	11.2	8.6	94.1	20.5	118
health and safety	97	96.9	76.3	–	–	38.1	29.9	67
other subjects	439	95.0	78.1	3.4	2.5	70.4	23.9	200

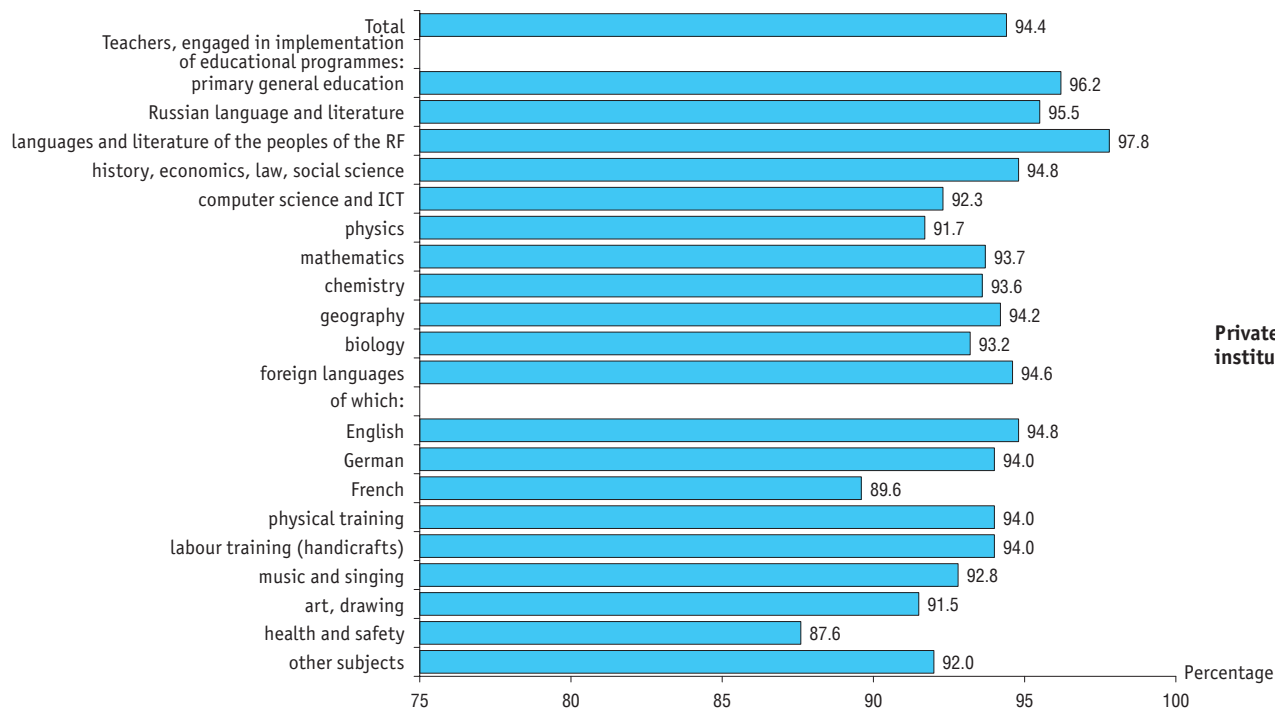
9.3.12. TEACHING PERSONNEL STAFFING LEVEL IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY SPECIALISATION: 2020/2021



(continued)



(continued)



9.4. Personnel in educational institutions implementing secondary vocational education programmes

9.4.1. PERSONNEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES

(at the beginning of the academic year; persons)

	Personnel (excluding part-timers and independent contractors)			Part-timers		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total						
Total	383942	380618	376362	42889	43079	42236
Managerial personnel	28474	28521	28530	322	357	382
Teaching personnel	195286	196596	197703	33764	33991	33292
Educational support staff	37788	37363	36641	2029	2043	2075
Maintenance personnel	122394	118138	113488	6774	6688	6487
State and municipal institutions						
Total	371195	367393	362395	38527	38438	37394
Managerial personnel	26915	26884	26828	152	160	164
Teaching personnel	187729	188756	189417	30072	30105	29281
Educational support staff	36374	35851	34859	1865	1862	1860
Maintenance personnel	120177	115902	111291	6438	6311	6089
Private institutions						
Total	12747	13225	13967	4362	4641	4842
Managerial personnel	1559	1637	1702	170	197	218
Teaching personnel	7557	7840	8286	3692	3886	4011
Educational support staff	1414	1512	1782	164	181	215
Maintenance personnel	2217	2236	2197	336	377	398

9.4.2. TEACHING PERSONNEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY POSITION

(at the beginning of the academic year; persons)

	Teaching personnel (excluding part-timers and independent contractors)			Part-timers		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total						
Total	195286	196596	197703	33764	33991	33292
Teachers	138984	140725	142193	30137	30359	30181
Industrial training instructors	24006	23125	22776	435	501	474
Child and youth counsellors	2961	3041	3068	28	26	26
Educational psychologists	2588	2820	2910	108	134	110
Teachers with organisational duties	2378	2531	2507	142	178	146
Teachers of health and safety with organisational duties	2238	2146	2067	74	75	62
Physical training instructors	2589	2492	2434	154	143	81
Methodologists	5382	5449	5570	169	159	175
Tutors	386	445	555	19	12	17
Others	13774	13822	13623	2498	2404	2020

(continued)

	Teaching personnel (excluding part-timers and independent contractors)			Part-timers		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
State and municipal institutions						
Total	187729	188756	189417	30072	30105	29281
Teachers	132501	133977	135071	26614	26628	26296
Industrial training instructors	23843	22950	22582	402	483	458
Child and youth counsellors	2916	2997	3018	19	17	18
Educational psychologists	2500	2721	2801	89	113	96
Teachers with organisational duties	2291	2455	2422	136	164	137
Teachers of health and safety with organisational duties	2113	2028	1952	52	51	41
Physical training instructors	2413	2330	2275	114	111	53
Methodologists	5129	5185	5302	158	147	166
Tutors	359	416	512	16	9	15
Others	13664	13697	13482	2472	2382	2001

(continued)

	Teaching personnel (excluding part-timers and independent contractors)			Part-timers		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Private institutions						
Total	7557	7840	8286	3692	3886	4011
Teachers	6483	6748	7122	3523	3731	3885
Industrial training instructors	163	175	194	33	18	16
Child and youth counsellors	45	44	50	9	9	8
Educational psychologists	88	99	109	19	21	14
Teachers with organisational duties	87	76	85	6	14	9
Teachers of health and safety with organisational duties	125	118	115	22	24	21
Physical training instructors	176	162	159	40	32	28
Methodologists	253	264	268	11	12	9
Tutors	27	29	43	3	3	2
Others	110	125	141	26	22	19

**9.4.3. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN EDUCATIONAL INSTITUTIONS
IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY POSITION**
(excluding part-timers and independent contractors; at the beginning of the academic year; percentage)

	Total		Of whom have attained education							
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
	Total									
Total	100	100	88.9	88.9	60.1	61.0	9.4	9.7	3.6	3.8
Teachers	100	100	96.1	95.9	66.1	66.9	3.3	3.7	1.3	1.5
Industrial training instructors	100	100	50.3	50.4	24.1	25.0	42.0	42.6	13.6	14.2
Child and youth councillors	100	100	88.5	88.8	64.8	65.4	10.2	10.4	5.5	5.4
Educational psychologists	100	100	98.7	98.2	80.7	80.9	0.9	1.3	0.5	0.7
Teachers with organisational duties	100	100	79.5	79.7	49.9	51.5	17.4	18.1	7.3	7.8
Teachers of health and safety with organisational duties	100	100	93.9	94.1	53.4	55.5	4.9	4.9	2.2	2.0
Physical training instructors	100	100	91.8	91.7	80.1	79.1	7.2	7.6	5.7	5.6
Methodologists	100	100	96.8	96.3	65.0	65.1	2.5	2.8	0.8	0.9
Tutors	100	100	84.5	84.7	55.1	59.6	12.6	13.2	3.4	4.7
Others	100	100	75.0	75.1	51.5	51.9	20.9	21.6	10.1	10.7

(continued)

	Total		Of whom have attained education							
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
State and municipal institutions										
Total	100	100	88.5	88.5	59.8	60.7	9.7	10.1	3.7	3.9
Teachers	100	100	96.0	95.8	66.0	66.8	3.4	3.8	1.4	1.6
Industrial training instructors	100	100	50.0	50.1	24.0	24.7	42.2	42.9	13.7	14.4
Child and youth councillors	100	100	88.4	88.6	64.6	65.2	10.4	10.5	5.5	5.5
Educational psychologists	100	100	98.7	98.3	80.6	81.0	0.9	1.3	0.5	0.7
Teachers with organisational duties	100	100	79.2	79.4	49.8	51.1	17.7	18.5	7.4	8.0
Teachers of health and safety with organisational duties	100	100	93.8	94.0	53.0	55.1	5.1	5.1	2.3	2.2
Physical training instructors	100	100	91.6	91.3	80.3	79.4	7.5	8.0	5.9	6.0
Methodologists	100	100	96.9	96.5	65.4	65.3	2.4	2.7	0.8	1.0
Tutors	100	100	85.8	85.5	55.5	60.0	11.1	12.3	3.6	5.1
Others	100	100	75.0	75.0	51.6	52.0	21.0	21.8	10.2	10.8

(continued)

	Total		Of whom have attained education							
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Private institutions										
Total	100	100	97.1	97.2	65.6	68.0	1.8	1.8	0.5	0.6
Teachers	100	100	98.2	98.1	66.7	68.9	1.2	1.3	0.3	0.5
Industrial training instructors	100	100	85.1	90.2	40.6	55.2	10.9	7.2	3.4	–
Child and youth counsellors	100	100	95.5	98.0	77.3	82.0	–	2.0	–	2.0
Educational psychologists	100	100	97.0	97.2	82.8	77.1	–	0.9	–	–
Teachers with organisational duties	100	100	86.8	85.9	53.9	62.4	7.9	7.1	5.3	3.5
Teachers of health and safety with organisational duties	100	100	96.6	96.5	61.9	63.5	1.7	1.7	–	–
Physical training instructors	100	100	94.4	97.5	76.5	75.5	3.1	1.3	2.5	0.6
Methodologists	100	100	93.9	92.5	56.8	61.6	3.8	4.9	0.4	0.4
Tutors	100	100	65.5	74.4	48.3	55.8	34.5	23.3	–	–
Others	100	100	79.2	85.1	40.8	44.7	11.2	5.7	4.8	2.1

9.4.4. TEACHING PERSONNEL WITH SCIENTIFIC DEGREES AND/OR ACADEMIC STATUS AS A PERCENTAGE OF THE TOTAL TEACHING PERSONNEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES

(excluding part-timers and independent contractors; at the beginning of the academic year; percentage)

	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Total					
Total					
With a scientific degree:					
Doctor of Sciences:					
thousand persons	318	261	266	338	205
as a percentage of the total	0.2	0.1	0.1	0.2	0.1
Candidate of Sciences:					
thousand persons	5774	6535	6897	7190	7052
as a percentage of the total	3.0	3.4	3.5	3.7	3.6
With an academic status of:					
Professors:					
thousand persons	171	174	173	225	141
as a percentage of the total	0.1	0.1	0.1	0.1	0.1
Associate Professor:					
thousand persons	1339	1589	1758	1886	1718
as a percentage of the total	0.7	0.8	0.9	1.0	0.9
Teachers					
With a scientific degree:					
Doctor of Sciences:					
thousand persons	302	242	241	326	194
as a percentage of the total	0.2	0.2	0.2	0.2	0.1

(continued)

	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Candidate of Sciences:					
thousand persons	5273	5942	6284	6583	6476
as a percentage of the total	3.9	4.3	4.5	4.7	4.6
With an academic status of:					
Professors:					
thousand persons	163	164	165	217	129
as a percentage of the total	0.1	0.1	0.1	0.2	0.1
Associate Professor:					
thousand persons	1245	1500	1649	1790	1642
as a percentage of the total	0.9	1.1	1.2	1.3	1.2
State and municipal institutions					
Total					
With a scientific degree:					
Doctor of Sciences:					
thousand persons	201	166	178	282	139
as a percentage of the total	0.1	0.1	0.1	0.1	0.1
Candidate of Sciences:					
thousand persons	4638	5384	5746	6103	5943
as a percentage of the total	2.5	2.9	3.1	3.2	3.1
With an academic status of:					
Professors:					
thousand persons	101	113	128	194	103
as a percentage of the total	0.1	0.1	0.1	0.1	0.1
Associate Professor:					
thousand persons	881	1155	1331	1468	1319
as a percentage of the total	0.5	0.6	0.7	0.8	0.7

(continued)

	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Teachers					
With a scientific degree:					
Doctor of Sciences:					
thousand persons	191	152	159	271	129
as a percentage of the total	0.1	0.1	0.1	0.2	0.1
Candidate of Sciences:					
thousand persons	4223	4858	5201	5545	5425
as a percentage of the total	3.3	3.7	3.9	4.1	4.0
With an academic status of:					
Professors:					
thousand persons	98	106	121	187	92
as a percentage of the total	0.1	0.1	0.1	0.1	0.1
Associate Professor:					
thousand persons	826	1092	1244	1388	1261
as a percentage of the total	0.6	0.8	0.9	1.0	0.9
Private institutions					
Total					
With a scientific degree:					
Doctor of Sciences:					
thousand persons	117	95	88	56	66
as a percentage of the total	1.7	1.4	1.2	0.7	0.8
Candidate of Sciences:					
thousand persons	1136	1151	1151	1087	1109
as a percentage of the total	16.1	16.4	15.3	13.9	13.4

(continued)

	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
With an academic status of:					
Professors:					
thousand persons	70	61	45	31	38
as a percentage of the total	1.0	0.9	0.6	0.4	0.5
Associate Professor:					
thousand persons	458	434	427	418	399
as a percentage of the total	6.5	6.2	5.7	5.3	4.8
Teachers					
With a scientific degree:					
Doctor of Sciences:					
thousand persons	111	90	82	55	65
as a percentage of the total	1.8	1.5	1.3	0.8	0.9
Candidate of Sciences:					
thousand persons	1050	1084	1083	1038	1051
as a percentage of the total	17.4	18.0	16.8	15.4	14.8
With an academic status of:					
Professors:					
thousand persons	65	58	44	30	37
as a percentage of the total	1.1	1.0	0.7	0.4	0.5
Associate Professor:					
thousand persons	419	408	405	402	381
as a percentage of the total	6.9	6.8	6.3	6.0	5.3

**9.4.5. FEMALE TEACHING PERSONNEL AS A PERCENTAGE OF THE TOTAL TEACHING PERSONNEL IN EDUCATIONAL INSTITUTIONS
IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY POSITION**
(excluding part-timers and independent contractors; at the beginning of the academic year)

	Persons			As a percentage of the total		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
	Total					
Total	144736	145073	145835	74.1	73.8	73.8
Teachers	107883	108683	109630	77.6	77.2	77.1
Industrial training instructors	11830	11142	10857	49.3	48.2	47.7
Child and youth councillors	2859	2940	2967	96.6	96.7	96.7
Educational psychologists	2466	2684	2769	95.3	95.2	95.2
Teachers with organisational duties	2031	2140	2159	85.4	84.6	86.1
Teachers of health and safety with organisational duties	308	310	300	13.8	14.4	14.5
Physical training instructors	814	768	785	31.4	30.8	32.3
Methodologists	5088	5156	5260	94.5	94.6	94.4
Tutors	323	370	462	83.7	83.1	83.2
Others	11134	10880	10646	80.8	78.7	78.1

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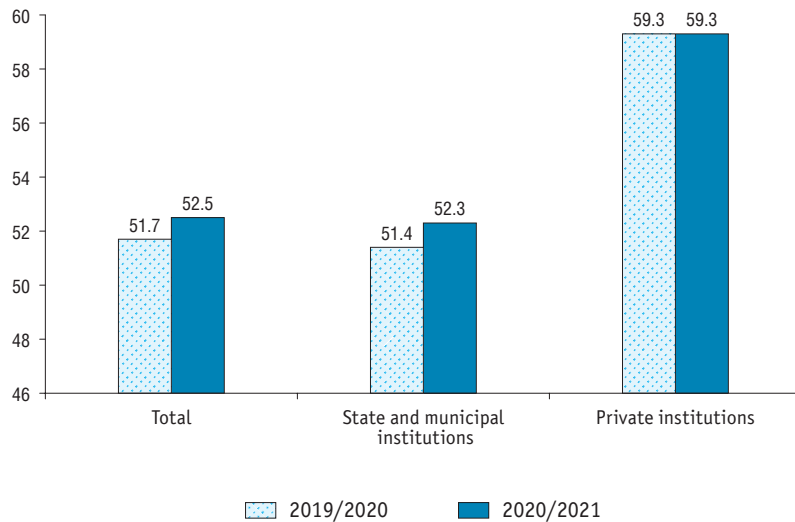
	Persons			As a percentage of the total		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
State and municipal institutions						
Total	139205	139263	139748	74.2	73.8	73.8
Teachers	103050	103622	104333	77.8	77.3	77.2
Industrial training instructors	11757	11050	10761	49.3	48.1	47.7
Child and youth councillors	2818	2898	2922	96.6	96.7	96.8
Educational psychologists	2386	2590	2669	95.4	95.2	95.3
Teachers with organisational duties	1961	2077	2084	85.6	84.6	86.0
Teachers of health and safety with organisational duties	278	275	268	13.2	13.6	13.7
Physical training instructors	761	723	738	31.5	31.0	32.4
Methodologists	4853	4912	5016	94.6	94.7	94.6
Tutors	300	345	425	83.6	82.9	83.0
Others	11041	10771	10532	80.8	78.6	78.1

(continued)

	Persons			As a percentage of the total		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Private institutions						
Total	5531	5810	6087	73.2	74.1	73.5
Teachers	4833	5061	5297	74.5	75.0	74.4
Industrial training instructors	73	92	96	44.8	52.6	49.5
Child and youth counsellors	41	42	45	91.1	95.5	90.0
Educational psychologists	80	94	100	90.9	94.9	91.7
Teachers with organisational duties	70	63	75	80.5	82.9	88.2
Teachers of health and safety with organisational duties	30	35	32	24.0	29.7	27.8
Physical training instructors	53	45	47	30.1	27.8	29.6
Methodologists	235	244	244	92.9	92.4	91.0
Tutors	23	25	37	85.2	86.2	86.0
Others	93	109	114	84.5	87.2	80.9

9.4.6. TEACHING PERSONNEL AS A PERCENTAGE OF THE TOTAL PERSONNEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES

(excluding part-timers and independent contractors; at the beginning of the academic year)



9.4.7. TEACHERS AND INDUSTRIAL TRAINING INSTRUCTORS IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES

(at the beginning of the academic year)

	Teachers and industrial training instructors (excluding part-timers and independent contractors)										Part-timers, persons	
	Total, persons		Of whom with educational attainment, percentage									
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical			
	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021
	Total											
Teachers – total	140725	142193	96.1	95.9	66.1	66.9	3.3	3.7	1.3	1.5	30359	30181
Of whom engaged within educational programmes:												
for skilled workers and employees	21831	21452	89.9	90.4	65.9	65.6	4.7	4.9	1.9	2.2	1904	1887
for mid-level specialists	105975	108456	94.0	94.1	60.4	61.5	2.6	3.0	1.0	1.1	24178	24027
Industrial training instructors – total	23125	22776	50.3	50.4	24.1	25.0	42.0	42.6	13.6	14.2	501	474
Of whom engaged within educational programmes:												
for skilled workers and employees	15941	15575	46.5	46.5	22.6	22.6	37.3	38.5	12.5	12.9	221	256
for mid-level specialists	5009	5050	53.3	54.1	21.0	22.8	36.5	37.1	7.9	8.5	161	151

(continued)

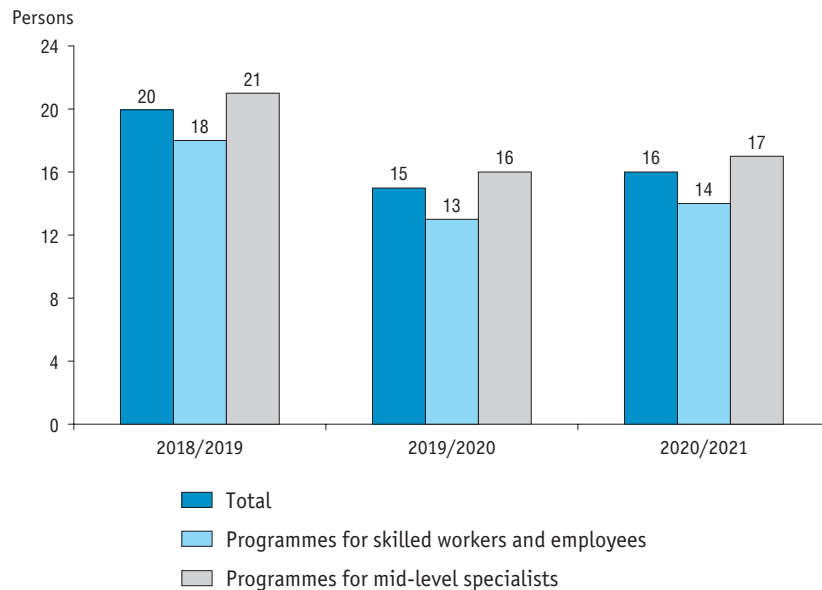
	Teachers and industrial training instructors (excluding part-timers and independent contractors)										Part-timers, persons	
	Total, persons		Of whom with educational attainment, percentage									
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical			
2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	
State and municipal institutions												
Teachers – total	133977	135071	96.0	95.8	66.0	66.8	3.4	3.8	1.4	1.6	26628	26296
Of whom engaged within educational programmes:												
for skilled workers and employees	21755	21358	89.9	90.4	65.9	65.6	4.6	4.9	1.9	2.2	1861	1836
for mid-level specialists	100308	102445	93.9	94.2	60.3	61.5	2.7	3.1	1.0	1.1	21052	20815
Industrial training instructors – total	22950	22582	50.0	50.1	24.0	24.7	42.2	42.9	13.7	14.4	483	458
Of whom engaged within educational programmes:												
for skilled workers and employees	15882	15518	46.4	46.3	22.5	22.5	37.4	38.6	12.5	13.0	219	255
for mid-level specialists	4910	4936	52.8	53.6	20.8	22.2	37.2	37.8	8.1	8.7	147	137

(continued)

	Teachers and industrial training instructors (excluding part-timers and independent contractors)										Part-timers, persons	
	Total, persons		Of whom with educational attainment, percentage									
			higher		of which pedagogical		secondary vocational – programmes for mid-level specialists		of which pedagogical			
	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021	2019/ 2020	2020/ 2021
Private institutions												
Teachers – total	6748	7122	98.2	98.1	66.7	68.9	1.2	1.3	0.3	0.5	3731	3885
Of whom engaged within educational programmes:												
for skilled workers and employees	76	94	86.8	92.6	64.5	58.5	6.6	5.3	–	2.1	43	51
for mid-level specialists	5667	6011	94.4	92.3	61.3	61.1	0.8	1.1	0.2	0.3	3126	3212
Industrial training instructors – total	175	194	64.6	90.2	81.5	55.2	10.9	7.2	3.4	–	18	16
Of whom engaged within educational programmes:												
for skilled workers and employees	59	57	84.7	94.7	40.7	50.9	13.6	3.5	8.5	–	2	1
for mid-level specialists	99	114	79.8	73.7	33.3	48.2	5.1	7.9	1.0	–	14	14

9.4.8. SECONDARY VOCATIONAL EDUCATION ENROLMENT PER TEACHER AND INDUSTRIAL TRAINING INSTRUCTOR IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES

(at the beginning of the academic year)



9.4.9. PARTICIPATION OF MANAGERIAL AND TEACHING PERSONNEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES IN ADDITIONAL PROFESSIONAL (VOCATIONAL) EDUCATION PROGRAMMES WITHIN THE LAST THREE YEARS

(excluding part-timers and independent contractors; at the beginning of the academic year)

	Personnel who undertook professional (vocational) development and/or retraining – total		Of whom							
			within their field of pedagogical activity		developed their ICT skills		in the form of internship (practical training)		in organisations and enterprises of the real sector of economy	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Total										
Managerial personnel:										
persons	19244	19270	12722	12301	3962	5093	2053	1789	–	–
as a percentage of the total	67.5	67.5	44.6	43.1	13.9	17.9	7.2	6.3	–	–
Teaching personnel:										
persons	152007	156478	120086	121700	32613	44010	35362	33742	24885	24885
as a percentage of the total	77.3	79.1	61.1	61.6	16.6	22.3	18.0	17.1	12.7	12.6
Of whom:										
teachers – total:										
persons	117952	121313	94192	95037	27237	37006	26882	25398	18644	18377
as a percentage of the total	83.8	85.3	66.9	66.8	19.4	26.0	19.1	17.9	13.2	12.9
of whom engaged within educational programmes:										
for skilled workers and employees:										
persons	16666	17064	13213	13414	2944	4000	2830	2796	2166	2142
as a percentage of the total	76.3	79.5	60.5	62.5	13.5	18.6	13.0	13.0	9.9	10.0
for mid-level specialists:										
persons	85268	89430	67069	68832	20744	28199	20428	20031	14377	14368
as a percentage of the total	80.5	82.5	63.3	63.5	19.6	26.0	19.3	18.5	13.6	13.2

(continued)

	Personnel who undertook professional (vocational) development and/or retraining – total		Of whom								
			within their field of pedagogical activity		developed their ICT skills		in the form of internship (practical training)		in organisations and enterprises of the real sector of economy		
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	
industrial training instructors – total:											
persons	18585	18627	14217	13978	2596	3416	7040	6993	5447	5482	
as a percentage of the total	80.4	81.8	61.5	61.4	11.2	15.0	30.4	30.7	23.6	24.1	
of whom engaged within educational programmes:											
for skilled workers and employees:											
persons	12424	12434	9284	9153	1592	2090	4652	4604	3633	3674	
as a percentage of the total	77.9	79.8	58.2	58.8	10.0	13.4	29.2	29.6	22.8	23.6	
for mid-level specialists:											
persons	3684	3864	2729	2780	499	756	1334	1361	1092	1082	
as a percentage of the total	73.5	76.5	54.5	55.0	10.0	15.0	26.6	27.0	21.8	21.4	
State and municipal institutions											
Managerial personnel:											
persons	18079	18085	11944	11522	3616	4684	1899	1652	–	–	
as a percentage of the total	67.2	67.4	44.4	42.9	13.5	17.5	7.1	6.2	–	–	
Teaching personnel:											
persons	145928	150131	115365	116983	30364	41394	33872	32425	23990	23968	
as a percentage of the total	77.3	79.3	61.1	61.8	16.1	21.9	17.9	17.1	12.7	12.7	

(continued)

	Personnel who undertook professional (vocational) development and/or retraining – total		Of whom								
			within their field of pedagogical activity		developed their ICT skills		in the form of internship (practical training)		in organisations and enterprises of the real sector of economy		
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	
Of whom:											
teachers – total:											
persons	112577	115672	90000	90791	25208	34653	25516	24222	17815	17536	
as a percentage of the total	84.0	85.6	67.2	67.2	18.8	25.7	19.0	17.9	13.3	13.0	
of whom engaged within educational programmes:											
for skilled workers and employees:											
persons	16612	16986	13179	13357	2940	3983	2812	2775	2154	2131	
as a percentage of the total	76.4	79.5	60.6	62.5	13.5	18.6	12.9	13.0	9.9	10.0	
for mid-level specialists:											
persons	80815	84889	63682	65475	18958	26239	19472	19053	13690	13628	
as a percentage of the total	80.6	82.9	63.5	63.9	18.9	25.6	19.4	18.6	13.6	13.3	
industrial training instructors – total:											
persons	18440	18482	14114	13892	2560	3364	6978	6915	5425	5442	
as a percentage of the total	80.3	81.8	61.5	61.5	11.2	14.9	30.4	30.6	23.6	24.1	
of whom engaged within educational programmes:											
for skilled workers and employees:											
persons	12372	12379	9254	9127	1591	2089	4629	4574	3631	3667	
as a percentage of the total	77.9	79.8	58.3	58.8	10.0	13.5	29.1	29.5	22.9	23.6	
for mid-level specialists:											
persons	3599	3791	2671	2729	464	715	1308	1318	1073	1049	
as a percentage of the total	73.3	76.8	54.4	55.3	9.5	14.5	26.6	26.7	21.9	21.3	

(continued)

	Personnel who undertook professional (vocational) development and/or retraining – total		Of whom								
			within their field of pedagogical activity		developed their ICT skills		in the form of internship (practical training)		in organisations and enterprises of the real sector of economy		
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	
Private institutions											
Managerial personnel:											
persons	1165	1185	778	779	346	409	154	137	–	–	
as a percentage of the total	71.2	69.6	47.5	45.8	21.1	24.0	9.4	8.0	–	–	
Teaching personnel:											
persons	6079	6347	4721	4717	2249	2616	1490	1317	895	917	
as a percentage of the total	77.5	76.6	60.2	56.9	28.7	31.6	19.0	15.9	11.4	11.1	
Of whom:											
teachers – total:											
persons	5375	5641	4192	4246	2029	2353	1366	1176	829	841	
as a percentage of the total	79.7	79.2	62.1	59.6	30.1	33.0	20.2	16.5	12.3	11.8	
of whom engaged within educational programmes:											
for skilled workers and employees:											
persons	54	78	34	57	4	17	18	21	12	11	
as a percentage of the total	71.1	83.0	44.7	60.6	5.3	18.1	23.7	22.3	15.8	11.7	
for mid-level specialists:											
persons	4453	4541	3387	3357	1786	1960	956	978	687	740	
as a percentage of the total	78.6	75.5	59.8	55.8	31.5	32.6	16.9	16.3	12.1	12.3	

(continued)

	Personnel who undertook professional (vocational) development and/or retraining – total		Of whom								
			within their field of pedagogical activity		developed their ICT skills		in the form of internship (practical training)		in organisations and enterprises of the real sector of economy		
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	
industrial training instructors – total:											
persons	145	145	103	86	36	52	62	78	22	40	
as a percentage of the total	82.9	74.7	58.9	44.3	20.6	26.8	35.4	40.2	12.6	20.6	
of whom engaged within educational programmes:											
for skilled workers and employees:											
persons	52	55	30	26	1	1	23	30	2	7	
as a percentage of the total	88.1	96.5	50.8	45.6	1.7	1.8	39.0	52.6	3.4	12.3	
for mid-level specialists:											
persons	85	73	58	51	35	41	26	43	19	33	
as a percentage of the total	85.9	64.0	58.6	44.7	35.4	36.0	26.3	37.7	19.2	28.9	

9.4.10. MANAGERIAL AND TEACHING PERSONNEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES WHO UNDERTOOK PROFESSIONAL (VOCATIONAL) DEVELOPMENT AND/OR RETRAINING BASED ON THE 'YOUNG PROFESSIONALS' (WORLD SKILLS RUSSIA) UNION

(excluding part-timers and independent contractors; at the beginning of the academic year)

	Total		State and municipal institutions		Private institutions	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Managerial personnel:						
persons	1357	1489	1321	1435	36	54
as a percentage of the total	4.8	5.2	4.9	5.3	2.2	3.2
Teaching personnel:						
persons	13079	16340	12919	16120	160	220
as a percentage of the total	6.7	8.3	6.8	8.5	2.0	2.7
Of whom:						
teachers – total:						
persons	9213	11557	9066	11351	147	206
as a percentage of the total	6.5	8.1	6.8	8.4	2.2	2.9
of whom engaged within educational programmes:						
for skilled workers and employees:						
persons	1317	1550	1315	1546	2	4
as a percentage of the total	6.0	7.2	6.3	7.2	2.6	4.3
for mid-level specialists:						
persons	6096	7808	5973	7638	123	170
as a percentage of the total	5.8	7.2	6.0	7.5	2.2	2.8

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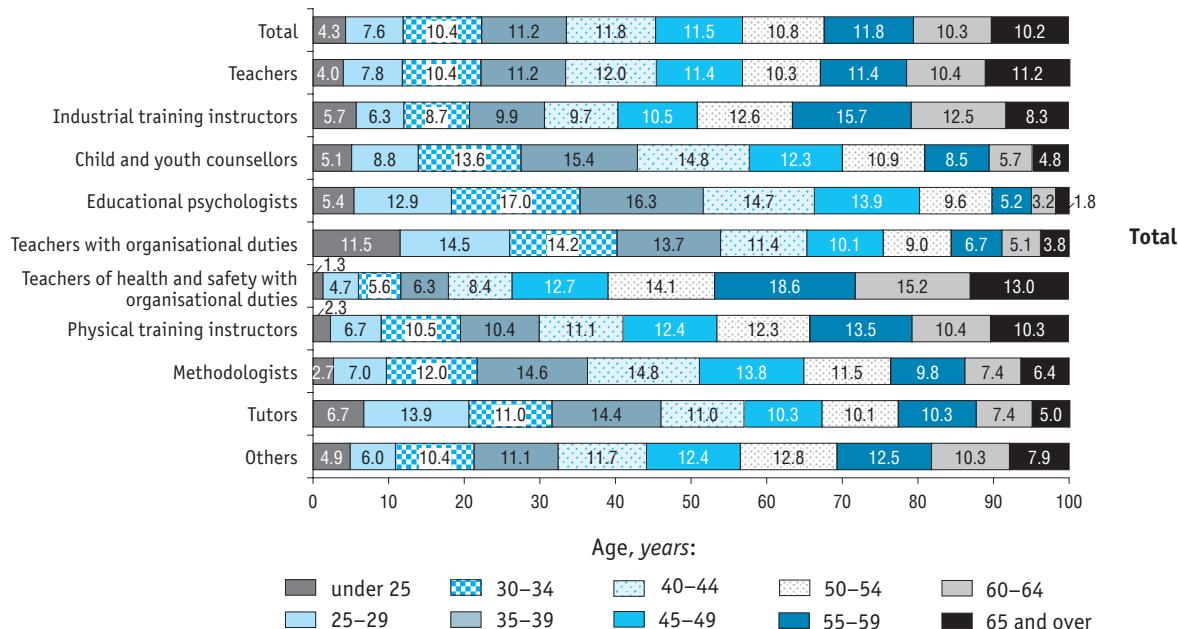
	Total		State and municipal institutions		Private institutions	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
industrial training instructors – total:						
persons	3404	4117	3398	4111	6	6
as a percentage of the total	14.7	18.1	14.8	18.2	3.4	3.1
of whom engaged within educational programmes:						
for skilled workers and employees:						
persons	2081	2492	2080	2490	1	2
as a percentage of the total	13.1	16.0	13.1	16.0	1.7	3.5
for mid-level specialists:						
persons	638	765	633	761	5	4
as a percentage of the total	12.7	15.1	12.9	15.4	5.1	3.5

**9.4.11. PERSONNEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES WHO HAVE
WORLDSKILLS EXPERT CERTIFICATES AND 'YOUNG PROFESSIONALS' (WORLD SKILLS RUSSIA) UNION CERTIFICATES**
(excluding part-timers and independent contractors; at the beginning of the academic year)

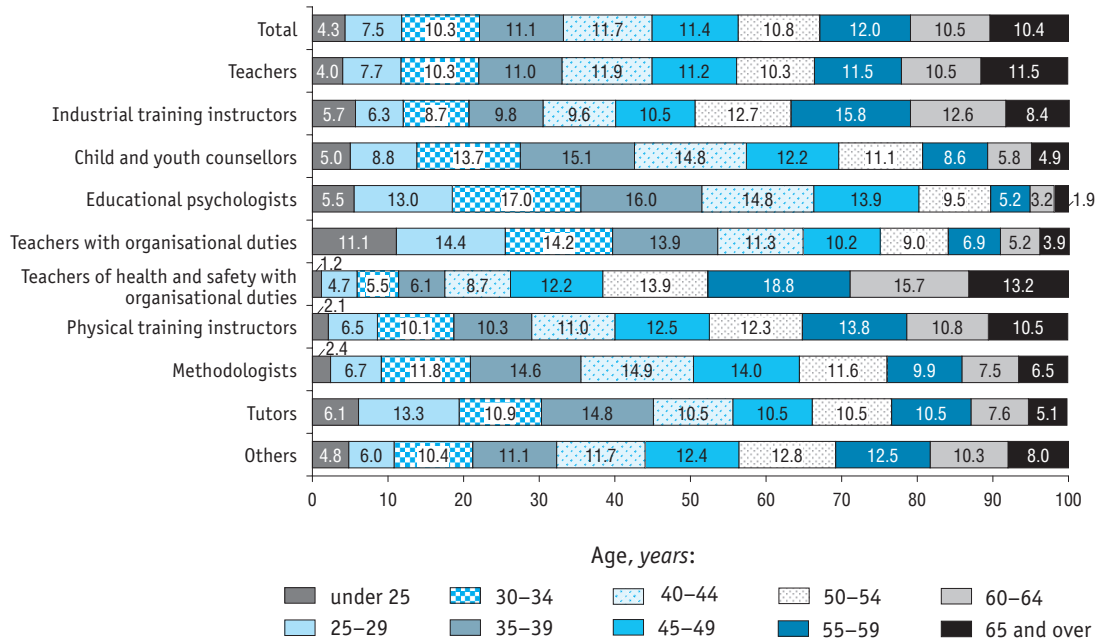
	Total		State and municipal institutions		Private institutions	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Personnel who have a Worldskills Expert certificate – total:						
persons	9198	9861	9092	9632	106	229
as a percentage of the total	2.4	2.6	2.5	2.7	0.8	1.6
Of whom teachers and industrial training instructors:						
persons	7292	7926	7221	7803	71	123
as a percentage of the total	4.5	4.8	4.6	4.9	1.0	1.7
Personnel who have a 'Young Professionals' (WorldSkills Russia) Union certificate, with the right to evaluate the demonstration exam according to Worldskills standards – total:						
persons	16365	21330	16094	20886	271	444
as a percentage of the total	4.3	5.7	4.4	5.8	2.0	3.2
Of whom teachers and industrial training instructors:						
persons	13418	17703	13213	17411	205	292
as a percentage of the total	8.2	10.7	8.4	11.0	2.9	4.0

9.4.12. PERCENTAGE DISTRIBUTION OF TEACHING PERSONNEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY AGE AND POSITION: 2020/2021

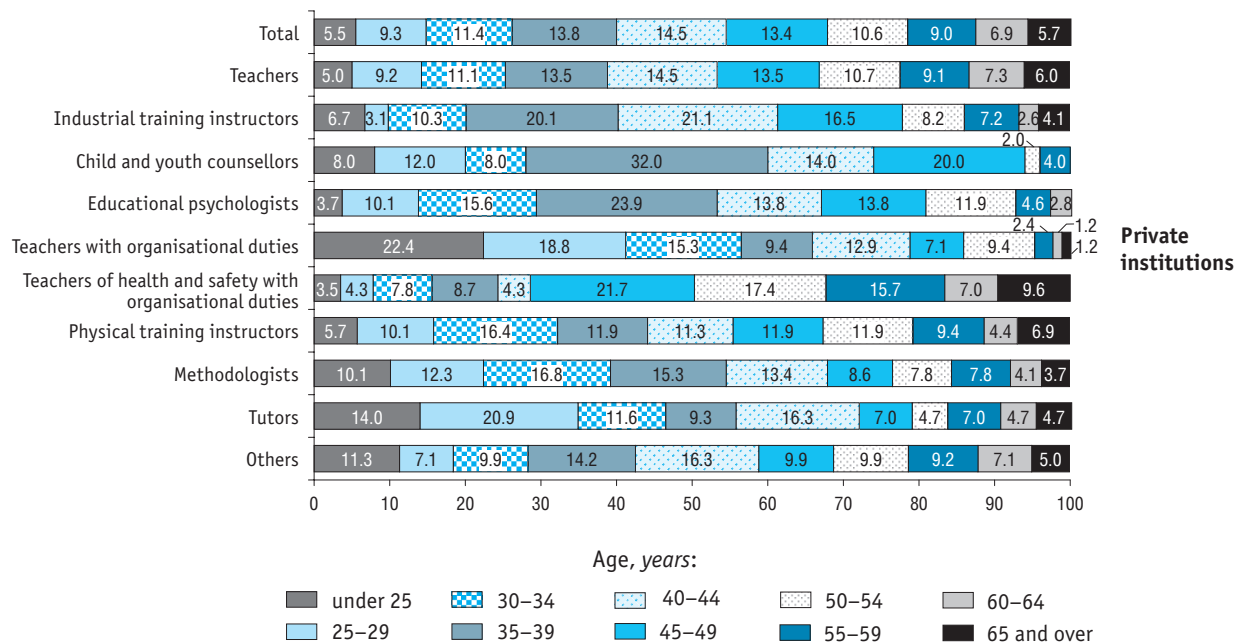
(excluding part-timers and independent contractors; at the beginning of the academic year; completed years as of January, 1)



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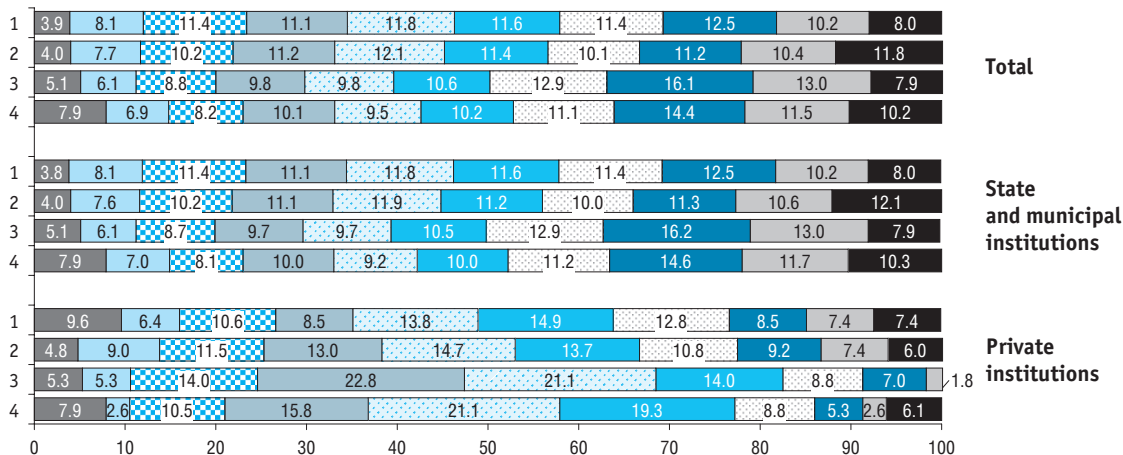


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9.4.13. PERCENTAGE DISTRIBUTION OF TEACHERS AND INDUSTRIAL TRAINING INSTRUCTORS IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY AGE AND PROGRAMME: 2020/2021

(excluding part-timers and independent contractors; at the beginning of the academic year; completed years as of January, 1)



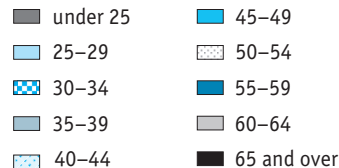
Teachers engaged within educational programmes:

- 1 – for skilled workers and employee
- 2 – for mid-level specialists

Industrial training instructors within educational programmes:

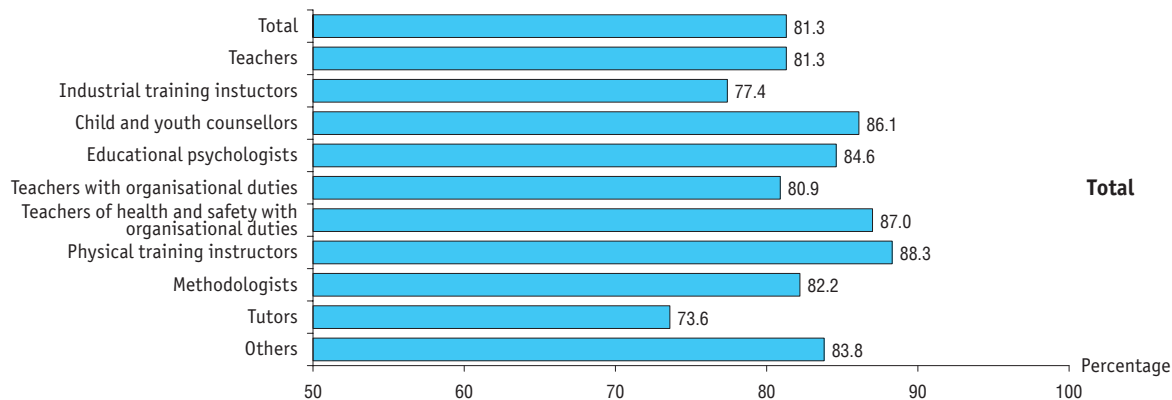
- 3 – for skilled workers and employee
- 4 – for mid-level specialists

Age, years:

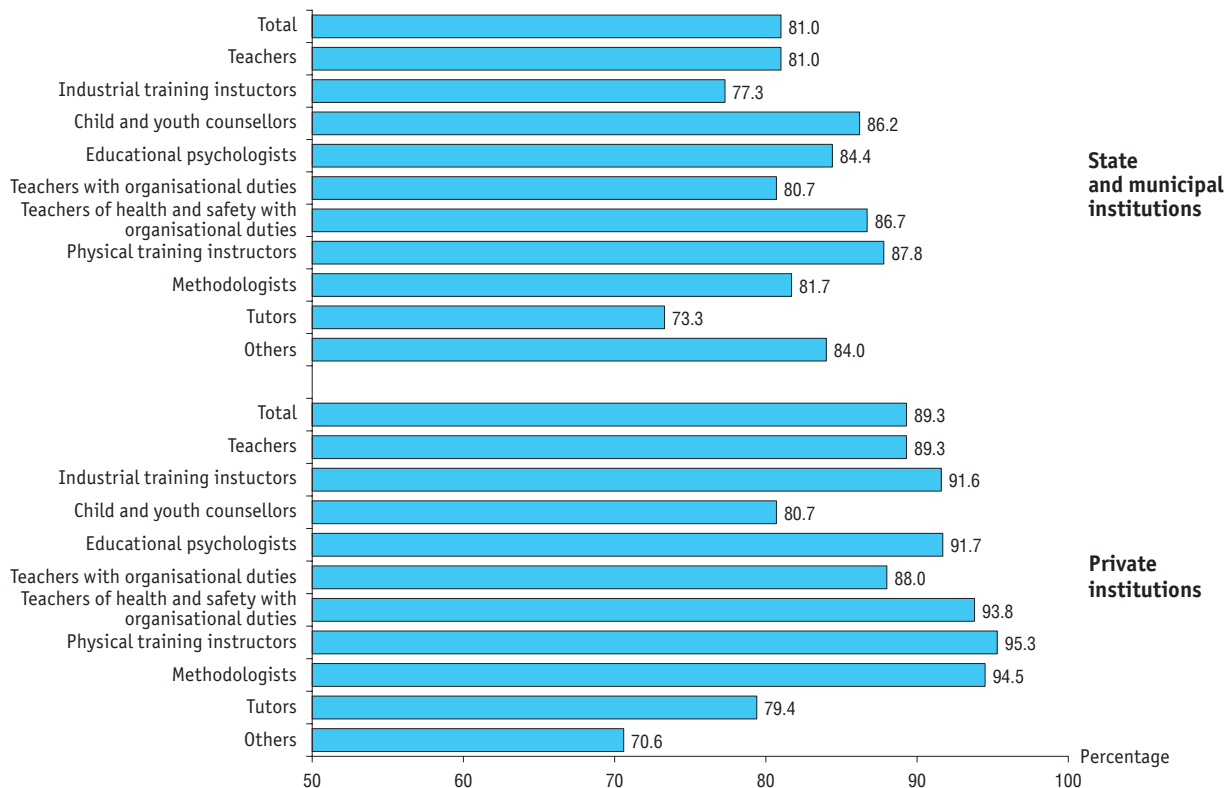


9.4.14. TEACHING PERSONNEL STAFFING LEVEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY POSITION: 2020/2021

(at the beginning of the academic year)

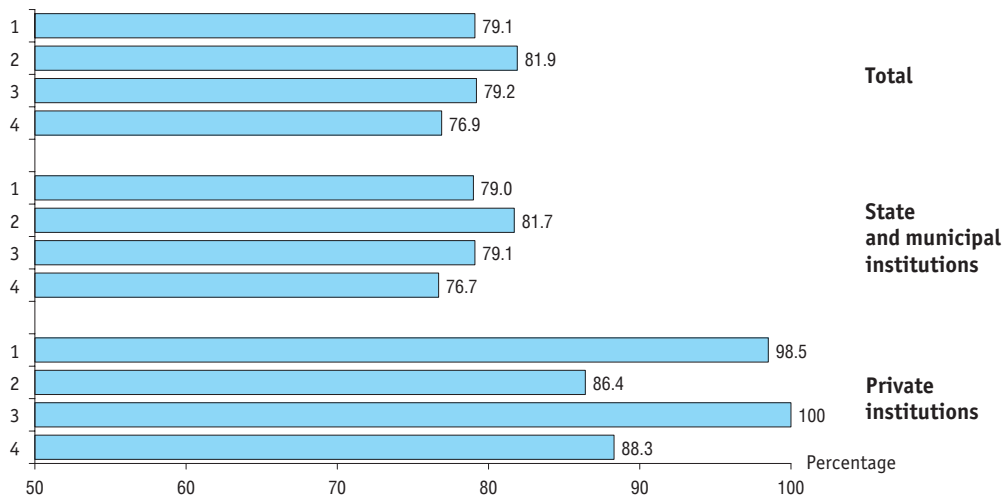


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9.4.15. TEACHERS AND INDUSTRIAL TRAINING INSTRUCTORS STAFFING LEVEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY PROGRAMME: 2020/2021

(at the beginning of the academic year)



Teachers engaged within educational programmes:

- 1 – for skilled workers and employees
- 2 – for mid-level specialists

Industrial training instructors within educational programmes:

- 3 – for skilled workers and employees
- 4 – for mid-level specialists

9.5. Personnel in institutions implementing bachelor's, specialist's, and master's programmes

9.5.1. PERSONNEL IN INSTITUTIONS IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY CATEGORY

(excluding part-timers and independent contractors; at the beginning of the academic year; thousand persons)

	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
	Total					
Total	903.4	724.5	633.5	607.9	590.8	576.3
Managerial personnel	26.5	24.0	28.6	29.1	29.4	29.7
Teaching personnel – total	...	...	249.4	241.9	235.4	229.9
Of whom:						
teaching staff	356.8	279.8	245.1	236.1	229.3	223.1
of whom within bachelor's, specialist's, and master's programmes	...	...	243.0	234.1	227.0	220.9
other teaching personnel	...	...	4.3	5.8	6.0	6.8
Researchers	21.6	18.4	17.0	17.0	16.8	17.1
Engineering and technicians	47.2	46.7	41.3	40.9	40.5	39.8
Administrative personnel	96.1	83.8	73.7	73.1	73.2	73.3
Operational personnel	16.1	11.7	9.2	9.6	9.0	8.8
Educational support staff	163.4	121.8	101.4	95.4	92.4	90.0
Maintenance personnel	175.6	138.3	113.0	101.1	94.3	87.6

(continued)

	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
State and municipal institutions						
Total	837.4	676.1	601.6	578.8	563.4	549.6
Managerial personnel	22.9	21.1	26.1	26.8	27.3	27.7
Teaching personnel – total	...	...	235.0	228.9	223.1	218.2
Of whom:						
teaching staff	324.8	255.8	230.8	223.2	217.2	211.5
of whom within bachelor's, specialist's, and master's programmes	...	...	228.8	221.4	215.0	209.4
other teaching personnel	...	...	4.2	5.7	5.9	6.7
Researchers	21.3	17.7	16.3	16.1	15.8	16.0
Engineering and technicians	45.4	45.2	40.2	39.8	39.4	38.7
Administrative personnel	88.2	78.2	69.0	68.4	68.6	68.7
Operational personnel	14.9	11.3	8.9	9.4	8.8	8.6
Educational support staff	151.3	113.5	96.2	90.7	88.2	86.0
Maintenance personnel	168.6	133.3	110.0	98.7	92.1	85.7

(continued)

	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
	Private institutions					
Total	66.0	48.3	31.9	29.1	27.5	26.6
Managerial personnel	3.7	2.9	2.5	2.4	2.1	2.0
Teaching personnel – total	...	...	14.4	12.9	12.3	11.7
Of whom:						
teaching staff	32.0	23.9	14.3	12.8	12.1	11.5
of whom within bachelor's, specialist's, and master's programmes	...	...	14.2	12.7	12.0	11.4
other teaching personnel	...	...	0.1	0.1	0.1	0.1
Researchers	0.3	0.8	0.7	0.9	0.9	1.1
Engineering and technicians	1.8	1.5	1.1	1.1	1.1	1.1
Administrative personnel	7.9	5.7	4.7	4.6	4.6	4.6
Operational personnel	1.2	0.4	0.3	0.2	0.2	0.2
Educational support staff	12.1	8.2	5.2	4.6	4.2	4.0
Maintenance personnel	7.0	5.7	3.0	2.4	2.2	2.0

9.5.2. TEACHING STAFF IN INSTITUTIONS IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES*

(at the beginning of the academic year; thousand persons)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
	Total							
Teaching staff (excluding part-timers and independent contractors)	279.6	358.9	356.8	279.8	245.1	236.1	229.3	223.1
Of whom within bachelor's, specialist's, and master's programmes	...	...	...	...	243.0	234.1	227.0	220.9
Teaching staff employed as part-timers	78.4	118.4	107.5	67.7	58.1	58.0	58.6	60.0
Of whom within bachelor's, specialist's, and master's programmes	...	...	...	...	56.7	56.7	57.2	58.7
	State and municipal institutions							
Teaching staff (excluding part-timers and independent contractors)	265.2	322.1	324.8	255.8	230.8	223.2	217.2	211.5
Of whom within bachelor's, specialist's, and master's programmes	...	...	...	...	228.8	221.4	215.0	209.4
Teaching staff employed as part-timers	50.6	89.9	89.1	56.4	51.7	52.0	52.4	53.9
Of whom within bachelor's, specialist's, and master's programmes	...	...	...	...	50.3	50.8	51.1	52.7

(continued)

	2000/2001	2005/2006	2010/2011	2015/2016	2017/2018	2018/2019	2019/2020	2020/2021
Private institutions								
Teaching staff (excluding part-timers and independent contractors)	14.4	36.7	32.0	23.9	14.3	12.8	12.1	11.5
Of whom within bachelor's, specialist's, and master's programmes	...	...	...	...	14.2	12.7	12.0	11.4
Teaching staff employed as part-timers	27.8	28.5	18.4	11.3	6.4	5.9	6.2	6.1
Of whom within bachelor's, specialist's, and master's programmes	...	...	...	...	6.3	5.9	6.1	6.0

* The data for the beginning of the 2000/2001 and 2005/2006 academic years, including rectors, vice rectors, and branch directors.

9.5.3. TEACHING STAFF IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES WITH SCIENTIFIC DEGREES AND/OR ACADEMIC STATUS

(excluding part-timers and independent contractors; at the beginning of the academic year)

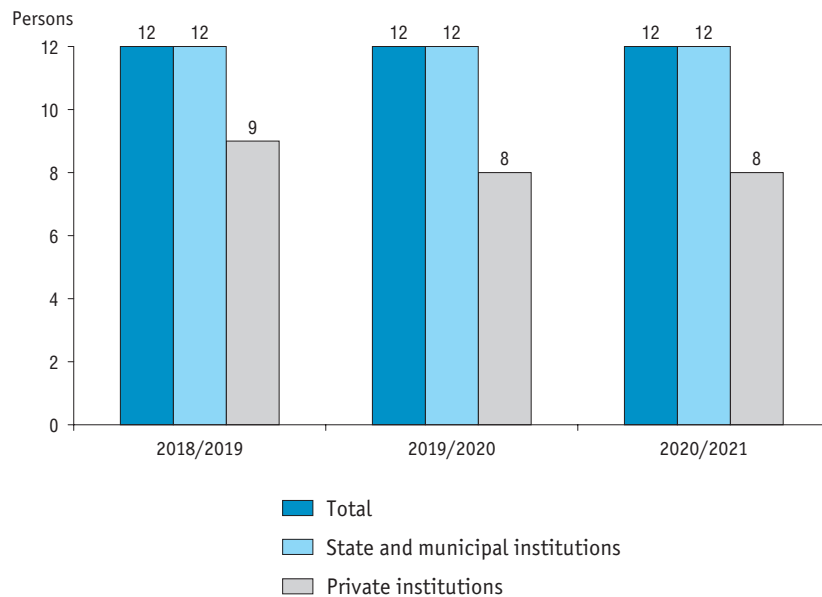
	Thousand persons			As a percentage of the total		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total						
Teaching staff:						
with a scientific degree:						
Doctor of Sciences	37.1	36.3	35.0	15.7	15.8	15.7
Candidate of Sciences	136.5	132.9	129.6	57.8	58.0	58.1
PhD	0.7	0.9	0.8	0.3	0.4	0.4
with an academic status:						
Professor	24.8	24.0	23.7	10.5	10.4	10.6
Associate Professor	88.5	87.4	84.8	37.5	38.1	38.0
Of whom within bachelor's, specialist's, and master's programmes						
with a scientific degree:						
Doctor of Sciences	36.6	35.8	34.6	15.7	15.8	15.7
Candidate of Sciences	135.6	131.8	128.5	57.9	58.1	58.2
PhD	0.7	0.9	0.8	0.3	0.4	0.4
with an academic status:						
Professor	24.6	23.7	23.4	10.5	10.4	10.6
Associate Professor	88.0	86.8	84.3	37.6	38.2	38.1

(continued)

	Thousand persons			As a percentage of the total		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
State and municipal institutions						
Teaching staff:						
with a scientific degree:						
Doctor of Sciences	35.3	34.5	33.5	15.8	15.9	15.8
Candidate of Sciences	128.6	125.4	122.5	57.6	57.7	57.9
PhD	0.6	0.8	0.7	0.3	0.4	0.4
with an academic status:						
Professor	23.6	22.8	22.8	10.6	10.5	10.8
Associate Professor	83.9	82.8	80.4	37.6	38.1	38.0
Of whom within bachelor's, specialist's, and master's programmes						
with a scientific degree:						
Doctor of Sciences	34.9	34.1	33.1	15.7	15.9	15.8
Candidate of Sciences	127.7	124.3	121.4	57.7	57.8	58.0
PhD	0.6	0.8	0.7	0.3	0.4	0.3
with an academic status:						
Professor	23.4	22.5	22.5	10.5	10.5	10.7
Associate Professor	83.4	82.2	79.9	37.6	38.2	38.1

(continued)

	Thousand persons			As a percentage of the total		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Private institutions						
Teaching staff:						
with a scientific degree:						
Doctor of Sciences	1.8	1.7	1.5	13.9	14.3	13.1
Candidate of Sciences	8.0	7.6	7.2	62.2	62.3	62.0
PhD	0.1	0.1	0.1	0.7	0.7	0.6
with an academic status:						
Professor	1.2	1.2	0.9	9.4	9.6	8.2
Associate Professor	4.6	4.6	4.4	36.2	37.6	38.2
Of whom within bachelor's, specialist's, and master's programmes						
with a scientific degree:						
Doctor of Sciences	1.8	1.7	1.5	14.0	14.4	13.2
Candidate of Sciences	7.9	7.5	7.1	62.4	62.4	62.2
PhD	0.1	0.1	0.1	0.7	0.8	0.6
with an academic status:						
Professor	1.2	1.2	0.9	9.4	9.6	8.2
Associate Professor	4.6	4.5	4.4	36.5	37.8	38.3

9.5.4. ENROLMENT PER MEMBER OF TEACHING STAFF IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES*(at the beginning of the academic year)*

9.5.5. TEACHING STAFF IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY POSITION*
(at the beginning of the academic year; persons)

	Teaching staff (excluding part-timers and independent contractors)			Part-timers		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
	Total					
Total	234142	226995	220883	56711	57162	58712
Deans of Faculties	3022	2861	2653	43	47	45
Heads of Chairs (Departments)	17029	16378	15905	1771	1668	1550
Directors of Institutes	954	998	1006	16	26	19
Professor	31817	30727	29631	12032	11513	11357
Associate Professor	118164	115446	113156	24382	24948	26112
Senior teachers	41247	40043	38695	8597	9181	9370
Teachers	6929	6519	6528	2639	2586	2851
Assistants	14980	14023	13309	7231	7193	7408
	State and municipal institutions					
Total	221422	214972	209442	50840	51056	52678
Deans of Faculties	2688	2563	2388	30	33	33
Heads of Chairs (Departments)	15766	15235	14864	1523	1450	1348
Directors of Institutes	934	981	989	11	23	16
Professor	29994	29074	28120	10887	10429	10323
Associate Professor	111807	109356	107342	21393	21930	22964
Senior teachers	38942	37787	36535	7526	7833	8203
Teachers	6463	6097	6025	2355	2277	2473
Assistants	14828	13879	13179	7115	7081	7318

(continued)

	Teaching staff (excluding part-timers and independent contractors)			Part-timers		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Private institutions						
Total	12720	12023	11441	5871	6106	6034
Deans of Faculties	334	298	265	13	14	12
Heads of Chairs (Departments)	1263	1143	1041	248	218	202
Directors of Institutes	20	17	17	5	3	3
Professor	1823	1653	1511	1145	1084	1034
Associate Professor	6357	6090	5814	2989	3018	3148
Senior teachers	2305	2256	2160	1071	1348	1167
Teachers	466	422	503	284	309	378
Assistants	152	144	130	116	112	90

* Here and below in tables 9.5.6 and 9.5.7; figures 9.5.8, 9.5.11, and 9.5.12, only teaching staff in bachelor's, specialist's, and master's programmes.

9.5.6. TEACHING STAFF IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES WITH SCIENTIFIC DEGREES AND/OR ACADEMIC STATUS BY POSITION: 2020/2021

(excluding part-timers and independent contractors; at the beginning of the academic year)

	With a scientific degree						With an academic status			
	Doctor of Sciences		Candidate of Sciences		PhD		Professor		Associate Professor	
	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total
Total										
Total	34581	15.7	128540	58.2	801	0.4	23448	10.6	84251	38.1
Deans of Faculties	719	27.1	1787	67.4	1	0.0	475	17.9	1599	60.3
Heads of Chairs (Departments)	7697	48.4	7742	48.7	23	0.1	5659	35.6	9204	57.9
Directors of Institutes	396	39.4	581	57.8	8	0.8	260	25.8	552	54.9
Professor	24547	82.8	3550	12.0	240	0.8	15986	54.0	10673	36.0
Associate Professor	1184	1.0	106091	93.8	439	0.4	1057	0.9	61776	54.6
Senior teachers	19	0.0	5083	13.1	67	0.2	5	0.0	323	0.8
Teachers	5	0.1	468	7.2	8	0.1	4	0.1	48	0.7
Assistants	14	0.1	3238	24.3	15	0.1	2	0.0	76	0.6
State and municipal institutions										
Total	33074	15.8	121421	58.0	732	0.3	22510	10.7	79868	38.1
Deans of Faculties	687	28.8	1575	66.0	–	–	452	18.9	1477	61.9
Heads of Chairs (Departments)	7473	50.3	6973	46.9	22	0.1	5508	37.1	8448	56.8
Directors of Institutes	396	40.0	569	57.5	8	0.8	260	26.3	546	55.2
Professor	23340	83.0	3305	11.8	211	0.8	15229	54.2	10182	36.2

(continued)

	With a scientific degree						With an academic status			
	Doctor of Sciences		Candidate of Sciences		PhD		Professor		Associate Professor	
	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total
Associate Professor	1150	1.1	100575	93.7	420	0.4	1050	1.0	58787	54.8
Senior teachers	9	0.0	4767	13.0	51	0.1	5	0.0	305	0.8
Teachers	5	0.1	436	7.2	5	0.1	4	0.1	47	0.8
Assistants	14	0.1	3221	24.4	15	0.1	2	0.0	76	0.6
Private institutions										
Total	1507	13.2	7119	62.2	69	0.6	938	8.2	4383	38.3
Deans of Faculties	32	12.1	212	80.0	1	0.4	23	8.7	122	46.0
Heads of Chairs (Departments)	224	21.5	769	73.9	1	0.1	151	14.5	756	72.6
Directors of Institutes	–	–	12	70.6	–	–	–	–	6	35.3
Professor	1207	79.9	245	16.2	29	1.9	757	50.1	491	32.5
Associate Professor	34	0.6	5516	94.9	19	0.3	7	0.1	2989	51.4
Senior teachers	10	0.5	316	14.6	16	0.7	–	–	18	0.8
Teachers	–	–	32	6.4	3	0.6	–	–	1	0.2
Assistants	–	–	17	13.1	–	–	–	–	–	–

9.5.7. FEMALE TEACHING STAFF AS A PERCENTAGE OF THE TOTAL TEACHING STAFF IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY POSITION

(excluding part-timers and independent contractors; at the beginning of the academic year)

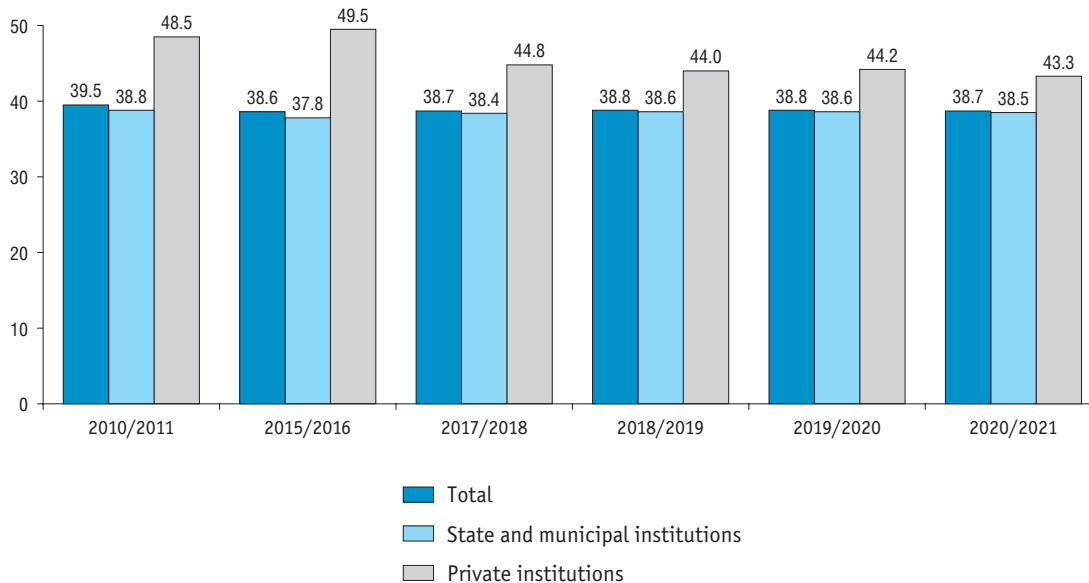
	Persons			As a percentage of the total		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total						
Total	134824	131442	128485	57.6	57.9	58.2
Deans of Faculties	1434	1378	1283	47.5	48.2	48.4
Heads of Chairs (Departments)	7757	7566	7510	45.6	46.2	47.2
Directors of Institutes	387	420	439	40.6	42.1	43.6
Professor	11278	11027	10961	35.4	35.9	37.0
Associate Professor	71283	70135	69004	60.3	60.8	61.0
Senior teachers	28361	27588	26474	68.8	68.9	68.4
Teachers	4508	4186	4233	65.1	64.2	64.8
Assistants	9816	9142	8581	65.5	65.2	64.5
State and municipal institutions						
Total	127364	124501	121886	57.5	57.9	58.2
Deans of Faculties	1209	1183	1106	45.0	46.2	46.3
Heads of Chairs (Departments)	7045	6912	6892	44.7	45.4	46.4
Directors of Institutes	376	412	432	40.3	42.0	43.7
Professor	10603	10387	10389	35.4	35.7	36.9
Associate Professor	67353	66464	65549	60.2	60.8	61.1
Senior teachers	26849	26137	25106	68.9	69.2	68.7
Teachers	4204	3947	3899	65.0	64.7	64.7
Assistants	9725	9059	8513	65.6	65.3	64.6

(continued)

	Persons			As a percentage of the total		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Private institutions						
Total	7460	6941	6599	58.6	57.7	57.7
Deans of Faculties	225	195	177	67.4	65.4	66.8
Heads of Chairs (Departments)	712	654	618	56.4	57.2	59.4
Directors of Institutes	11	8	7	55.0	47.1	41.2
Professor	675	640	572	37.0	38.7	37.9
Associate Professor	3930	3671	3455	61.8	60.3	59.4
Senior teachers	1512	1451	1368	65.6	64.3	63.3
Teachers	304	239	334	65.2	56.6	66.4
Assistants	91	83	68	59.9	57.6	52.3

9.5.8. TEACHING STAFF AS A PERCENTAGE OF THE TOTAL PERSONNEL IN INSTITUTIONS IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES

(excluding part-timers and independent contractors; at the beginning of the academic year)



9.5.9. PARTICIPATION OF MANAGERIAL PERSONNEL, TEACHING STAFF, AND RESEARCHERS IN INSTITUTIONS IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES IN ADDITIONAL PROFESSIONAL (VOCATIONAL) EDUCATION PROGRAMMES WITHIN THE LAST THREE YEARS

(excluding part-timers and independent contractors; at the beginning of the academic year)

	Personnel who undertook professional (vocational) development programmes and/or retraining – total		Of whom								
			within their field of pedagogical activity		developed their ICT skills		in the form of internship (practical training)		including in the leading Russian and foreign universities and research centres		
			2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Total											
Managerial personnel:											
persons	15706	16297	5831	6254	6974	7497	809	793	595	418	
as a percentage of the total	53.4	54.9	19.8	21.1	23.7	25.3	2.8	2.7	2.0	1.4	
Teaching staff:											
persons	206038	203955	139748	144460	131403	138056	16122	15036	10000	8699	
as a percentage of the total	89.8	91.4	60.9	64.8	57.3	61.9	7.0	6.7	4.4	3.9	
Of whom within bachelor's, specialist's, and master's programmes											
persons	204118	201947	138076	142806	130131	137151	15900	14933	9971	8659	
as a percentage of the total	89.9	91.4	60.8	64.7	57.3	62.1	7.0	6.8	4.4	3.9	
Researchers:											
persons	8610	8447	5282	5744	2479	2616	1477	1322	1294	1045	
as a percentage of the total	51.4	49.5	31.5	33.6	14.8	15.3	8.8	7.7	7.7	6.1	

(continued)

	Personnel who undertook professional (vocational) development programmes and/or retraining – total		Of whom							
			within their field of pedagogical activity		developed their ICT skills		in the form of internship (practical training)		including in the leading Russian and foreign universities and research centres	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
State and municipal institutions										
Managerial personnel:										
persons	14230	14898	5026	5508	6044	6605	766	756	575	405
as a percentage of the total	52.1	53.9	18.4	19.9	22.1	23.9	2.8	2.7	2.1	1.5
Teaching staff:										
persons	194814	193341	131771	136438	122950	129834	15580	14405	9765	8462
as a percentage of the total	89.7	91.4	60.7	64.5	56.6	61.4	7.2	6.8	4.5	4.0
Of whom within bachelor's, specialist's, and master's programmes										
persons	193002	191422	130180	134879	121734	128995	15363	14305	9736	8422
as a percentage of the total	89.8	91.4	60.7	64.4	56.6	61.6	7.1	6.8	4.5	4.0
Researchers:										
persons	8216	8062	5037	5497	2181	2339	1469	1313	1290	1042
as a percentage of the total	51.9	50.3	31.8	34.3	13.8	14.6	9.3	8.2	8.2	6.5

(continued)

	Personnel who undertook professional (vocational) development programmes and/or retraining – total		Of whom							
			within their field of pedagogical activity		developed their ICT skills		in the form of internship (practical training)		including in the leading Russian and foreign universities and research centres	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
Private institutions										
Managerial personnel:										
persons	1476	1399	805	746	930	892	43	37	20	13
as a percentage of the total	70.9	68.9	38.7	36.7	44.7	43.9	2.1	1.8	1.0	0.6
Teaching staff:										
persons	11224	10614	7977	8022	8453	8222	542	631	235	237
as a percentage of the total	92.4	91.9	65.7	69.5	69.6	71.2	4.5	5.5	1.9	2.1
Of whom within bachelor's, specialist's, and master's programmes										
persons	11116	10525	7896	7927	8397	8156	537	628	235	237
as a percentage of the total	92.5	92.0	65.7	69.3	69.8	71.3	4.5	5.5	2.0	2.1
Researchers:										
persons	394	385	245	247	298	277	8	9	4	3
as a percentage of the total	41.6	36.3	25.9	23.3	31.5	26.1	0.8	0.8	0.4	0.3

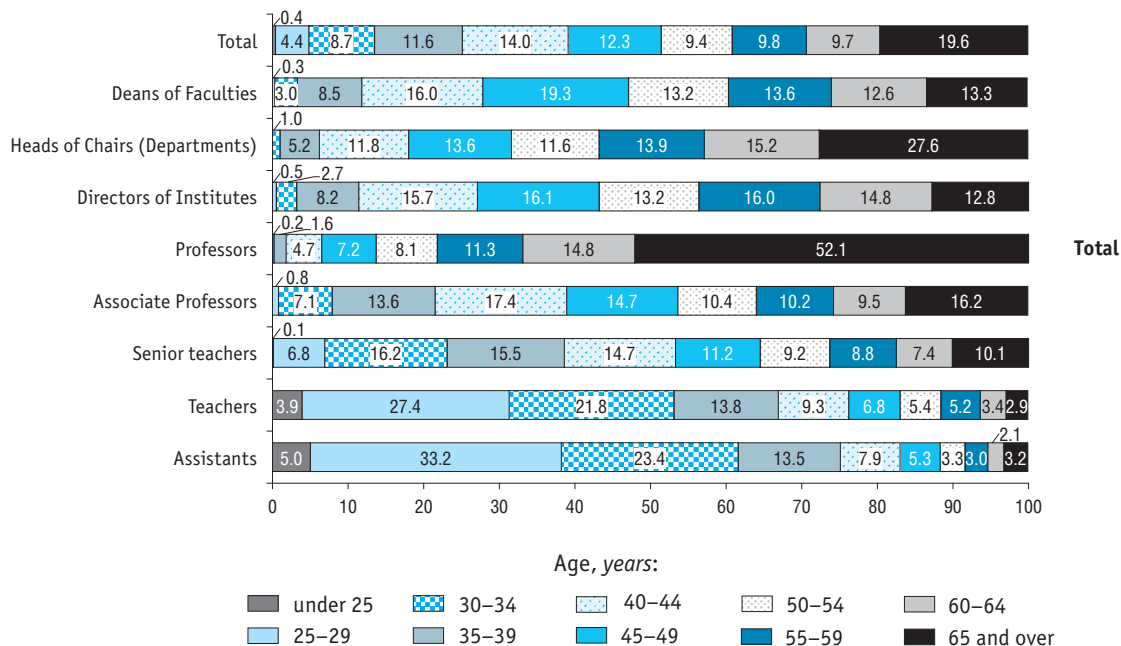
9.5.10. INTERNATIONAL PERSONNEL IN INSTITUTIONS IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES

(at the beginning of the academic year)

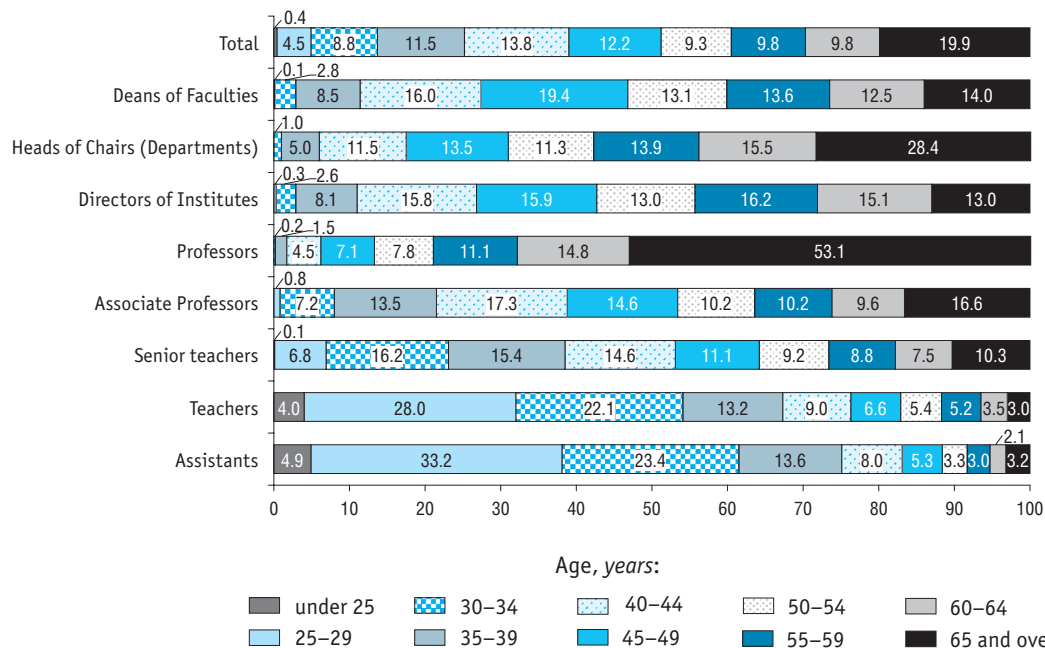
	Personnel (excluding part-timers and independent contractors)								Part-timers							
	Persons		As a percentage of the total		Of whom the citizens of, <i>percentage</i>				Persons		As a percentage of the total		Of whom the citizens of, <i>percentage</i>			
					CIS countries		the EU and the US						CIS countries		the EU and the US	
	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021	2019/2020	2020/2021
	Total															
Teaching staff	1912	1787	0.8	0.8	32.7	31.1	32.4	31.8	706	606	0.8	0.6	41.5	44.9	39.4	34.8
Researchers	909	914	5.4	5.4	34.0	35.4	23.4	21.8	345	347	4.3	4.0	28.1	31.1	37.7	39.5
	State and municipal institutions															
Teaching staff	1800	1680	0.8	0.8	33.1	31.3	31.2	30.1	667	571	1.3	1.1	40.9	44.3	39.0	34.3
Researchers	852	847	5.4	5.3	34.4	35.4	23.6	21.0	344	346	4.4	4.1	27.9	30.9	37.8	39.6
	Private institutions															
Teaching staff	112	107	0.9	0.9	27.7	27.1	51.8	59.8	39	35	0.6	0.6	51.3	54.3	46.2	42.9
Researchers	57	67	6.0	6.3	28.1	35.8	21.1	31.3	1	1	0.4	0.4	100	100	–	–

9.5.11. PERCENTAGE DISTRIBUTION OF TEACHING STAFF IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY AGE AND POSITION: 2020/2021

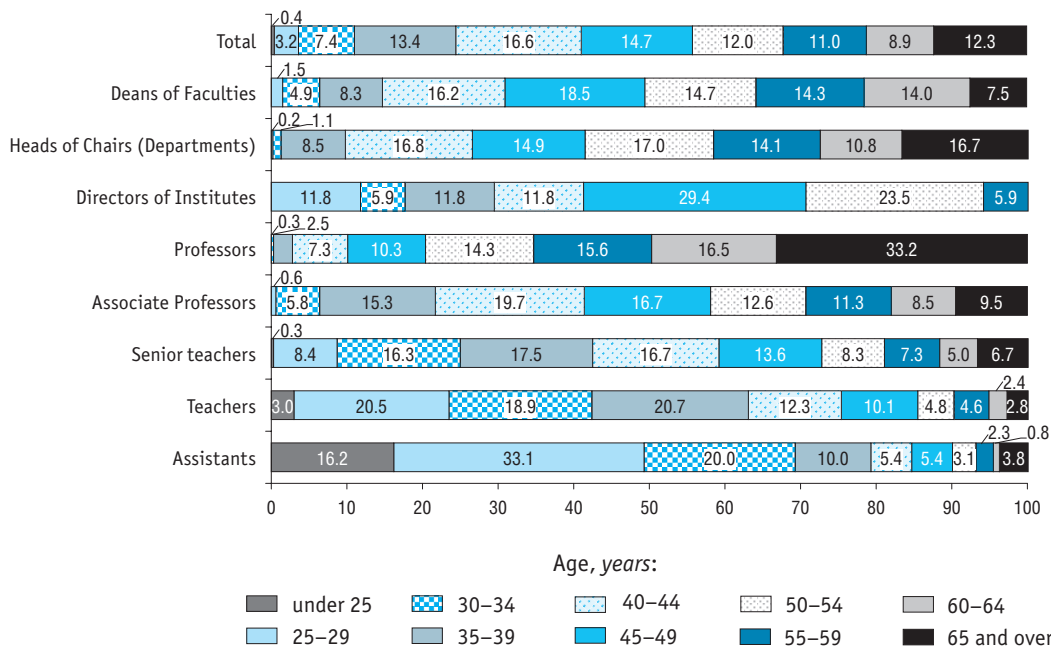
(excluding part-timers and independent contractors; at the beginning of the academic year; completed years as of January, 1)



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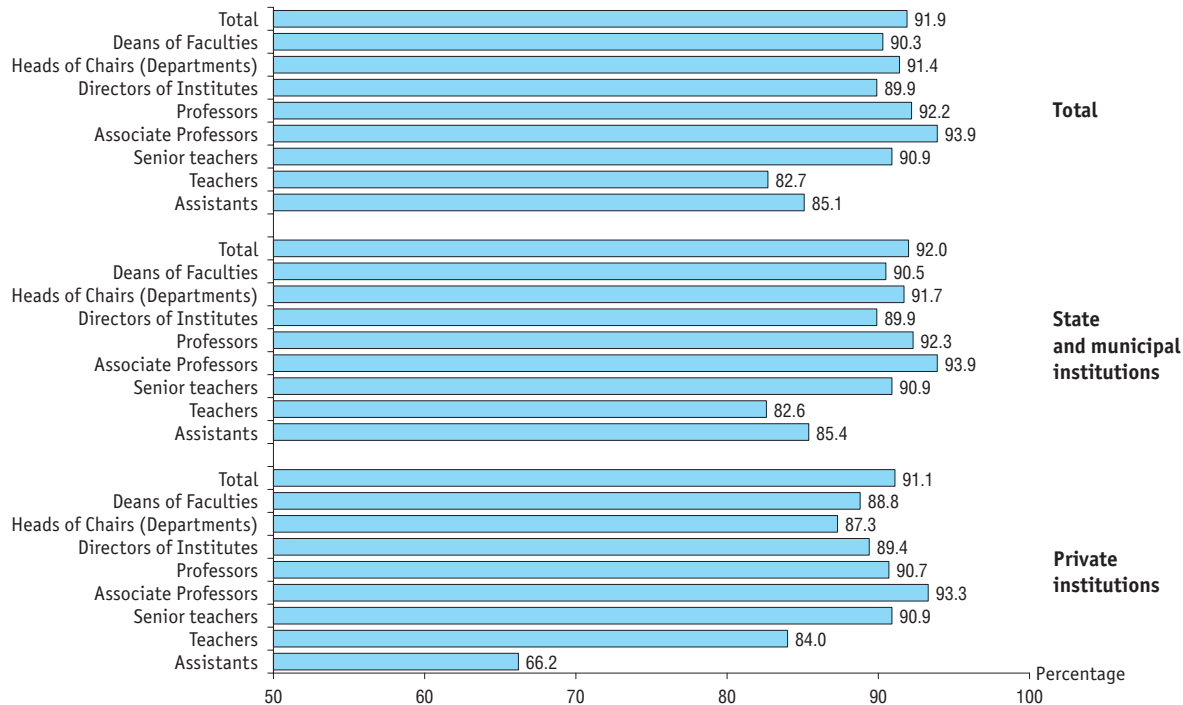


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9.5.12. TEACHING STAFF STAFFING LEVEL IN INSTITUTIONS IMPLEMENTING BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES BY POSITION: 2020/2021

(at the beginning of the academic year)



9.6. Personnel in institutions implementing vocational training programmes

9.6.1. TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES BY POSITION

(at the end of the year; persons)

	Teaching personnel (excluding part-timers and independent contractors)			Part-timers		
	2018	2019	2020	2018	2019	2020
Total	49909	51859	60758	10441	10174	10620
Teachers	26942	28367	34063	8211	8116	8402
Of whom within vocational training programmes	15538	15211	19147	4620	4386	4641
Industrial training instructors	16105	16171	18317	1596	1449	1548
Of whom within vocational training programmes	12354	12232	14109	1155	1018	1153
Child and youth counsellors	620	671	733	11	8	7
Educational psychologists	582	643	722	28	34	36
Teachers with organisational duties	385	381	551	51	49	52
Teachers of health and safety with organisational duties	441	458	492	5	10	9
Physical training instructors	484	482	533	15	13	9
Methodologists	1367	1461	1587	41	49	76
Others	2983	3225	3760	483	446	481

9.6.2. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES

(excluding part-timers and independent contractors; at the end of the year)

	Persons			As a percentage of the total		
	2018	2019	2020	2018	2019	2020
Total	49909	51859	60758	100	100	100
Of whom have attained education:						
higher	37885	39698	46550	75.9	76.5	76.6
of which pedagogical	20132	22331	26015	40.3	43.1	42.8
secondary vocational – programmes for mid-level specialists	8357	8526	9611	16.7	16.4	15.8
of which pedagogical	2355	2613	2735	4.7	5.0	4.5
secondary vocational – programmes for skilled workers and employees	1857	1820	2632	3.7	3.5	4.3

9.6.3. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES BY POSITION: 2020

(excluding part-timers and independent contractors; at the end of the year)

	Of whom have							
	higher education		Doctor of Sciences degree		Candidate of Sciences degree		secondary vocational education – programmes for mid-level specialists	
	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total
Total	46550	76.6	244	0.4	2371	3.9	9611	15.8
Teachers	31380	92.1	236	0.7	2199	6.5	1844	5.4
Of whom within vocational training programmes	17063	89.1	143	0.7	1213	6.3	1096	5.7
Industrial training instructors	8298	45.3	–	–	16	0.1	6706	36.6
Of whom within vocational training programmes	6090	43.2	–	–	5	0.0	4757	33.7
Child and youth counsellors	636	86.8	1	0.1	8	1.1	80	10.9
Educational psychologists	687	95.2	–	–	9	1.2	16	2.2
Teachers with organisational duties	443	80.4	–	–	2	0.4	90	16.3
Teachers of health and safety with organisational duties	445	90.4	–	–	11	2.2	35	7.1
Physical training instructors	461	86.5	–	–	8	1.5	62	11.6
Methodologists	1463	92.2	1	0.1	36	2.3	77	4.9
Others	2737	72.8	6	0.2	82	2.2	701	18.6

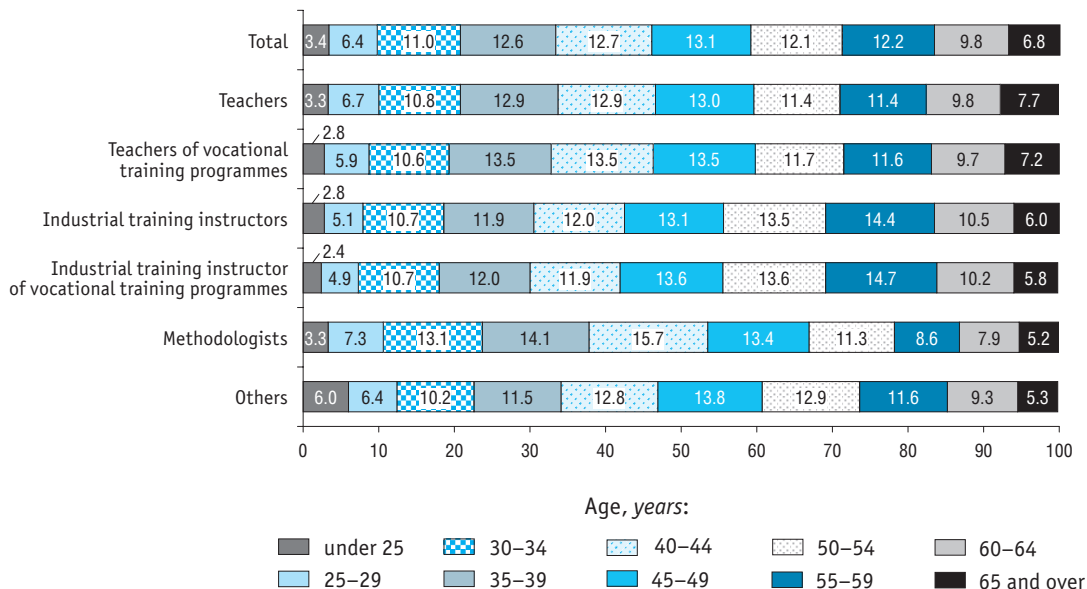
9.6.4. FEMALE TEACHING PERSONNEL AS A PERCENTAGE OF THE TOTAL TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES BY POSITION

(excluding part-timers and independent contractors; at the end of the year)

	Persons			As a percentage of the total		
	2018	2019	2020	2018	2019	2020
Teachers	16052	17263	20151	59.6	60.9	59.2
Of whom within vocational training programmes	7264	7047	8554	46.7	46.3	44.7
Industrial training instructors	4101	4245	5041	25.5	26.3	27.5
Of whom within vocational training programmes	2532	2471	3197	20.5	20.2	22.7
Child and youth counsellors	566	617	678	91.3	92.0	92.5
Educational psychologists	493	542	624	84.7	84.3	86.4
Teachers with organisational duties	311	308	434	80.8	80.8	78.8
Teachers of health and safety with organisational duties	54	60	59	12.2	13.1	12.0
Physical training instructors	143	154	164	29.5	32.0	30.8
Methodologists	1116	1181	1328	81.6	80.8	83.7
Others	2096	2240	2703	70.3	69.5	71.9

9.6.5. PERCENTAGE DISTRIBUTION OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES BY AGE AND POSITION: 2020

(excluding part-timers and independent contractors; at the end of the year; completed years as of January, 1)



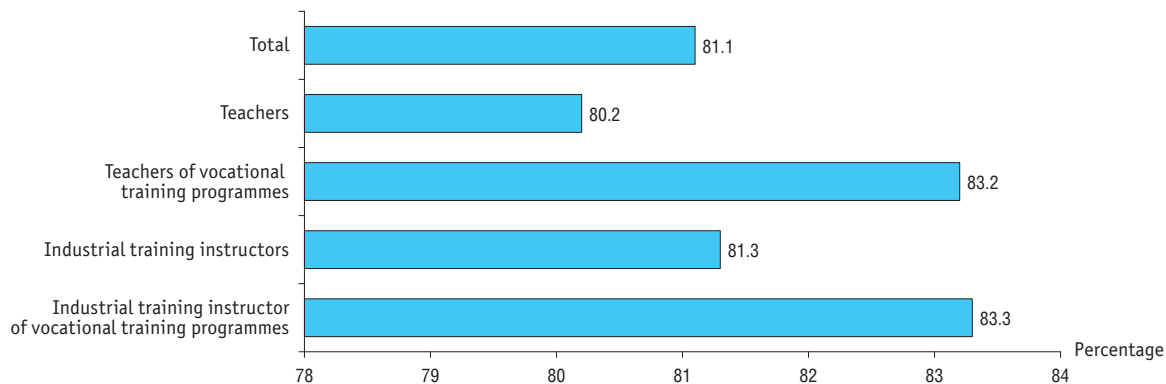
9.6.6. PARTICIPATION OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES IN ADDITIONAL PROFESSIONAL (VOCATIONAL) EDUCATION PROGRAMMES WITHIN THE LAST THREE YEARS

(excluding part-timers and independent contractors; at the end of the year)

	Personnel who undertook professional (vocational) development programmes and/or retraining – total			Of whom								
				within their field of pedagogical activity			developed their ICT skills			in the form of internship (practical training)		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total:												
persons	34692	36787	43814	26623	28984	34287	3799	5907	9045	6041	6372	6992
as a percentage of the total	69.5	70.9	72.1	53.3	55.9	56.4	7.6	11.4	14.9	12.1	12.3	11.5
Of whom:												
teachers:												
persons	20408	21647	26257	15541	17167	20301	2733	3998	6583	3839	3839	4515
as a percentage of the total	75.7	76.3	77.1	57.7	60.5	59.6	10.1	14.1	19.3	14.2	13.5	13.3
including teachers within vocational training programmes:												
persons	11056	11390	14405	8320	8845	11068	1311	1931	3258	2206	2172	2622
as a percentage of the total	71.2	74.9	75.2	53.5	58.1	57.8	8.4	12.7	17.0	14.2	14.3	13.7
industrial training instructors:												
persons	11444	12069	13954	8679	9065	10904	805	1181	1613	2244	2528	2500
as a percentage of the total	71.1	74.6	76.2	53.9	56.1	59.5	5.0	7.3	8.8	13.9	15.6	13.6
including industrial training instructors within vocational training programmes:												
persons	8516	8887	10714	6595	6853	8620	523	748	1037	1513	1669	1617
as a percentage of the total	68.9	72.7	75.9	53.4	56.0	61.1	4.2	6.1	7.3	12.2	13.6	11.5

9.6.7. TEACHING PERSONNEL STAFFING LEVEL IN INSTITUTIONS IMPLEMENTING VOCATIONAL TRAINING PROGRAMMES: 2020

(at the end of the year)



9.7. Personnel in institutions implementing additional general education programmes for children

9.7.1. PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY CATEGORY*

(at the end of the year; thousand persons)

	Personnel (excluding external multiple jobholders)						Part-timers					
	2010	2015	2017	2018	2019	2020	2010	2015	2017	2018	2019	2020
Total	307.4	522.1	475.3	447.7	412.2	400.4	118.0	121.8	108.3	101.5	98.4	93.9
Managerial personnel	30.4	47.7	43.1	40.0	36.2	35.3	0.6	0.9	0.9	1.0	0.9	0.9
Teaching personnel	185.5	304.2	280.7	267.7	252.6	247.5	105.7	100.1	88.7	82.7	81.0	77.8
Educational support staff	14.9	24.8	22.7	21.3	19.7	19.2	2.3	4.1	3.9	3.8	3.6	3.3
Maintenance personnel	76.6	145.3	128.9	118.7	103.7	98.4	9.4	16.8	14.8	14.0	12.9	11.8

* Here and below in tables 9.7.2–9.7.5 and figures 9.7.6–9.7.8, the data refer to additional education institutions that provide reports to the Ministry of Education of the Russian Federation.

9.7.2. TEACHING PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY POSITION
(at the end of the year; thousand persons)

	Teaching personnel (excluding part-timers)						Part-timers					
	2010	2015	2017	2018	2019	2020	2010	2015	2017	2018	2019	2020
Total	185.5	304.2	280.7	267.7	252.6	247.5	105.7	100.1	88.7	82.7	81.0	77.8
Teachers	1.6	7.7	6.3	5.5	5.0	4.0	1.6	2.2	2.3	1.7	1.6	0.9
Teachers of additional education	110.0	132.0	134.4	134.4	134.7	135.4	77.3	58.0	54.3	52.0	53.1	52.9
Teachers with organisational duties	9.6	9.7	9.6	9.5	9.8	9.6	1.5	1.2	1.1	1.1	1.0	0.9
Child and youth councellors	0.6	0.7	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1
Coaches	39.1	72.9	53.5	41.3	30.0	25.3	18.9	23.2	17.1	14.3	11.9	10.9
Methodologists	12.7	15.5	14.0	13.2	12.8	12.8	2.0	1.8	1.6	1.5	1.4	1.3
Others	11.8	65.7	62.3	63.2	59.9	59.9	4.2	13.5	12.2	12.1	11.9	11.0

9.7.3. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN

(excluding part-timers; at the end of the year)

	2010	2015	2017	2018	2019	2020
Total, thousand persons	185.1	304.2	280.7	267.7	252.6	247.5
Of whom with educational attainment, percentage:						
higher	66.2	69.4	71.0	70.9	71.1	71.2
of which pedagogical	51.3	55.5	58.6	58.8	59.5	59.7
secondary vocational – programmes for mid-level specialists	26.5	26.3	26.4	27.0	27.1	27.2
of which pedagogical	16.1	19.3	20.7	21.5	21.8	22.3

9.7.4. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY POSITION
(excluding part-timers; at the end of the year)

	Total, thousand persons	Of whom with educational attainment, <i>percentage</i>			
		higher	of which pedagogical	secondary vocational – programmes for mid-level specialists	of which pedagogical
2019					
Total	252.6	71.1	59.5	27.1	21.8
Teachers	5.0	74.0	66.3	25.5	22.8
Teachers of additional education	134.7	69.9	57.6	28.2	22.2
Teachers with organisational duties	9.8	75.4	52.6	21.4	13.0
Child and youth councillors	0.5	83.6	71.1	14.8	11.1
Coaches	30.0	78.6	69.7	18.7	14.9
Methodologists	12.8	91.8	73.4	6.9	4.5
Others	59.9	64.5	55.8	34.5	29.5
2020					
Total	247.5	71.2	59.7	27.2	22.3
Teachers	4.0	75.4	69.0	24.0	22.3
Teachers of additional education	135.4	70.4	58.3	27.9	22.2
Teachers with organisational duties	9.6	76.3	54.2	21.0	13.1
Child and youth councillors	0.5	83.7	69.9	13.6	9.4
Coaches	25.3	78.0	69.5	19.5	16.1
Methodologists	12.8	92.1	73.6	6.9	4.7
Others	59.9	64.4	56.2	34.6	30.4

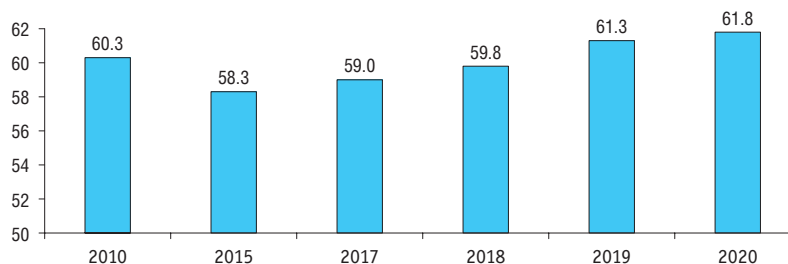
9.7.5. FEMALE TEACHING PERSONNEL AS A PERCENTAGE OF TEACHING PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY POSITION

(excluding part-timers; at the end of the year)

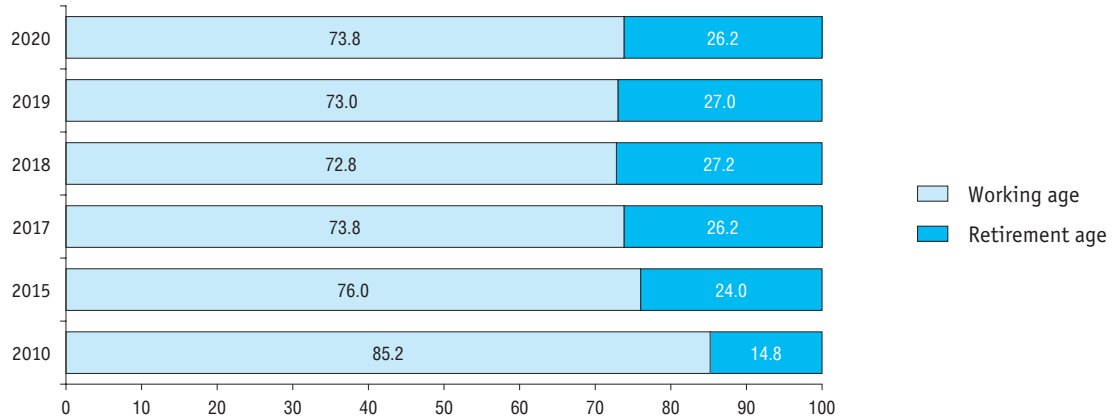
	Total, thousand persons						As a percentage of the total					
	2010	2015	2017	2018	2019	2020	2010	2015	2017	2018	2019	2020
Total	118.5	200.5	192.5	189.1	182.8	181.4	63.9	65.9	68.6	70.6	72.4	73.3
Teachers	1.2	6.4	5.4	4.8	4.3	3.3	76.7	82.7	84.4	86.8	84.8	84.0
Teachers of additional education	79.3	100.0	103.2	104.0	103.9	104.3	72.0	75.7	76.8	77.3	77.1	77.0
Teachers with organisational duties	7.8	7.8	7.7	7.6	7.9	7.8	81.3	80.7	80.1	80.1	80.8	80.6
Child and youth councillors	0.6	0.6	0.5	0.5	0.5	0.5	90.5	82.7	93.2	93.7	93.3	94.2
Coaches	10.9	21.1	15.0	10.8	7.8	6.7	27.9	29.0	28.0	26.2	26.0	26.6
Methodologists	10.5	12.6	11.7	11.2	11.0	11.1	82.3	81.3	83.5	84.6	85.9	86.3
Others	8.2	52.0	49.2	50.2	47.5	47.8	70.0	79.2	78.8	79.4	79.3	79.8

9.7.6. TEACHING PERSONNEL AS A PERCENTAGE OF THE TOTAL PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN

(excluding part-timers; at the end of the year)

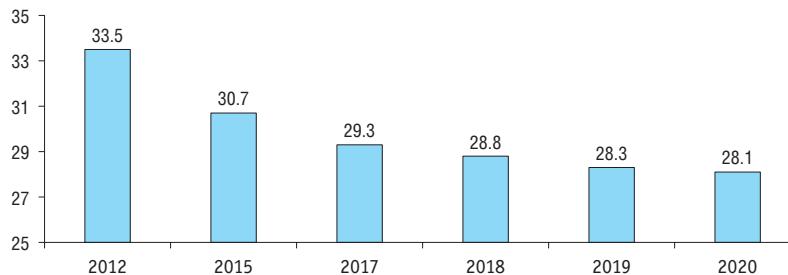


9.7.7. PERCENTAGE DISTRIBUTION OF TEACHING PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY AGE
(excluding part-timers; at the end of the year)



9.7.8. TEACHING PERSONNEL UNDER 35 AS A PERCENTAGE OF THE TOTAL TEACHING PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN

(excluding part-timers; at the end of the year)



9.7.9. TEACHING PERSONNEL IN ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY CATEGORY*

(at the end of the year; thousand persons)

	Teaching personnel (excluding part-timers and independent contractors)			Part-timers		
	2018	2019	2020	2018	2019	2020
Total	799.0	765.2	687.5	121.1	119.8	109.4
Of whom teachers of additional education	234.4	249.4	249.3	71.8	75.4	73.2
In the total teaching personnel – female	656.6	630.0	560.3	75.7	75.7	69.2

* Here and below in tables 9.7.10 and figures 9.7.11, 9.7.12, according to Rosstat.

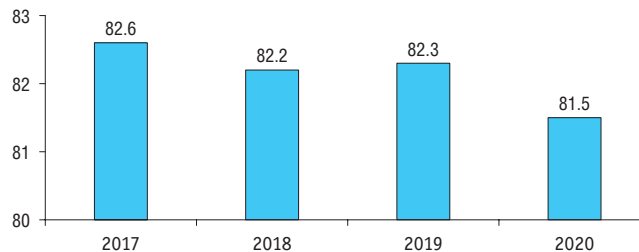
9.7.10. EDUCATIONAL ATTAINMENT OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN

(excluding part-timers and independent contractors; at the end of the year)

	2018	2019	2020
Total, thousand persons	799.0	765.2	687.5
Of whom with educational attainment, <i>percentage</i> :			
higher	77.3	77.4	77.2
of which pedagogical	70.5	70.7	70.2
secondary vocational – programmes for mid-level specialists	21.5	21.2	21.4
of which pedagogical	18.5	18.6	18.6
In the total number of teaching staff – teachers of additional education, <i>thousand persons</i>	234.4	249.4	249.3
Of whom with educational attainment, <i>percentage</i> :			
higher	72.9	73.4	73.1
of which pedagogical	63.1	63.9	63.6
secondary vocational – programmes for mid-level specialists	25.0	24.5	24.5
of which pedagogical	20.1	20.1	20.2

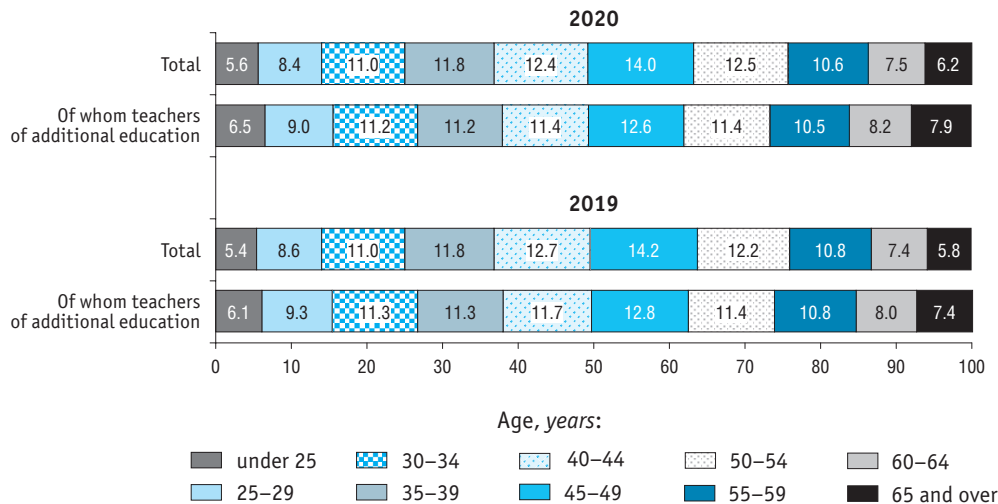
9.7.11. FEMALE TEACHING PERSONNEL AS A PERCENTAGE OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN

(excluding part-timers and independent contractors; at the end of the year)



9.7.12. PERCENTAGE DISTRIBUTION OF TEACHING PERSONNEL IN INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN BY AGE

(excluding part-timers and independent contractors; at the end of the year)



9.8. Personnel in institutions implementing additional professional (vocational) programmes

9.8.1. TEACHING STAFF IN INSTITUTIONS IMPLEMENTING ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY POSITION

(at the end of the year; persons)

	Teaching staff (excluding part-timers and independent contractors)			Part-timers		
	2018	2019	2020	2018	2019	2020
Total	30329	30583	25183	14924	14868	13634
Deans of Faculties	436	404	365	46	50	31
Heads of Chairs (Departments)	2492	2300	2104	395	507	452
Directors of Institutes	190	206	196	14	9	11
Professor	3034	3445	2504	1599	1739	1608
Associate Professor	9077	9588	7642	3453	3217	3150
Senior teachers	3478	3725	2901	1342	1229	1187
Teachers	9856	9238	7947	6442	6462	5472
Assistants	1766	1677	1524	1633	1655	1723

9.8.2. EDUCATIONAL ATTAINMENT OF TEACHING STAFF IN INSTITUTIONS IMPLEMENTING ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY POSITION

(excluding part-timers and independent contractors; at the end of the year)

	Of whom have							
	higher education		Doctor of Sciences degree		Candidate of Sciences degree		PhD	
	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total	persons	as a percentage of the total
2019								
Total	29836	97.6	4598	15.0	12200	39.9	24	0.1
Deans of Faculties	396	98.0	99	24.5	192	47.5	1	0.2
Heads of Chairs (Departments)	2300	100	1003	43.6	948	41.2	–	–
Directors of Institutes	202	98.1	54	26.2	101	49.0	1	0.5
Professor	3442	99.9	2931	85.1	319	9.3	5	0.1
Associate Professors	9584	100	343	3.6	8674	90.5	5	0.1
Senior teachers	3701	99.4	65	1.7	726	19.5	3	0.1
Teachers	8563	92.7	75	0.8	583	6.3	9	0.1
Assistants	1648	98.3	28	1.7	657	39.2	–	–
2020								
Total	24518	97.4	3245	12.9	9748	38.7	24	0.1
Deans of Faculties	358	98.1	63	17.3	190	52.1	1	0.3
Heads of Chairs (Departments)	2099	99.8	805	38.3	974	46.3	5	0.2
Directors of Institutes	194	99.0	50	25.5	97	49.5	1	0.5
Professor	2500	99.8	1967	78.6	280	11.2	7	0.3
Associate Professors	7637	99.9	209	2.7	6870	89.9	1	0.0
Senior teachers	2886	99.5	72	2.5	407	14.0	1	0.0
Teachers	7353	92.5	58	0.7	381	4.8	8	0.1
Assistants	1491	97.8	21	1.4	549	36.0	–	–

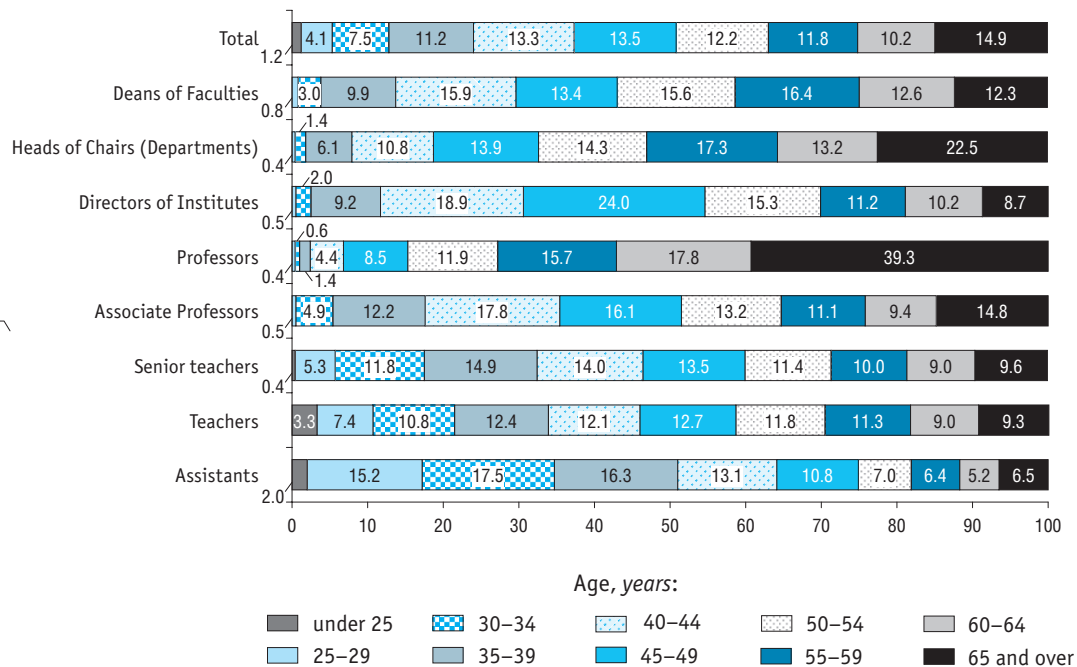
9.8.3. FEMALE TEACHING STAFF AS A PERCENTAGE OF THE TOTAL TEACHING STAFF IN INSTITUTIONS IMPLEMENTING ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY POSITION

(excluding part-timers and independent contractors; at the end of the year)

	Persons			As a percentage of the total		
	2018	2019	2020	2018	2019	2020
Total	17508	18523	15632	57.7	60.6	62.1
Deans of Faculties	275	262	235	63.1	64.9	64.4
Heads of Chairs (Departments)	1216	1165	1122	48.8	50.7	53.3
Directors of Institutes	97	117	103	51.1	56.8	52.6
Professor	1366	1430	1163	45.0	41.5	46.4
Associate Professor	5772	6078	5124	63.6	63.4	67.1
Senior teachers	2064	2511	1858	59.3	67.4	64.0
Teachers	5530	5843	4970	56.1	63.2	62.5
Assistants	1188	1117	1057	67.3	66.6	69.4

9.8.4. PERCENTAGE DISTRIBUTION OF TEACHING STAFF IN INSTITUTIONS IMPLEMENTING ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY AGE AND POSITION: 2020

(excluding part-timers and independent contractors; at the end of the year; completed years as of January, 1)



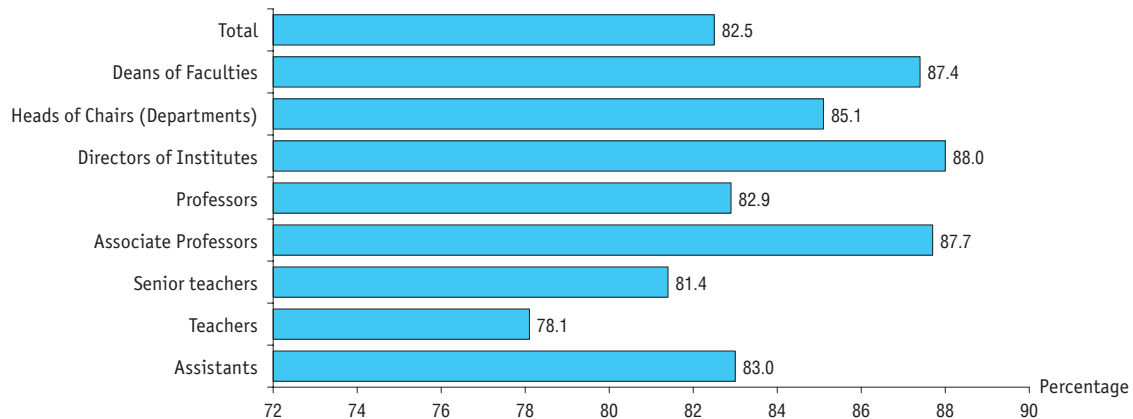
9.8.5. PARTICIPATION OF TEACHING STAFF IN INSTITUTIONS IMPLEMENTING ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES IN ADDITIONAL PROFESSIONAL (VOCATIONAL) EDUCATION WITHIN THE LAST THREE YEARS

(excluding part-timers and independent contractors; at the end of the year)

	Persons			As a percentage of the total		
	2018	2019	2020	2018	2019	2020
Personnel who undertook professional (vocational) development programmes and/or retraining – total	24455	25204	20417	80.6	82.4	81.1
Of whom:						
within their field of pedagogical activity	18060	16136	16126	59.5	52.8	64.0
developed their ICT skills	8588	12842	10274	28.3	42.0	40.8

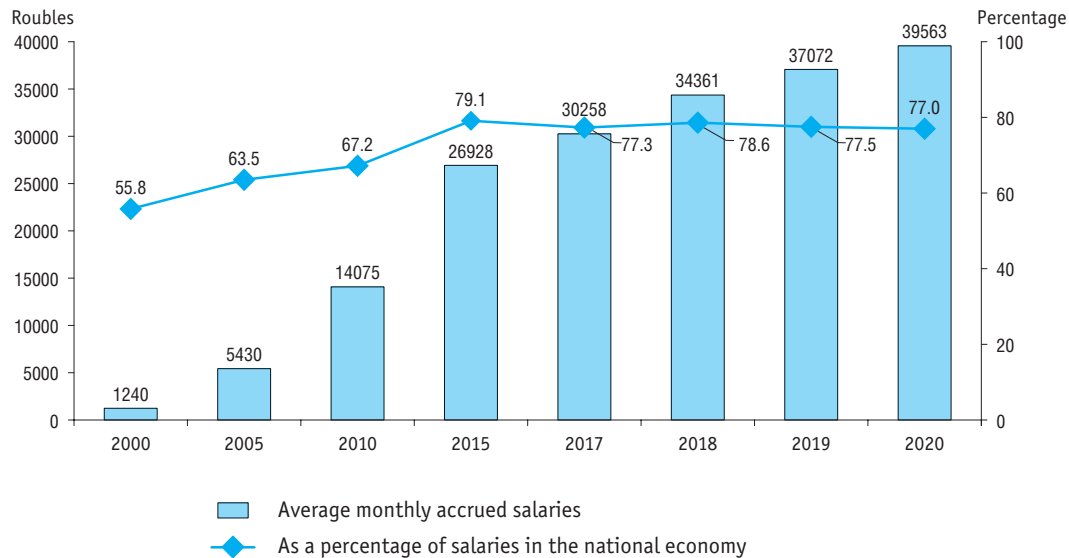
9.8.6. TEACHING STAFF STAFFING LEVEL IN INSTITUTIONS IMPLEMENTING ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES BY POSITION: 2020

(at the end of the year)

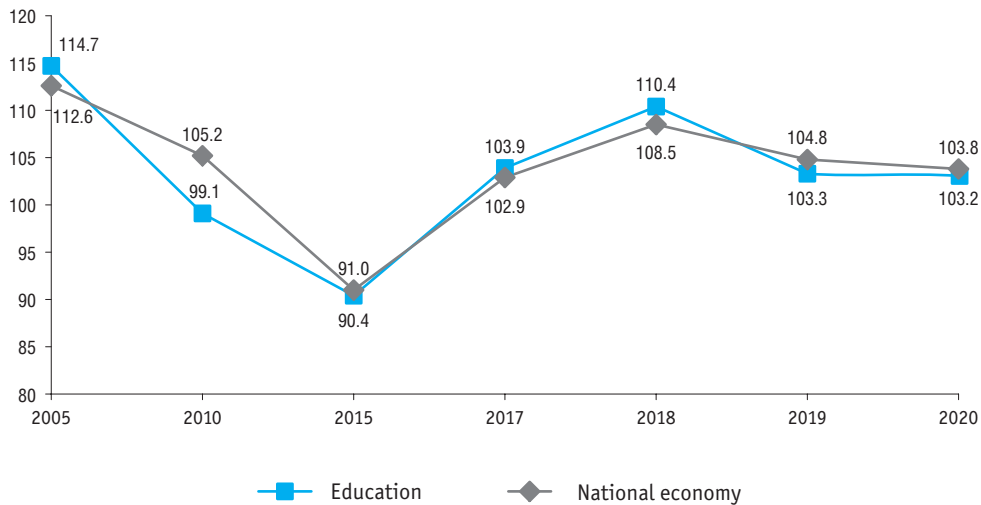


9.9. Salaries in education

9.9.1. AVERAGE MONTHLY NOMINAL ACCRUED SALARIES IN EDUCATION



9.9.2. REAL ACCRUED SALARIES IN THE NATIONAL ECONOMY AND IN EDUCATION (as a percentage of the previous year)



9.9.3. AVERAGE MONTHLY NOMINAL ACCRUED SALARIES IN EDUCATION BY OWNERSHIP OF EDUCATIONAL INSTITUTIONS
(roubles)

	2005	2010	2015	2017	2018	2019	2020
Total	5430	14075	26928	30258	34361	37072	39563
Ownership:							
public ownership	7189	19974	36068	42363	49499	53749	56779
municipal ownership	4380	10682	22497	24532	27597	29693	31637
private ownership	9527	21430	28692	33841	39412	42757	52659
non-profit and religious organisations (associations)	7449	15715	20314	23038	25353	27530	29591
mixed Russian (without foreign participation)	11075	22827	35812	37579	36983	41470	42642
foreign, joint Russian and foreign	12758	33425	46102	57769	66274	81221	89349

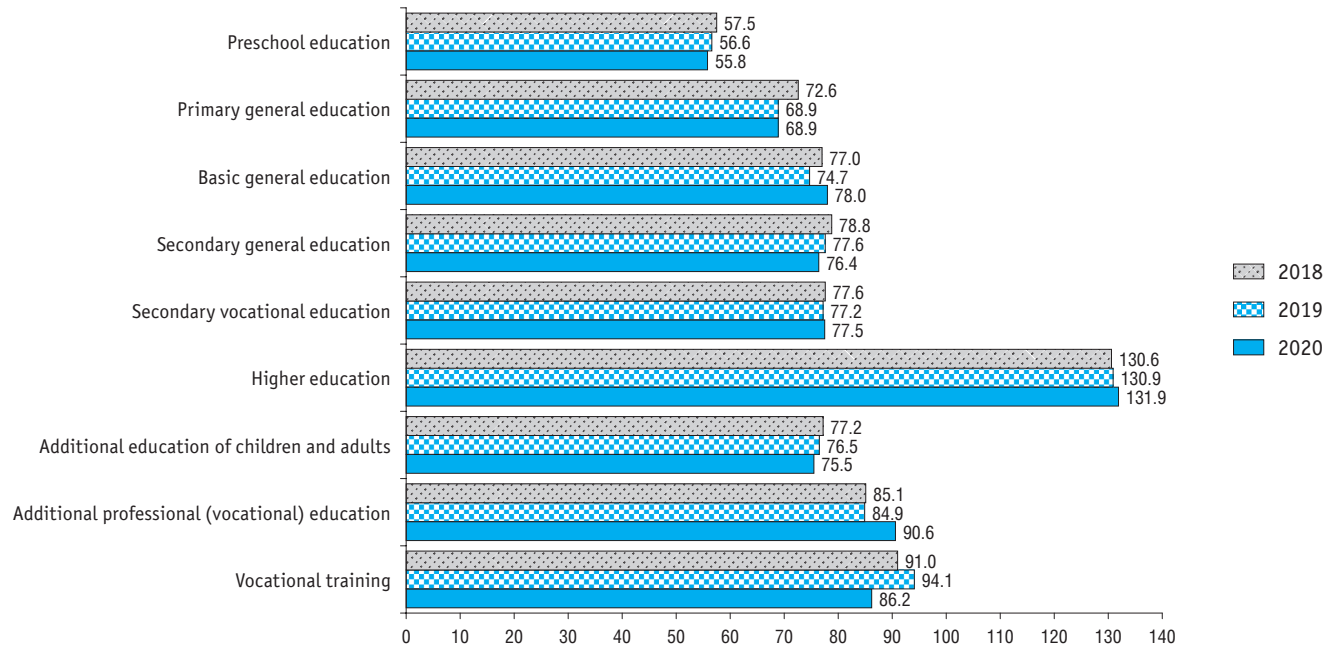
9.9.4. AVERAGE MONTHLY NOMINAL ACCRUED SALARIES IN EDUCATION*

(roubles)

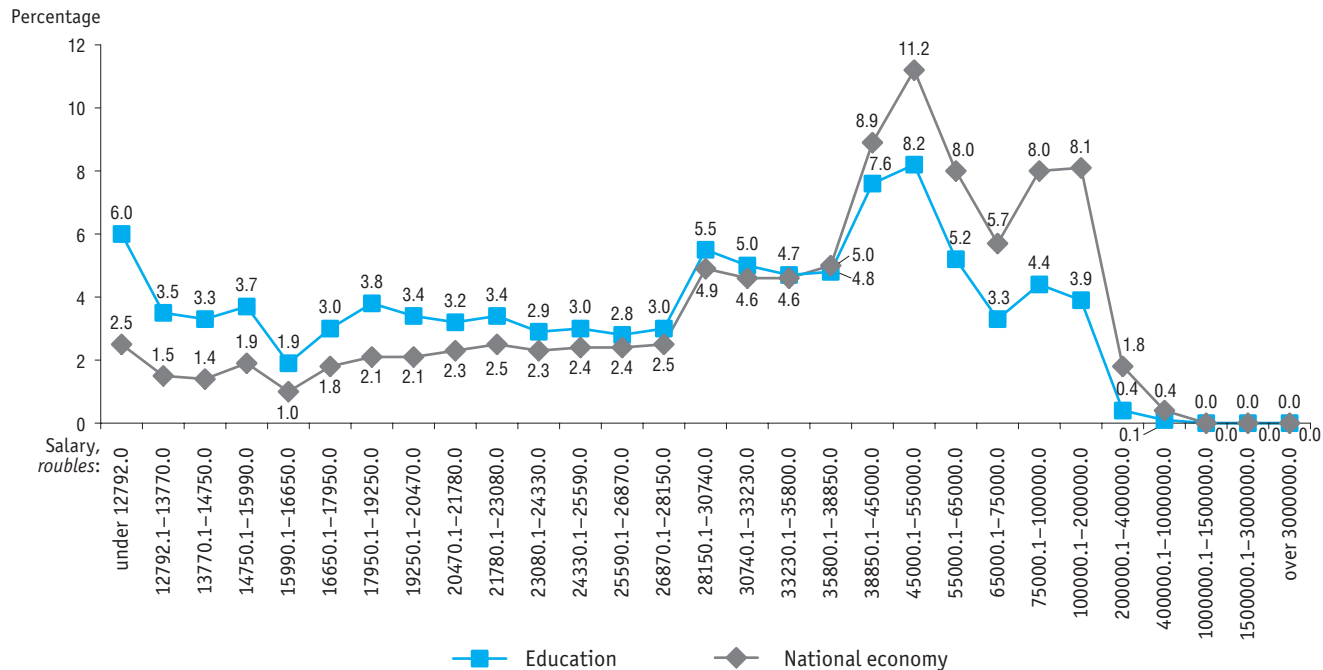
	2017	2018	2019	2020
Total	30258	34361	37072	39563
Preschool education	22262	25124	27110	28670
Primary general education	27324	31744	32978	35357
Basic general education	32492	33681	35742	40059
Secondary general education	29640	34450	37165	39214
Secondary vocational education	29489	33937	36968	39816
Higher education	46928	57122	62641	67741
Additional education of children and adults	30075	33757	36597	38795
Additional professional (vocational) education	28650	37196	40635	46539
Vocational training	32285	39784	45048	44244

* Here and below in figure 9.9.5, in accordance with the OKVED2.

9.9.5. AVERAGE MONTHLY NOMINAL ACCRUED SALARIES IN EDUCATION AS A PERCENTAGE OF SALARIES IN THE NATIONAL ECONOMY



9.9.6. DISTRIBUTION OF THE NUMBER OF EMPLOYEES BY ACCRUED SALARY IN THE NATIONAL ECONOMY AND IN EDUCATION: APRIL 2021*



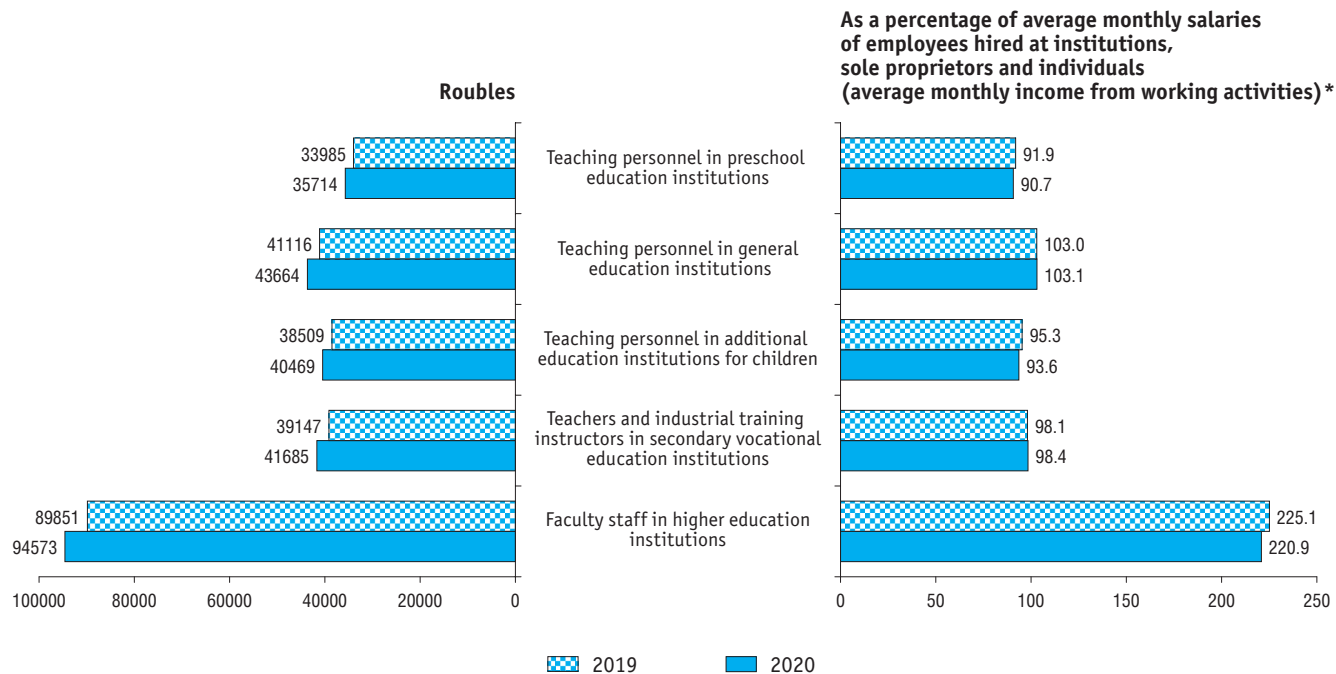
* According to the results of sample surveys of organisations, the purpose of which was to receive information regarding the distribution of employees by the size of their salary.

9.9.7. AVERAGE ACCRUED SALARIES OF THE HIGHEST- AND LOWEST-PAID EMPLOYEES BY TYPE OF ECONOMIC ACTIVITY: APRIL 2021*

	Average salary, roubles		Ratio of the average salary of 10% of the highest- and 10% of the lowest-paid employees, times
	10% of the highest-paid employees	10% of the lowest-paid employees	
Agriculture, forestry and fishing	107201.7	13034.3	8.2
Mining and quarrying	264483.2	25527.8	10.4
Manufacturing	167920.2	18262.4	9.2
Electricity, gas, steam and air-conditioning supply	144839.5	16935.3	8.6
Water supply; sewerage, waste management, and remediation activities	108906.2	13703.8	7.9
Construction	212109.1	17499.9	12.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	226760.3	14946.3	15.2
Transportation and storage	174770.3	14684.0	11.9
Accommodation and food service activities	118972.0	11965.8	9.9
Information and communication	341918.6	18373.8	18.6
Financial and insurance activities	418829.4	22180.3	18.9
Real estate activities	187229.0	13170.3	14.2
Professional, scientific and technical activities	300106.8	15840.7	18.9
Administrative and support service activities	172547.2	11605.3	14.9
Public administration and defence; compulsory social security	158381.3	15804.6	10.0
Education	113239.8	11821.3	9.6
Human health and social work activities	133054.4	13541.2	9.8
Art, entertainment and recreation	198450.0	11448.6	17.3
Other service activities	269294.8	9390.1	28.7
Activities of extraterritorial organisations and bodies	270938.1	32335.1	8.4

* According to the results of sample surveys of organisations, the purpose of which was to receive information regarding the distribution of employees by the size of their salary (in accordance with OKVED2).

9.9.8. AVERAGE SALARIES OF TEACHING PERSONNEL IN STATE AND MUNICIPAL INSTITUTIONS



* The salary of teachers in preschool education institutions is given as a percentage of the average salary in general education, and the salary of teachers in institutions of additional education for children is given as a percentage of the average salary of teachers.

9.9.9. SALARY ARREARS AS OF JANUARY 1, 2021 BY TYPE OF ECONOMIC ACTIVITY*

	Million roubles			Salary arrears as a percentage of the total payroll fund of institutions with salary arrears	Personnel who have salary arrears, <i>persons</i>	Institutions with salary arrears
	Total	Of which				
		due to late receipt of funds from budgets of all levels	due to lack of institutions' own funds			
Total	1628.3	24.0	1604.4	324.8	23684	335
Agriculture, hunting and forestry	71.2	–	71.2	241.0	1970	34
Fishing and aquaculture	–	–	–	–	–	–
Industrial production	940.1	22.7	917.4	354.0	13734	133
Mining and quarrying	162.0	–	162.0	167.8	3496	14
Manufacturing	737.6	22.7	714.8	496.0	9364	90
Electricity, gas, steam and air-conditioning supply	18.2	–	18.2	265.9	259	13
Water supply, sewerage, waste management and remediation activities	22.4	–	22.4	165.7	615	16
Construction	379.3	–	379.3	327.6	5500	68
Transportation	148.4	–	148.4	584.7	1082	30
Real estate management on a fee or contract basis	33.9	–	33.9	270.9	602	36
Research and development	9.4	–	9.4	87.7	191	7
Education	23.9	–	23.9	154.9	389	19
Human health and social work activities	2.9	1.3	1.6	11.6	116	4
Activities in culture, art, recreation and entertainment, television and radio broadcasting	19.3	–	19.3	1171.0	100	4

* Here and below in table 9.9.10, excluding small enterprises; according to the OKVED2.

9.9.10. SALARY ARREARS IN EDUCATION AS OF JANUARY 1, 2021

	Thousand roubles			Salary arrears as a percentage of the total payroll fund of institutions with salary arrears	Personnel who have salary arrears, <i>persons</i>
	Total	Of whom			
		due to late receipt of funds from budgets of all levels	due to lack of institutions' own funds		
Total	23883	–	23883	154.9	389
Preschool education	–	–	–	–	–
Primary general education	–	–	–	–	–
Basic general education	–	–	–	–	–
Secondary general education	–	–	–	–	–
Secondary vocational education	–	–	–	–	–
Higher education	8265	–	8265	228.9	154
Vocational training	156	–	156	190.2	2
Additional education	15462	–	15462	131.8	233

TECHNICAL NOTES

Data for average annual employment in the economy are gathered once a year on the main job of citizens, when preparing a labour force balance that includes the data of organisations, materials of national labour force surveys, and data of executive authorities. The average annual employment includes employed international citizens, both residents and non-residents, on the territory of the Russian Federation.

Average annual number of employees (average staff strength) in education is calculated by summing up the average number of employees for each month of the year and dividing the sum by 12. Average number of employees (average staff strength) per month is calculated by summing up the number of employees (staff strength) per calendar day and dividing the sum by the number of calendar days in the month. Women on maternity and childcare leaves, employees enrolled in educational institutions and persons on unpaid additional leave, as well as educational institutions entrants who were on unpaid leave to take their entrance examinations are excluded from average number of employees. Part-time workers (working part day or part week) are included into the average number of employees in proportion to the time worked.

Staffing levels are calculated as a percentage of the number of filled positions to the number of all positions according to staff schedule.

Teaching personnel are individuals who are employed by an institution engaged in educational activity on a basis of an em-

ployment or service agreement and carry out their duties related to education and development of students and/or organise other educational activities.

Teacher is an employee of an educational institution who is engaged in educational, scientific, methodological, disciplinary, and organisational activity.

Enrolment per member of teaching personnel (educator, teacher, industrial training instructor, member of teaching staff) is calculated as the ratio of the enrolment to the number of teaching personnel (educators, teachers, industrial training instructors, members of teaching staff) (including part-timers) at full-time equivalent [excluding members of teaching personnel (educators) within preschool education and child care programmes (using the number of teaching personnel excluding part-timers and independent contractors and excluding full-time equivalent)].

Since the 2016/2017 academic year, for general education programmes of primary general, basic general, and secondary general education, the following calculation system is used: the enrolment is calculated as intramural full-time enrolment plus 25% of intramural part-time enrolment plus 10% of extramural enrolment; for secondary vocational education programmes and higher education programmes – bachelor's, specialist's, and master's degree programmes, the following calculation system is used: the enrolment is calculated as intramural full-time enrolment plus 25% of intramural part-time enrolment plus 10% of extramural enrolment.

The background features a light blue grid pattern. In the corners, there are decorative clusters of blue geometric shapes, including circles, squares, and diamonds, some with white outlines or gradients.

10

LEARNING ENVIRONMENT

10.1. State of buildings

10.1.1. TECHNICAL STATE AND AMENITIES OF PRESCHOOL EDUCATION INSTITUTIONS

(at the end of the year)

	2015	2017	2018	2019	2020
Buildings which:					
require capital repair	3991	3266	3073	2876	2870
as a percentage of the total number of buildings	7.8	6.9	6.6	6.2	6.2
urban areas	6.8	5.8	5.7	5.4	5.3
rural areas	9.3	8.8	8.2	7.8	8.1
are in emergency state	232	144	125	131	168
as a percentage of the total number of buildings	0.5	0.3	0.3	0.3	0.4
urban areas	0.3	0.2	0.1	0.2	0.3
rural areas	0.7	0.5	0.5	0.5	0.6
Institutions, which facilities have all kinds of amenities (water supply and plumbing, central heating, sewerage systems)	38568	34314	33660	33106	33051
as a percentage of the total number of institutions	90.5	92.1	92.2	93.1	93.8
urban areas	95.9	96.5	96.7	97.2	97.7
rural areas	82.7	84.5	84.2	85.8	86.5

10.1.2. TECHNICAL STATE AND AMENITIES OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES*
(at the end of the year; as a percentage of all buildings)

	2017	2018	2019	2020		
				Total	State and municipal institutions	Private institutions
Total						
Buildings which:						
require capital repair	11.7	11.6	10.8	10.5	10.7	2.2
are in emergency state	0.8	0.8	0.7	0.7	0.7	0.1
Buildings which are equipped with:						
water supply and plumbing	88.7	90.6	90.3	91.2	91.2	91.8
sewerage	87.6	89.6	89.4	90.4	90.4	91.6
central heating	90.6	92.1	90.7	91.8	91.9	87.3
automatic fire alarm	95.4	96.2	94.5	94.7	94.8	90.5
Urban areas						
Buildings which:						
require capital repair	10.6	10.7	9.7	9.9	10.2	2.4
are in emergency state	0.4	0.4	0.4	0.4	0.4	0.1
Buildings which are equipped with:						
water supply and plumbing	96.5	96.9	95.5	95.7	95.8	90.9
sewerage	96.1	96.4	95.1	95.2	95.4	90.7
central heating	96.6	97.1	95.4	95.4	95.7	86.5
automatic fire alarm	96.9	97.4	95.9	95.8	96.0	89.9

* In 2019, including buildings where the institutions occupy only part of the premises (floors).

(continued)

	2017	2018	2019	2020		
				Total	State and municipal institutions	Private institutions
Rural areas						
Buildings which:						
require capital repair	12.5	12.3	11.7	11.0	11.1	0.6
are in emergency state	1.2	1.2	0.9	0.9	0.9	–
are equipped with:						
water supply and plumbing	83.0	85.9	86.4	87.7	87.7	97.6
sewerage	81.4	84.5	85.2	86.7	86.6	97.0
central heating	86.2	88.4	87.1	89.0	89.0	92.8
automatic fire alarm	94.3	95.3	93.4	93.9	94.9	94.6

10.1.3. TECHNICAL STATE AND AMENITIES OF ADDITIONAL EDUCATION INSTITUTIONS IMPLEMENTING ADDITIONAL GENERAL EDUCATION PROGRAMMES FOR CHILDREN

(at the end of the year)

	2005	2010	2015	2017	2018	2019	2020
Institutions which buildings:							
require capital repair	3697	2034	2737	2309	2233	2159	2160
as a percentage of the total number of institutions	41.7	23.8	19.1	17.2	17.5	18.4	18.8
are in emergency state	338	122	156	160	125	103	109
as a percentage of the total number of institutions	3.8	1.4	1.1	1.2	1.0	0.9	1.0
have all kinds of amenities (water supply and plumbing, central heating, sewerage)	5384	5934	11375	10898	10485	9687	9575
as a percentage of the total number of institutions	60.7	69.6	79.2	81.3	82.3	82.6	83.5

10.1.4. TECHNICAL STATE OF EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES (at the end of the year)

	Floor area that requires capital repair			Floor area in emergency state		
	2018	2019	2020	2018	2019	2020
	Thousand square metres					
Total floor area	5254.7	5248.3	5324.2	482.8	471.5	439.5
Education and laboratory spaces (buildings)	3128.1	3089.4	3105.5	256.4	251.5	221.0
Dormitories	1772.4	1785.6	1866.8	149.0	137.7	131.7
Other facilities (premises)	354.2	373.3	351.9	77.4	82.3	86.9
	As a percentage of the total					
Total floor area	12.4	12.4	12.7	1.1	1.1	1.0
State and municipal institutions	12.7	12.8	13.1	1.2	1.1	1.1
Private institutions	0.8	1.0	0.2	–	–	–
Education and laboratory spaces (buildings)	10.7	10.6	10.7	0.9	0.9	0.8
State and municipal institutions	11.1	10.9	11.1	0.9	0.9	0.8
Private institutions	0.6	0.5	0.1	–	–	–
Dormitories	18.4	18.7	19.8	1.5	1.4	1.4
State and municipal institutions	18.7	18.9	20.0	1.6	1.5	1.4
Private institutions	2.2	4.3	1.0	–	–	–
Other facilities (premises)	9.9	10.6	10.1	2.2	2.3	2.5

10.1.5. TECHNICAL STATE OF HIGHER EDUCATION INSTITUTIONS

(at the end of the year)

	Floor area that requires capital repair						Floor area in emergency state					
	2010	2015	2017	2018	2019	2020	2010	2015	2017	2018	2019	2020
Thousand square metres												
Total floor area	6319.1	8582.0	9523.7	9590.6	11141.3	12465.9	396.1	602.6	691.3	626.8	631.2	563.5
Education and laboratory spaces (buildings)	3929.6	5097.0	5716.4	5820.2	6610.8	6965.8	226.5	317.0	329.3	298.1	219.2	216.6
Dormitories	2202.8	3061.1	3380.1	3322.7	3895.2	4900.6	151.5	189.2	206.0	161.3	182.6	192.9
Other facilities (premises)	186.7	423.9	427.2	447.7	635.3	599.6	18.1	96.4	156.0	167.4	229.4	154.0
As a percentage of the total												
Total floor area	9.4	13.2	15.1	15.2	17.6	19.7	0.6	0.9	1.1	1.0	1.0	0.9
State and municipal institutions	10.1	13.8	15.7	15.7	18.2	20.5	0.6	1.0	1.1	1.0	1.0	0.9
Private institutions	0.5	0.4	0.1	0.0	0.0	0.0	0.0	–	–	–	–	–
Education and laboratory spaces (buildings)	7.9	11.3	13.5	13.8	15.7	16.6	0.5	0.7	0.8	0.7	0.5	0.5
State and municipal institutions	8.8	12.0	14.2	14.5	16.5	17.5	0.5	0.8	0.8	0.7	0.5	0.5
Private institutions	0.5	0.4	0.1	0.0	0.0	0.0	0.0	–	–	–	–	–
Dormitories	16.0	20.3	22.3	21.7	25.2	31.4	1.1	1.3	1.4	1.1	1.2	1.2
State and municipal institutions	16.1	20.5	22.5	21.9	25.4	31.7	1.1	1.3	1.4	1.1	1.2	1.2
Private institutions	1.1	–	–	–	–	–	–	–	–	–	–	–
Other facilities (premises)	4.9	8.6	8.1	7.8	10.8	10.5	0.5	2.0	2.9	2.9	3.9	2.7

**10.1.6. TECHNICAL STATE OF INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES
AND HIGHER EDUCATION INSTITUTIONS EQUIPPED WITH AUTOMATIC SECURITY AND FIRE ALARM**
(at the end of the year)

	Floor area equipped with security and fire alarm, thousand square metres			As a percentage of the total		
	2018	2019	2020	2018	2019	2020
Total						
Educational institutions implementing secondary vocational education programmes:						
education and laboratory spaces (buildings)	23896.5	24838.7	25130.9	81.6	84.8	86.2
dormitories	7957.4	8038.0	8184.1	82.7	84.1	86.7
Higher education institutions						
education and laboratory spaces (buildings)	36487.7	36843.4	37528.8	86.7	87.5	89.7
dormitories	14009.7	14280.6	14560.8	91.4	92.2	93.2
State and municipal institutions						
Educational institutions implementing secondary vocational education programmes:						
education and laboratory spaces (buildings)	23056.4	23943.8	24217.5	81.8	85.0	86.4
dormitories	7817.0	7899.1	8065.0	82.6	84.0	86.6
Higher education institutions						
education and laboratory spaces (buildings)	34764.3	35112.1	35791.7	86.6	87.6	89.8
dormitories	13898.5	14155.9	14439.4	91.6	92.5	93.4

(continued)

	Floor area equipped with security and fire alarm, <i>thousand square metres</i>			As a percentage of the total		
	2018	2019	2020	2018	2019	2020
Private institutions						
Educational institutions implementing secondary vocational education programmes:						
education and laboratory spaces (buildings)	840.1	895.0	913.3	77.1	80.9	80.7
dormitories	140.4	139.0	119.1	86.9	89.8	87.7
Higher education institutions						
education and laboratory spaces (buildings)	1723.4	1731.3	1737.1	87.3	86.5	87.4
dormitories	111.2	124.7	121.3	68.9	71.3	68.8

10.2. Infrastructure (facilities and equipment)

10.2.1. FLOOR AREA OF PRESCHOOL EDUCATION INSTITUTIONS

(at the end of the year)

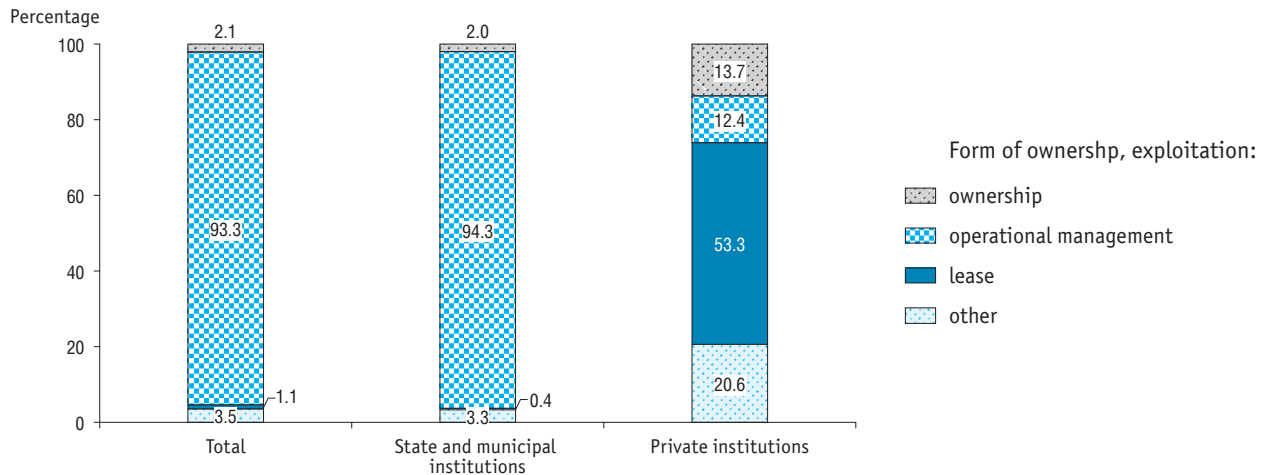
	2010	2015	2017	2018	2019	2020
Total floor area, million square metres	58.5	63.5	63.5	63.8	64.5	66.3
Of which floor area, used directly for the educational institution's needs	49.7	54.1	53.8	54.2	54.8	56.1
Of which floor area for groups	31.3	33.1	32.8	32.9	33.0	33.4
Total floor area, used directly for the educational institution's needs per child, square metres	9.2	8.5	8.1	8.1	8.2	8.9
Urban areas	9.0	8.2	7.9	7.8	7.9	8.5
Rural areas	10.0	10.0	9.3	9.3	9.4	10.9

**10.2.2. FLOOR AREA OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL,
AND SECONDARY GENERAL EDUCATION PROGRAMMES**
(at the end of the year; thousand square metres)

	2017	2018	2019	2020
Total				
Total floor area	164135.6	166060.6	168783.6	171442.2
Study spaces	74150.0	74642.9	75846.0	76741.4
Educational support floor areas	26628.4	26838.9	27244.2	27739.7
Utility spaces	43536.8	44458.0	45043.3	45773.1
Other facilities (premises)	19820.5	20120.9	20650.0	21188.0
State and municipal institutions				
Total floor area	162121.7	164000.5	166782.5	169330.0
Study spaces	73211.1	73676.5	74881.3	75727.4
Educational support floor areas	26335.0	26531.1	26960.5	27439.9
Utility spaces	43098.7	44014.8	44635.6	45342.7
Other facilities (premises)	19476.9	19778.1	20305.0	20820.1
Private institutions				
Total floor area	2013.9	2060.1	2001.1	2112.2
Study spaces	938.9	966.4	964.7	1014.0
Educational support floor areas	293.4	307.7	283.7	299.9
Utility spaces	438.1	443.2	407.7	430.5
Other facilities (premises)	343.6	342.8	345.1	367.9

10.2.3. FLOOR AREA DISTRIBUTION IN EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY OWNERSHIP AND EXPLOITATION FORM: 2020

(at the end of the year)



10.2.4. STUDY SPACES FLOOR AREA OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES
(at the end of the year)

	2015*	2017	2018	2019	2020
Study spaces, million square metres	58.5	74.2	74.6	75.8	76.7
As a percentage of the total floor area of the buildings of institutions	33.2	45.2	44.9	44.9	44.8
Per student, square metres	4.6	4.4	4.4	4.3	4.3
State and municipal institutions	4.6	4.4	4.3	4.3	4.2
Private institutions	5.8	7.0	6.8	7.0	7.1

* At the beginning of the 2015/2016 academic year; excluding floor areas of intramural part-time (shift-based) general education institutions.

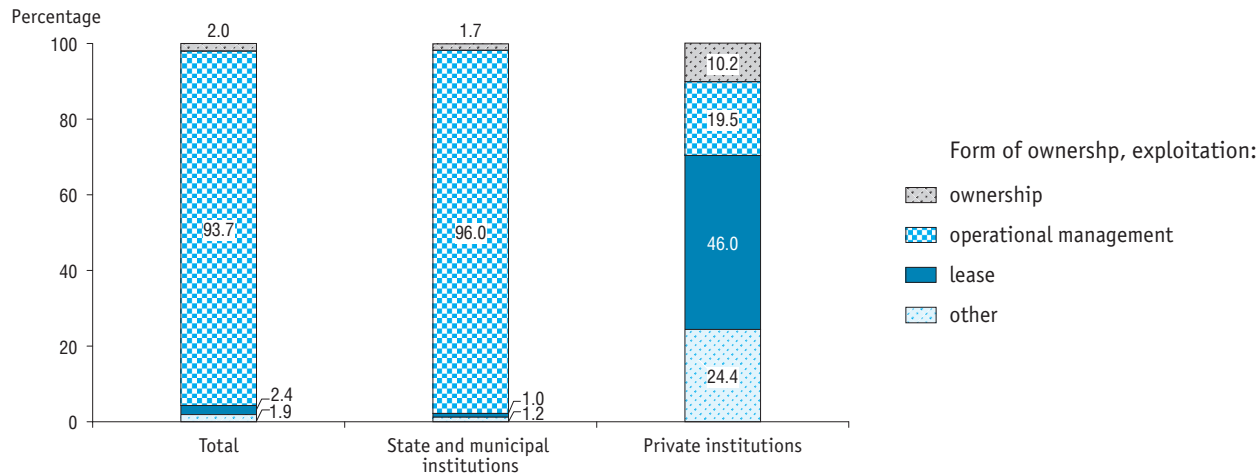
10.2.5. FLOOR AREA OF EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES

(at the end of the year; thousand square metres)

	2018	2019	2020
	Total		
Total floor area	42480.2	42355.1	42081.1
Education and laboratory spaces (buildings)	29290.3	29277.8	29146.3
Dormitories	9621.9	9560.3	9443.4
Other facilities (premises)	3568.0	3517.0	3491.4
	State and municipal institutions		
Total floor area	41195.0	41061.4	40781.7
Education and laboratory spaces (buildings)	28200.5	28171.6	28015.2
Dormitories	9460.2	9405.6	9307.7
Other facilities (premises)	3534.3	3484.2	3458.8
	Private institutions		
Total floor area	1285.1	1293.7	1299.4
Education and laboratory spaces (buildings)	1089.8	1106.2	1131.1
Dormitories	161.7	154.7	135.7
Other facilities (premises)	33.6	32.8	32.6

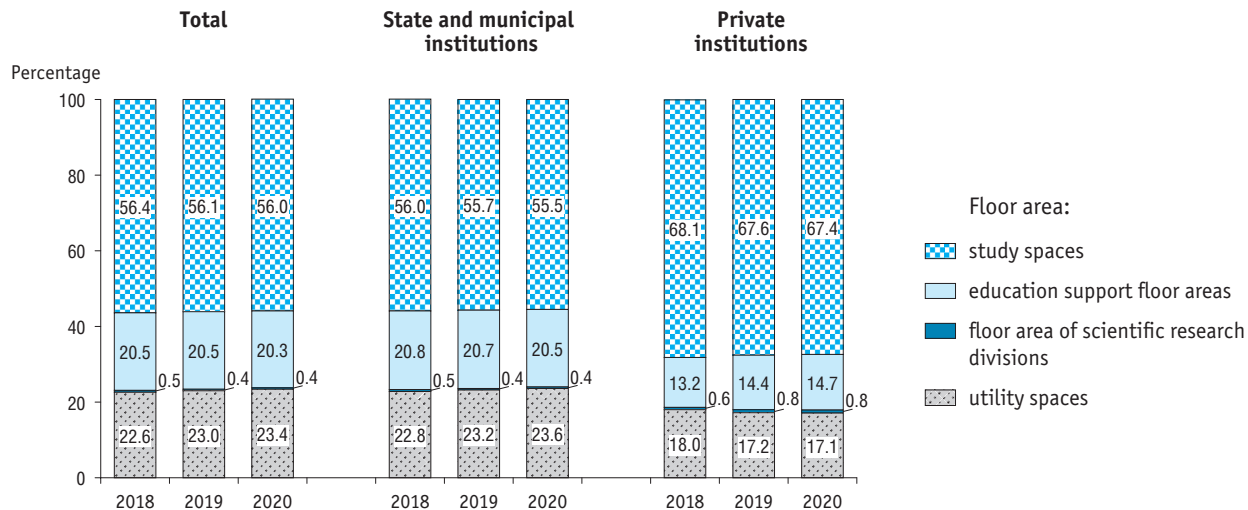
10.2.6. FLOOR AREA DISTRIBUTION IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY OWNERSHIP AND EXPLOITATION FORM: 2020

(at the end of the year)



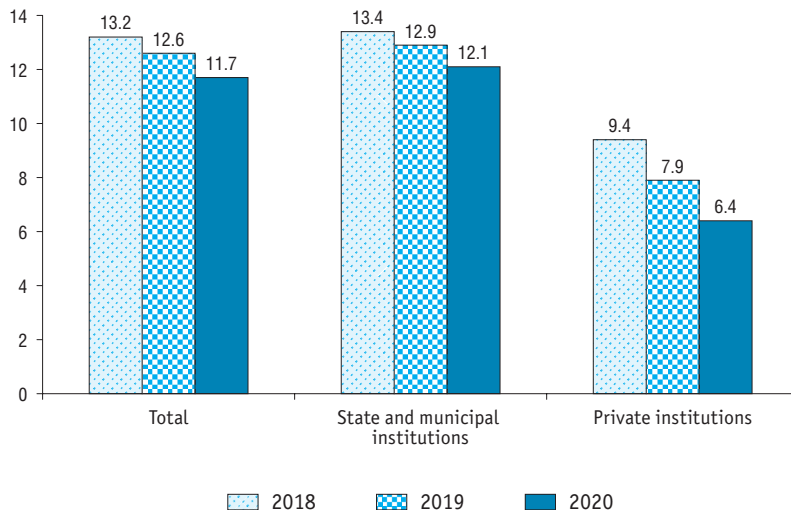
10.2.7. FLOOR AREA DISTRIBUTION OF EDUCATION AND LABORATORY SPACES (BUILDINGS) IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES BY INTENDED PURPOSE

(at the end of the year)



10.2.8. FLOOR AREA OF EDUCATION AND LABORATORY SPACES (BUILDINGS) IN EDUCATIONAL INSTITUTIONS IMPLEMENTING SECONDARY VOCATIONAL EDUCATION PROGRAMMES PER STUDENT*

(at the end of the year)



* Excluding floor areas that are leased, subleased, or under capital repair.

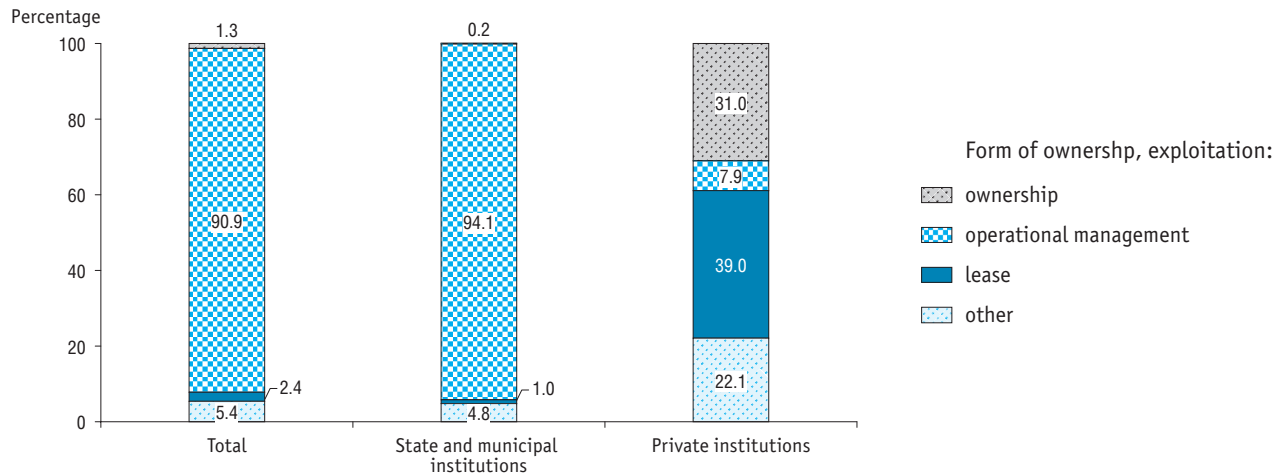
10.2.9. FLOOR AREA OF HIGHER EDUCATION INSTITUTIONS

(at the end of the year; thousand square metres)

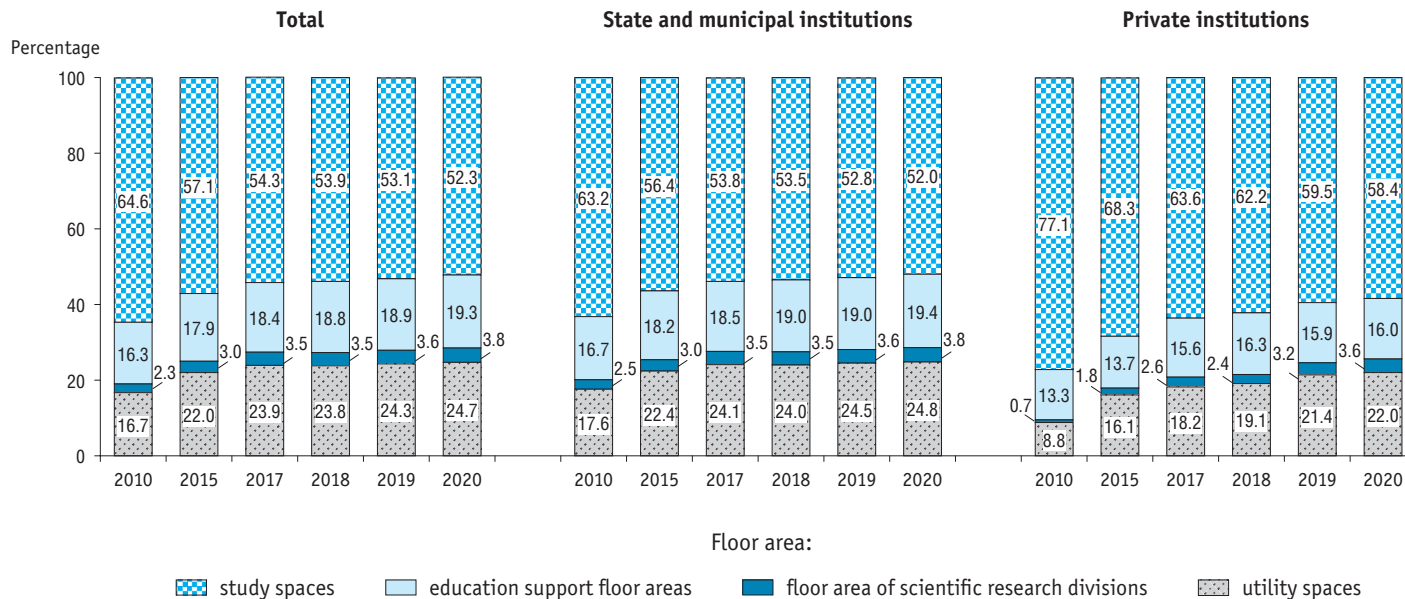
	2010	2015	2017	2018	2019	2020
	Total					
Total floor area	67270.1	65206.1	62886.7	63198.5	63451.9	63200.1
Education and laboratory spaces (buildings)	49624.5	45202.2	42419.1	42097.6	42098.1	41844.4
Dormitories	13799.0	15085.6	15161.5	15328.3	15481.7	15630.0
Other facilities (premises)	3846.6	4918.2	5306.1	5772.5	5872.1	5725.8
	State and municipal institutions					
Total floor area	62025.8	61911.0	60482.7	60925.5	61111.9	60867.3
Education and laboratory spaces (buildings)	44582.3	42205.9	40318.5	40123.4	40096.1	39858.0
Dormitories	13658.0	14920.3	15003.3	15167.0	15306.8	15453.6
Other facilities (premises)	3785.4	4784.9	5160.9	5635.2	5709.0	5555.7
	Private institutions					
Total floor area	5244.3	3295.0	2404.0	2272.9	2340.0	2332.8
Education and laboratory spaces (buildings)	5042.2	2996.3	2100.5	1974.2	2002.1	1986.4
Dormitories	141.0	165.4	158.3	161.4	174.9	176.4
Other facilities (premises)	61.2	133.3	145.2	137.3	163.0	170.0

10.2.10. FLOOR AREA DISTRIBUTION OF BUILDINGS IN HIGHER EDUCATION INSTITUTIONS BY OWNERSHIP AND EXPLOITATION FORM: 2020

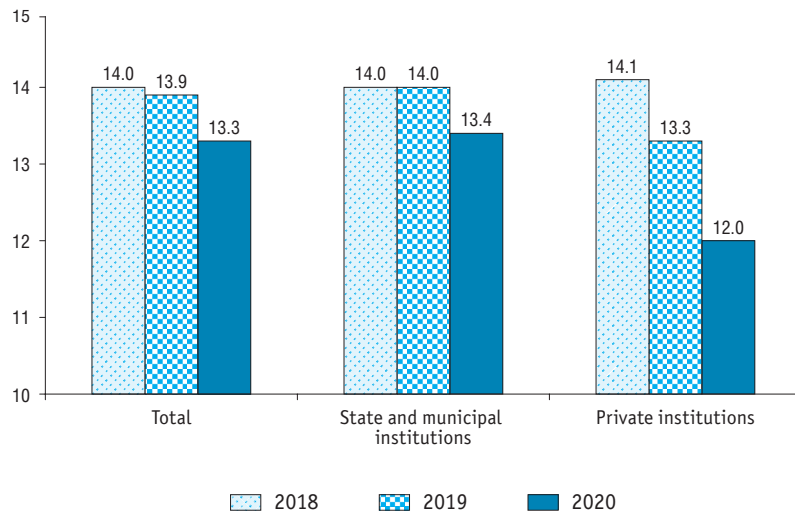
(at the end of the year)



10.2.11. FLOOR AREA DISTRIBUTION OF EDUCATION AND LABORATORY SPACES (BUILDINGS) IN HIGHER EDUCATION INSTITUTIONS BY INTENDED PURPOSE (at the end of the year)



10.2.12. FLOOR AREA OF EDUCATION AND LABORATORY SPACES (BUILDINGS) IN HIGHER EDUCATION INSTITUTIONS PER STUDENT* (at the end of the year; square metres)



* Excluding floor areas that are leased, subleased, or under capital repair.

10.2.13. EDUCATIONAL PROCESS FACILITIES IN EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(at the end of the year; as a percentage of all institutions)

	2017	2018	2019	2020
Total				
Institutions which have the following:				
assembly hall	58.2	59.0	59.6	60.3
gym	89.0	89.6	90.1	90.6
indoor swimming pool	4.8	4.8	4.7	4.8
library	94.6	95.0	95.1	95.3
equipped classrooms of:				
basics of computer engineering	91.0	91.4	91.7	92.0
foreign languages	57.6	59.1	60.9	61.2
health and safety	52.8	54.1	55.6	56.2
extracurricular activities	37.8	38.7	39.9	41.4
Labour instruction classrooms (workshops)	69.4	69.4	68.9	68.8
Household arts classroom	56.7	57.3	57.4	57.5
Urban areas				
Institutions which have the following:				
assembly hall	77.6	78.1	78.6	79.1
gym	93.7	94.2	94.7	94.9
indoor swimming pool	9.4	9.3	9.2	9.3
library	95.8	96.1	96.0	96.0
equipped classrooms of:				
basics of computer engineering	92.8	93.2	93.4	93.5
foreign languages	70.2	71.5	73.1	73.6
health and safety	66.1	67.6	68.4	69.0
extracurricular activities	50.7	52.2	52.5	53.8
Labour instruction classrooms (workshops)	72.2	72.7	72.6	72.6
Household arts classroom	75.8	76.4	76.3	76.3

(continued)

	2017	2018	2019	2020
Rural areas				
Institutions which have the following:				
assembly hall	43.9	44.7	45.2	46.0
gym	85.6	86.1	86.7	87.3
indoor swimming pool	1.4	1.5	1.3	1.4
library	93.8	94.3	94.5	94.7
equipped classrooms of:				
basics of computer engineering	89.7	90.0	90.4	90.8
foreign languages	48.4	49.8	51.7	51.7
health and safety	43.1	44.1	45.9	46.4
extracurricular activities	28.2	28.6	30.4	31.9
Labour instruction classrooms (workshops)	67.3	67.0	66.1	65.9
Household arts classroom	42.6	43.1	43.2	43.2

10.2.14. AVAILABILITY OF HOT MEALS TO STUDENTS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(at the end of the year)

	2005*	2010**	2015***	2017	2018	2019	2020
Institutions with a refectory (canteen, dining room), <i>as a percentage of the total number of institutions</i>	84.4	92.0	95.5	97.2	97.5	97.6	98.4
Urban areas	97.5	98.1	98.5	97.2	97.6	97.7	98.0
Rural areas	78.2	88.7	93.7	97.2	97.3	97.5	98.8
Number of students who get hot meals, <i>thousand persons</i>	9923.6	10175.5	11900.7	12614.3	13001.4	13240.1	13651.7
As a percentage of the total	67.8	76.9	81.5	80.6	80.9	80.3	81.1
Urban areas	64.0	74.9	80.5	79.7	80.1	79.4	79.9
Rural areas	76.2	81.7	84.7	83.3	83.3	83.3	85.0

* At the beginning of the 2005/2006 academic year.

** At the beginning of the 2010/2011 academic year.

*** At the beginning of the 2015/2016 academic year.

10.2.15. AVAILABILITY OF HOT MEALS TO STUDENTS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES BY GROUP OF GRADES: 2020

(at the end of the year)

	Total	1 st –4 th grade	5 th –9 th grade	10 th –11 th (12 th) grade
Total				
Number of students who get hot meals:				
thousand persons	13651.7	7328.9	5490.8	832.1
as a percentage of the total	81.1	98.7	68.7	58.7
Urban areas				
Number of students who get hot meals:				
thousand persons	10298.1	5629.9	4021.3	646.9
as a percentage of the total	79.9	98.9	66.6	56.3
Rural areas				
Number of students who get hot meals:				
thousand persons	3353.7	1699.0	1469.5	185.2
as a percentage of the total	85.0	98.3	75.5	68.7

10.2.16. AVAILABILITY OF SCHOOL TRANSPORTATION TO STUDENTS AT EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES: 2020

(at the end of the year)

	Total	1 st –4 th grade	5 th –9 th grade	10 th –11 th (12 th) grade
	Total			
Students who need school transportation, <i>thousand persons</i>	1007.0	446.3	496.6	64.1
Of whom get school transportation, <i>percentage</i>	92.0	91.7	92.3	91.7
	Urban areas			
Students who need school transportation, <i>thousand persons</i>	279.1	130.8	131.7	16.6
Of whom get school transportation, <i>percentage</i>	87.4	87.6	87.4	86.5
	Rural areas			
Students who need school transportation, <i>thousand persons</i>	727.9	315.5	365.0	47.5
Of whom get school transportation, <i>percentage</i>	93.8	93.4	94.1	93.5

**10.2.17. AVAILABILITY OF PUBLIC CATERING TO STUDENTS OF EDUCATIONAL INSTITUTIONS IMPLEMENTING
SECONDARY VOCATIONAL EDUCATION PROGRAMMES**

(at the end of the year)

	2017	2018	2019	2020
Total				
Number of seats in the catering facilities (divisions) at education and laboratory spaces (buildings), <i>thousand seats</i>	415.2	406.9	406.8	399.8
As a percentage of the total standard number of seats	107.0	100.8	96.8	89.3
State and municipal institutions				
Number of seats in the catering facilities (divisions) at education and laboratory spaces (buildings), <i>thousand seats</i>	394.2	386.3	385.1	378.3
As a percentage of the total standard number of seats	106.2	100.9	97.6	90.9
Private institutions				
Number of seats in the catering facilities (divisions) at education and laboratory spaces (buildings), <i>thousand seats</i>	21.0	20.6	21.7	21.5
As a percentage of the total standard number of seats	124.5	99.3	84.9	68.0

10.2.18. AVAILABILITY OF PUBLIC CATERING TO STUDENTS OF HIGHER EDUCATION INSTITUTIONS

(at the end of the year)

	2010	2015	2017	2018	2019	2020
Total						
Number of seats in the catering facilities (divisions) at education and laboratory spaces (buildings), <i>thousand seats</i>	369.3	297.6	263.6	253.4	238.8	230.0
As a percentage of the total standard number of seats	57.8	57.0	50.0	48.1	45.4	42.2
State and municipal institutions						
Number of seats in the catering facilities (divisions) at education and laboratory spaces (buildings), <i>thousand seats</i>	316.3	256.1	234.9	225.7	213.1	205.2
As a percentage of the total standard number of seats	54.7	52.9	46.9	44.8	42.5	39.6
Private institutions						
Number of seats in the catering facilities (divisions) at education and laboratory spaces (buildings), <i>thousand seats</i>	52.9	41.5	28.7	27.8	25.8	24.8
As a percentage of the total standard number of seats	86.5	108.9	105.8	117.8	104.5	92.1

10.2.19. LIBRARY STOCK IN EDUCATIONAL INSTITUTIONS

(at the end of the year)

	Educational institutions implementing primary general, basic general, and secondary general education programmes		Educational institutions implementing secondary vocational education programmes*		Higher education institutions*	
	Million copies	As a percentage of the total	Million copies	As a percentage of the total	Million copies	As a percentage of the total
2018						
Library stock	630.0	100	121.6	100	1560.8	100
Of which acquired in the reporting year	65.9	10.5	6.1	5.0	472.2	30.3
Of which e-documents	5.3	0.8	10.6	8.7	1135.5	72.8
2019						
Library stock	640.3	100	126.7	100	1689.4	100
Of which acquired in the reporting year	67.4	10.5	6.5	5.1	413.3	24.5
Of which e-documents	4.4	0.7	16.2	12.8	1276.6	75.6
2020						
Library stock	664.7	100	124.5	100	2105.2	100
Of which acquired in the reporting year	65.5	9.9	7.3	5.9	374.1	17.8
Of which e-documents	4.2	0.6	18.0	14.5	1698.2	80.7

* Including libraries in dormitories.

10.2.20. AVAILABILITY OF STUDENT DORMITORIES

(at the end of the year)

	2015	2017	2018	2019	2020
Students, enrolled in programmes for skilled workers and employees, who need a place in a dormitory, <i>thousand persons</i>	103.6	102.0	98.0	98.2	99.3
Of whom living in dormitories, <i>percentage</i>	92.8	94.1	94.0	94.2	93.8
Students, enrolled in programmes for mid-level specialists, who need a place in a dormitory, <i>thousand persons</i>	311.4	349.3	353.7	364.3	368.1
Of whom living in dormitories, <i>percentage</i>	90.8	90.9	91.7	91.9	91.0
Students, enrolled in bachelor's, specialist's, and master's programmes, who need a place in a dormitory, <i>thousand persons</i>	897.4	874.3	876.9	894.6	855.7
Of whom living in dormitories, <i>percentage</i>	86.7	89.1	88.5	85.5	82.4

TECHNICAL NOTES

The information about **learning environment** includes the data on institutions that carry out educational activities, including separate subdivisions (and branches thereof), whose main activity is educational activity directed at implementation of corresponding educational programmes.

Total floor area of a building is a total area of all floors of the building (including maintenance floor, attic, ground floor, and basement) measured within the inner surfaces of external walls, as well as areas of projecting and recessed balconies.

Educational support floor area is the area where activities, auxiliary to the teaching (educational) process, are conducted: teachers' rooms, department managers' offices, administrative offices, premises of social organisations, libraries (reading rooms, book depositories), office and production premises, recreation rooms for employees, offices of the management, registries, vivaria,

computer centres, conference halls, and related premises (assembly hall, amateur art rooms, projection booth, broadcasting studio, storeroom for equipment).

Availability of public catering to students of institutions implementing secondary vocational education programmes, and institutions implementing bachelor's, specialist's, master's programmes is the ratio of seats at catering facilities (or subdivisions thereof) at educational institutions to the standard number of seats. The standard number of seats is calculated by multiplying the estimated number of students by 200 and dividing by 1,000, because according to the existing standard a catering facility must be equipped with 200 seats per 1,000 students in educational institution. The estimated number of students is equal to the intramural full-time enrolment plus 10% of extramural enrolment multiplied by attendance ratio which is equal to 0.9.



11

**EDUCATION OF STUDENTS
WITH LIMITED HEALTH CAPACITIES AND DISABILITIES**

11.1. ACCESSIBILITY OF EDUCATIONAL INSTITUTIONS TO STUDENTS WITH LIMITED MOBILITY

(at the end of the year)

	Total				State and municipal institutions				Private institutions			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
Buildings accessible to people with limited mobility, <i>as a percentage of all buildings:</i>												
educational institutions implementing primary general, basic general, and secondary general education programmes*	41.2	44.4	47.3	49.1	41.3	44.5	47.4	49.2	36.1	40.7	40.2	43.9
urban areas	51.4	54.7	56.6	57.9	52.0	55.2	57.2	58.4	36.5	41.5	40.8	44.2
rural areas	33.7	36.8	40.2	42.2	33.7	36.8	40.2	42.2	33.6	35.2	36.6	42.2
vocational education institutions implementing secondary vocational education programmes:												
education and laboratory spaces (buildings)	43.4	47.7	50.1	52.0	41.8	45.9	48.3	50.2	82.4	84.7	85.1	86.8
dormitories	31.3	34.9	37.0	38.9	30.9	34.8	36.8	38.6	53.2	46.5	55.8	59.1
higher education institutions:												
education and laboratory spaces (buildings)	44.9	48.1	49.4	51.8	41.5	44.9	46.2	48.8	88.4	89.7	92.7	93.0
dormitories	31.3	34.2	34.5	37.5	30.4	33.5	33.9	36.8	70.3	71.2	66.7	69.1
Additional education institutions implementing additional general education programmes for children, with classes suitable for people with limited mobility, <i>as a percentage of all institutions</i>	45.3	48.6	50.7	52.6	45.8	49.1	51.2	53.2	29.5	34.2	37.1	36.7

* In 2019, including buildings where the institutions occupy only part of the premises (floors).

**11.2. CHILDREN WITH LIMITED HEALTH CAPACITIES AND DISABLED CHILDREN AS A PERCENTAGE OF THE TOTAL ENROLMENT
IN INSTITUTIONS IMPLEMENTING PRESCHOOL EDUCATION AND CHILD CARE PROGRAMMES BY GROUP**
(at the end of the year)

	Children with limited health capacities						Disabled children					
	Persons			As a percentage of the total			Persons			As a percentage of the total		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Total	519542	550400	548864	6.9	7.2	7.4	79151	83806	83455	1.0	1.1	1.1
General development groups	52396	56490	50450	0.8	0.9	0.8	32634	32862	31408	0.5	0.5	0.5
Compensatory groups	362860	374570	377970	88.9	90.3	90.8	35177	37570	38456	8.6	9.1	9.2
Including the following categories of children:												
with hearing impairment	4045	4389	3800	89.1	84.7	81.4	2563	2605	2335	56.5	50.3	50.0
with speech impediment	263053	273790	280417	88.7	90.8	92.0	6501	6923	7504	2.2	2.3	2.5
with visual impairment	27778	26850	25347	92.6	95.2	94.3	2486	2347	2336	8.3	8.3	8.7
with mental deficiency (mental development disorders)	6584	6845	6127	85.6	83.9	81.2	5438	6100	5483	70.7	74.8	72.6
with mental retardation	32981	34963	36937	95.3	95.4	95.1	7272	8045	8863	21.0	21.9	22.8
with musculoskeletal disorders	16328	15247	13460	89.3	87.6	85.2	4252	4435	4654	23.3	25.5	29.4
with multiple special needs (multiple disorders)	4860	5131	5493	80.3	82.1	83.9	4421	4612	4604	73.0	73.8	70.3
with other limited health capacities	7231	7355	6389	68.3	64.6	58.6	2244	2503	2677	21.2	22.0	24.5
Health groups	5489	4757	4244	7.6	6.3	5.6	636	761	666	0.9	1.0	0.9
Combined groups	97250	112924	114506	20.4	19.9	19.6	9324	10955	11497	2.0	1.9	2.0
Early childhood groups	528	640	702	0.4	0.4	0.5	610	776	546	0.4	0.5	0.4
Child care groups	590	587	596	2.5	2.5	2.4	374	501	568	1.6	2.1	2.3
Family preschool groups	429	432	396	2.3	2.2	1.9	396	381	314	2.1	1.9	1.5

**11.3. STUDENTS WITH LIMITED HEALTH CAPACITIES AND DISABLED STUDENTS WITHIN PRIMARY GENERAL, BASIC GENERAL,
AND SECONDARY GENERAL EDUCATION PROGRAMMES**

(at the beginning of the academic year)

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Students with limited health capacities (with or without disability):						
thousand persons	507.1	572.8	623.5	671.1	718.6	734.1
as a percentage of the total	3.4	3.8	4.0	4.2	4.3	4.4
In the total enrolment of students with limited health capacities – disabled persons:						
thousand persons	250.5	273.2	293.3	311.8	326.2	343.8
as a percentage of the total	1.7	1.8	1.9	1.9	2.0	2.0

11.4. STUDENTS WITH LIMITED HEALTH CAPACITIES AND DISABLED STUDENTS IN PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES: 2020/2021

(at the beginning of the academic year)

	Total	Primary general education programmes	Basic general education programmes	Secondary general education programmes	Educational programmes for students with mental deficiency (mental development disorders)
Students with limited health capacities (with or without disability):					
thousand persons	734.1	250.4	271.4	8.7	203.6
as a percentage of the total	4.4	3.4	3.4	0.6	97.9
In the total enrolment of students with limited health capacities – disabled persons:					
thousand persons	237.4	66.2	60.9	6.2	104.2
as a percentage of the total	1.4	0.9	0.8	0.4	50.1
Disabled students (excluding students with limited health capacities):					
thousand persons	106.5	38.8	53.6	12.4	1.7
as a percentage of the total	0.6	0.5	0.7	0.9	0.8

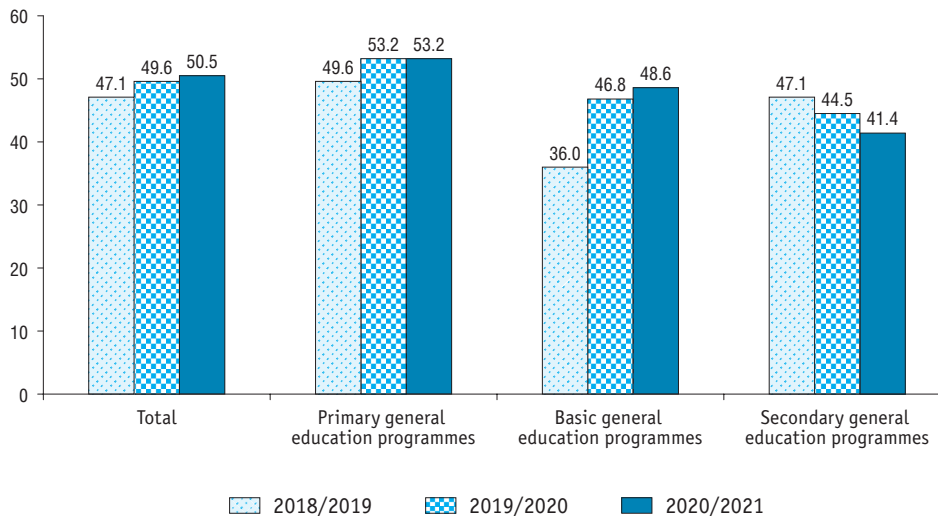
**11.5. STUDENTS IN ADAPTED EDUCATIONAL PROGRAMMES OF PRIMARY GENERAL, BASIC GENERAL,
AND SECONDARY GENERAL EDUCATION**
(at the beginning of the academic year; persons)

	Total			State and municipal institutions			Private institutions		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Total	600339	659301	679704	599836	658641	679040	503	660	664
Of whom in programmes for:									
deaf	6175	6001	5836	6171	5998	5832	4	3	4
hearing-impaired and with late hearing impairment	10833	11240	11805	10823	11226	11791	10	14	14
blind	2399	2431	2399	2396	2429	2397	3	2	2
visually impaired	17621	18891	19140	17614	18881	19120	7	10	20
with severe speech pathology	45213	57446	62408	45202	57426	62392	11	20	16
with musculoskeletal disorders	17819	20834	22573	17799	20745	22524	20	89	49
with mental retardation	248538	277995	287861	248344	277731	287587	194	264	274
with autism spectrum disorders	6000	8525	10661	5944	8432	10550	56	93	111
with mental deficiency (mental development disorders)	245741	255938	257021	245543	255773	256847	198	165	174

11.6. STUDENTS WITH LIMITED HEALTH CAPACITIES IN INCLUSIVE PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES
(at the beginning of the academic year)

	2018/2019	2019/2020	2020/2021			
			Total	Primary general education programmes	Basic general education programmes	Secondary general. education programmes
Students with limited health capacities (with or without disability):						
persons	315991	356260	370567	172131	192169	6267
as a percentage of the total enrolment in inclusive classrooms	8.9	9.0	8.9	8.2	9.6	7.3
In the total enrolment of students with limited health capacities – disabled students:						
persons	81675	87020	90942	43945	42696	4301
as a percentage of the total enrolment in inclusive classrooms	2.3	2.2	2.2	2.1	2.1	5.0

11.7. STUDENTS WITH LIMITED HEALTH CAPACITIES IN INCLUSIVE EDUCATIONAL PROGRAMMES AS A PERCENTAGE OF THE TOTAL ENROLMENT OF STUDENTS WITH LIMITED HEALTH CAPACITIES IN PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES
(at the beginning of the academic year)



**11.8. STUDENTS WITH LIMITED HEALTH CAPACITIES IN INCLUSIVE PRIMARY GENERAL, BASIC GENERAL,
AND SECONDARY GENERAL EDUCATION PROGRAMMES BY FUNCTIONAL LIMITATION**
(at the beginning of the academic year)

	2018/2019		2019/2020		2020/2021	
	Persons	Percentage	Persons	Percentage	Persons	Percentage
Total	315991	100	356260	100	370567	100
Of whom:						
deaf	578	0.2	754	0.2	655	0.2
hearing-impaired and with late hearing impairment	3260	1.0	3655	1.0	3843	1.0
blind	170	0.1	188	0.1	210	0.1
visually impaired	6316	2.0	6764	1.9	6823	1.8
with severe speech pathology	28818	9.1	40694	11.4	45278	12.2
with musculoskeletal disorders	16694	5.3	17068	4.8	17305	4.7
with mental retardation	172290	54.5	195545	54.9	204888	55.3
with autism spectrum disorders	4345	1.4	5843	1.6	7160	1.9
with mental deficiency (mental development disorders)	52645	16.7	57449	16.1	57922	15.6
with multiple special needs (multiple disorders)	1303	0.4	1181	0.3	1170	0.3
with other limited health capacities	29572	9.4	27119	7.6	25313	6.8

11.9. AVAILABILITY OF MEDICAL FACILITIES AND SPECIAL DOCTORS' OFFICES IN INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES

(at the end of the year; as a percentage of all institutions)

	2017	2018	2019	2020
Total				
Institutions that have:				
medical station (room)	63.2	63.8	64.5	65.0
logopedic room (speech therapist's office)	24.4	25.5	27.0	28.1
special needs teacher's office	6.8	7.5	8.7	9.8
educational psychologist's office	47.5	49.3	51.6	52.8
Urban areas				
Institutions that have:				
medical station (room)	92.8	93.4	93.9	94.2
logopedic room (speech therapist's office)	42.4	43.7	45.7	47.1
special needs teacher's office	12.6	13.6	15.6	17.2
educational psychologist's office	75.7	77.6	79.7	80.7
Rural areas				
Institutions which have the following:				
medical station (room)	41.4	41.6	42.3	42.6
logopedic room (speech therapist's office)	11.1	12.0	12.9	13.6
special needs teacher's office	2.5	3.0	3.5	4.1
educational psychologist's office	26.7	28.1	30.4	31.4

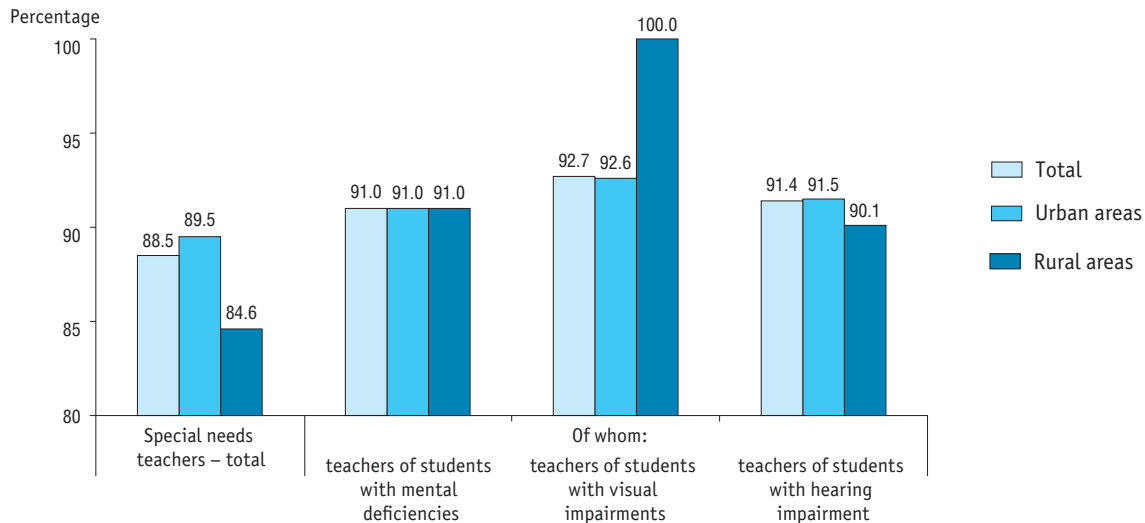
11.10. SPECIAL NEEDS TEACHERS IN EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES: 2020/2021

(at the beginning of the academic year)

	Special needs teachers (excluding part-timers and independent contractors)			Part-timers		
	Total	Urban areas	Rural areas	Total	Urban areas	Rural areas
Special needs teachers – total, persons	5534	4568	966	652	435	217
Of whom:						
teachers of students with mental deficiencies	1407	1054	353	175	88	87
teachers of students with visual impairments	175	171	4	15	15	–
teachers of students with hearing impairment	486	448	38	13	13	–
In the total number of special needs teachers – teachers with a special education teacher certification, <i>percentage</i>	61.9	65.6	44.6	29.1	24.8	37.8

11.11. SPECIAL NEEDS TEACHERS STAFFING LEVEL IN EDUCATIONAL INSTITUTIONS IMPLEMENTING PRIMARY GENERAL, BASIC GENERAL, AND SECONDARY GENERAL EDUCATION PROGRAMMES: 2020/2021*

(at the beginning of the academic year)



* The calculation of this indicator is presented in Technical Notes to Section 9.

11.12. WILLINGNESS OF PARENTS TO CONTINUE EDUCATION OF THEIR DISABLED CHILDREN IN GENERAL EDUCATION INSTITUTIONS: 2020*

(percentage)

	Total	Urban areas	Rural areas
Disabled children under 15 enrolled in general education institutions**	100	100	100
Including whose parents:			
want to continue their child's education	45.6	39.6	54.0
in a vocational education institution implementing secondary vocational education programmes	18.7	15.4	23.4
in a higher education institution	26.9	24.2	30.6
do not want to continue their child's education in the professional (vocational) education system	16.9	15.1	19.5
do not know	37.5	45.3	26.5

* According to the Comprehensive monitoring of living conditions (see Technical Notes on Section 2).

** Disabled children enrolled in an ordinary general education institution, and those who study at home.

**11.13. CHILDREN WITH LIMITED HEALTH CAPACITIES AND DISABLED CHILDREN AMONG STUDENTS WITHIN ADDITIONAL
GENERAL EDUCATION PROGRAMMES FOR CHILDREN**
(at the beginning of the academic year)

	Children with limited health capacities						Disabled children					
	Persons			As a percentage of the total			Persons			As a percentage of the total		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Number of children studying in the following fields of education:												
technical engineering	58596	76505	87118	2.8	3.2	3.1	19152	21153	25724	0.9	0.9	0.9
natural sciences	56502	67943	71210	2.1	2.4	2.4	19571	21522	22942	0.7	0.8	0.8
tourism and local studies	21566	24221	24134	1.9	2.2	2.3	7280	7569	7084	0.6	0.7	0.7
social and pedagogical	258475	279567	272786	4.3	4.4	4.4	100817	111464	100389	1.7	1.8	1.6
in arts:												
within general development programmes	194378	226896	223417	2.6	3.1	3.3	69444	74629	72839	0.9	1.0	1.1
within pre-vocational education programmes	2039	2695	3573	0.2	0.3	0.4	3136	3585	3933	0.3	0.4	0.4
in physical training and sports:												
within general development programmes	136025	157985	153630	2.7	3.2	3.2	39867	41893	39925	0.8	0.8	0.8
within pre-vocational education programmes	2830	2957	2449	0.3	0.4	0.4	1947	1315	1102	0.2	0.2	0.2

11.14. STUDENTS WITH LIMITED HEALTH CAPACITIES AND DISABLED STUDENTS IN SECONDARY VOCATIONAL EDUCATION PROGRAMMES (at the beginning of the academic year)

	Total			Programmes for skilled workers and employees			Programmes for mid-level specialists		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
Students with limited health capacities (with or without disability):									
total, <i>persons</i>	13626	14242	15742	3440	3614	3716	10186	10628	12026
of whom within adapted educational programmes	2696	3119	3489	968	1074	1152	1728	2045	2337
as a percentage of the total	0.5	0.5	0.5	0.6	0.7	0.6	0.4	0.4	0.4
In the total enrolment of students with limited health capacities – disabled students:									
total, <i>persons</i>	11892	12379	13753	2766	2866	2970	9126	9513	10783
of whom within adapted educational programmes, <i>persons</i>	1918	2135	2502	721	726	770	1197	1409	1732
as a percentage of the total	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4
Disabled students (excluding students with limited health capacities):									
total, <i>persons</i>	13112	14743	16288	2457	2769	3121	10655	11974	13167
of whom within adapted educational programmes	3097	3004	3309	658	633	821	2439	2371	2488
as a percentage of the total	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5

**11.15. STUDENTS WITH LIMITED HEALTH CAPACITIES AND DISABLED STUDENTS IN BACHELOR'S, SPECIALIST'S,
AND MASTER'S PROGRAMMES**
(at the beginning of the academic year)

	2018/2019	2019/2020	2020/2021			
			Total	Bachelor's programmes	Specialist's programmes	Master's programmes
Students with limited health capacities (with or without disability):						
total, <i>persons</i>	12076	11043	12313	8599	3116	598
of whom within adapted educational programmes	1237	1131	1235	1053	87	95
as a percentage of the total	0.3	0.3	0.3	0.3	0.4	0.1
In the total enrolment of students with limited health capacities – disabled students:						
total, <i>persons</i>	10646	10564	11935	8310	3065	560
of whom within adapted educational programmes	1192	1106	1170	998	82	90
as a percentage of the total	0.3	0.3	0.3	0.3	0.4	0.1
Disabled students (excluding students with limited health capacities):						
total, <i>persons</i>	12247	14209	16386	11636	3718	1032
of whom within adapted educational programmes	1237	1088	918	671	176	71
as a percentage of the total	0.3	0.3	0.4	0.4	0.5	0.2

**11.16. STUDENTS WITH LIMITED HEALTH CAPACITIES AND DISABLED STUDENTS IN POSTGRADUATE, RESIDENCY,
AND APPRENTICESHIP PROGRAMMES: 2020**
(at the end of the year)

	Postgraduate programmes		Residency programmes		Apprenticeship programmes	
	2019	2020	2019	2020	2019	2020
Students with limited health capacities and disabled:						
total, <i>persons</i>	76	123	82	123	7	10
of whom within adapted educational programmes	3	8	1	–	4	9
as a percentage of the total enrolment	0.1	0.1	0.2	0.2	0.8	1.0

**11.17. STUDENTS WITH LIMITED HEALTH CAPACITIES AND DISABLED STUDENTS WHO HAVE COMPLETED THEIR STUDIES
IN VOCATIONAL TRAINING PROGRAMMES: 2020**
(at the end of the year)

	Total	Vocational training programmes for skilled workers and employees	Retraining programs for skilled workers and employees	Programmes aimed at upgrading professional skills of skilled workers and employees
Students with limited health capacities (with or without disability):				
total, <i>persons</i>	15612	15340	213	59
of whom within adapted educational programmes	12996	12820	143	33
as a percentage of the total enrolment	0.8	1.2	0.1	0.01
In the total enrolment of students with limited health capacities – disabled students:				
total, <i>persons</i>	4885	4783	87	15
of whom within adapted educational programmes	3532	3468	53	11
as a percentage of the total enrolment	0.3	0.4	0.04	0.0
Disabled students (excluding students with limited health capacities):				
total, <i>persons</i>	792	763	15	14
of whom within adapted educational programmes	486	479	–	7
as a percentage of the total enrolment	0.04	0.1	0.01	0.0

11.18. STUDENTS WITH LIMITED HEALTH CAPACITIES AND DISABLED STUDENTS WHO HAVE COMPLETED THEIR STUDIES WITHIN ADDITIONAL PROFESSIONAL (VOCATIONAL) PROGRAMMES: 2020

	Total	Professional (vocational) development programmes	Professional (vocational) retraining programmes
Students with limited health capacities (with or without disability):			
<i>total, persons</i>	1914	1741	173
of whom trained in separate groups for individuals with limited health capacities	116	99	17
as a percentage of the total enrolment	0.03	0.03	0.03
In the total enrolment of students with limited health capacities – disabled students:			
<i>total, persons</i>	1260	1157	103
of whom trained in separate groups for individuals with limited health capacities	50	46	4
as a percentage of the total enrolment	0.02	0.02	0.02
Disabled students (excluding students with limited health capacities):			
<i>total, persons</i>	554	447	107
of whom trained in separate groups for individuals with limited health capacities	1	–	1
as a percentage of the total enrolment	0.01	0.01	0.02

TECHNICAL NOTES

Students with limited health capacities are individuals who have physical and/or mental development impairments, as confirmed by a board of psychologists, doctors, and teachers (educational committee), which make pursuit of education impossible without accommodating the learning environment to special needs of such students.

Disabled students are individuals who suffer from a serious health condition with a bodily dysfunction as a result of an illness, injury, or impairment, which led to disability and require social protection (art. 1 of Federal Law no. 181-FL 'On the Social Protection of Disabled Individuals in the Russian Federation' as of November 24, 1995). A person must be considered disabled by a federal social security medical assessment board under the regulations laid down by Decree no. 95 of the Government of the Russian Federation of February 20, 2006. It should be noted, however, that according to the Russian law the terms 'disabled individual' and 'individual with limited health capacities' are not interchangeable.

Disabled children are individuals under 18 who were considered disabled. The data on the number of students with limited health capacities and disabled students within secondary vocational education programmes are given excluding vocational education institutions of the Russian Federal Penitentiary Service.

Accessibility (inclusive environment) of buildings to individuals with limited mobility is the quality of a building (room) that enables one to freely access the place of destination and receive a service.

Adapted educational programme is an educational programme adapted for individuals with limited health capacities. It takes into account special psychophysical development and individual capacities; if necessary, the programme in question ensures the correction of developmental disorders and social adaptation of said categories of individuals.

Special needs teachers are special education teachers who organise learning and training activities for students with limited health capacities to acquire the knowledge, skills, and competencies that are necessary to live in the society, ensuring that they achieve the results required by the established educational standard; provide special educational assistance to individuals with limited health capacities; exercise methodological support of students' educational process. The profession of a special needs teacher is divided into several narrow specialties, among them: teachers of students with hearing impairment; teachers of students with visual impairments; teachers of students with mental deficiencies.

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12

INTERNATIONAL COMPARISONS

12.1. EDUCATIONAL ATTAINMENT OF THE ADULT POPULATION IN RUSSIA, OECD COUNTRIES, AND BRICS COUNTRIES: 2020*
(aged 25–64; as a percentage of population of each age group)

	Educational attainment			
	basic general and below (ISCED level 0, 1, and 2)	secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	secondary vocational – programmes for mid-level specialists (ISCED level 5)	higher (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)
Russia	5.8	26.8	34.5	30.2
		OECD countries		
Australia	16.2	34.4	11.8	37.5
Austria	14.3	51.5	15.2	19.0
Belgium	20.2	37.3	0.6	41.8
Canada	7.6	32.5	25.6	34.4
Chile	32.6	42.3	8.7	16.4
Colombia	41.2	34.2	n(4)**	24.6
Costa Rica	57.3	17.6	6.3	18.7
Czech Republic	5.9	69.2	0.1	24.8
Denmark	18.4	41.2	4.9	35.5
Estonia	9.3	48.4	6.3	35.9
Finland	8.8	43.3	9.7	38.2
France	18.5	41.8	14.9	24.8
Germany	13.9	54.9	0.6	30.7
Greece	23.6	43.7	1.5	31.2
Hungary	14.4	58.4	1.2	26.0
Iceland	24.1	35.3	1.9	38.7

(continued)

	Educational attainment			
	basic general and below (ISCED level 0, 1, and 2)	secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	secondary vocational – programmes for mid-level specialists (ISCED level 5)	higher (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)
Ireland	14.5	35.5	7.2	42.8
Israel	12.0	37.9	12.3	37.9
Italy	37.1	42.7	0.0	20.1
Japan	n(2)**	47.3***	21.4	31.3
Latvia	10.5	51.6	3.7	34.2
Lithuania	6.4	49.5	–	44.1
Luxembourg	25.8	22.8	4.8	46.5
Mexico	58.4	22.2	0.5	18.9
Netherlands	19.0	38.4	2.1	40.6
New Zealand	19.1	40.8	4.1	36.0
Norway	17.5	37.2	11.0	34.3
Poland	6.8	60.4	0.1	32.8
Portugal	44.6	27.2	...	28.1
Republic of Korea	10.6	38.6	14.1	36.6
Slovakia	7.5	65.7	0.2	26.6
Slovenia	9.8	54.4	7.0	28.9
Spain	37.1	23.2	12.1	27.6
Sweden	16.1	39.3	9.8	34.8
Switzerland	10.7	44.0	n(4)**	45.3
Türkiye	58.3	19.7	6.1	15.9
United Kingdom	18.3	32.3	9.5	39.9
United States	8.3	41.7	11.0	39.1

(continued)

	Educational attainment			
	basic general and below (ISCED level 0, 1, and 2)	secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	secondary vocational – programmes for mid-level specialists (ISCED level 5)	higher (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)
BRICS countries				
Brazil	43.0	36.9	n(4)**	20.1
China	75.5	14.8	5.8	3.9
India	78.5	9.1	n(4)**	12.4
South Africa	52.3	31.8	7.9	7.9

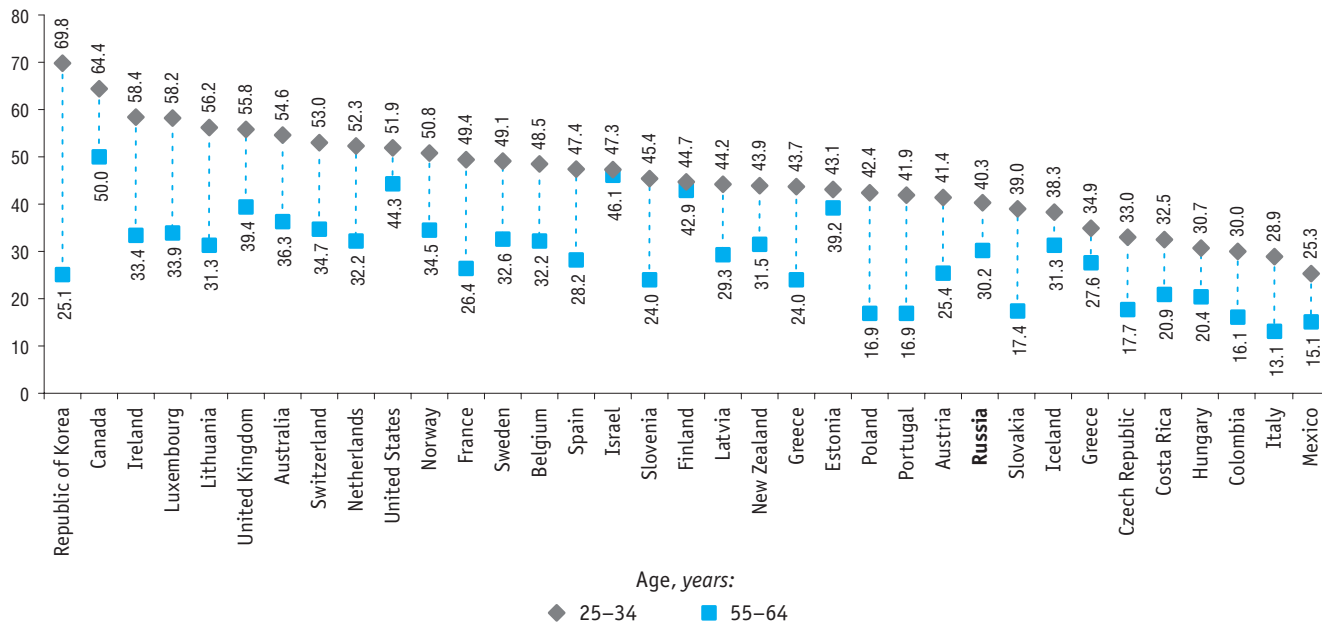
* Here and below in figure 12.2, the data for Chile refer to 2017, for Brazil – 2018, for Denmark, India, Türkiye, and Japan – 2019, for China – 2010; for Russia – according to 2015 microcensus.

** Here and below, the 'n' symbol means that the data in this field are included into another column, which number is indicated in brackets after 'n'.

*** Data on the number of individuals with ISCED level 4 are included in column 3.

12.2. ADULT POPULATION WITH HIGHER EDUCATION (ISCED LEVEL 6, 7, AND 8) AS A PERCENTAGE OF THE TOTAL POPULATION IN RUSSIA, OECD COUNTRIES, AND BRICS COUNTRIES BY AGE: 2020*

(as a percentage of population in each age group)



* The data for foreign countries include ISCED level 5.

12.3. EMPLOYMENT AND UNEMPLOYMENT RATES IN RUSSIA, OECD COUNTRIES, AND BRICS COUNTRIES: 2020*

(aged 25–64; percentage)

	Employment rate by educational attainment (employed population as a percentage of the total population with the respective educational attainment)			Unemployment rate by educational attainment (unemployed population as a percentage of the labour force with the respective educational attainment)		
	Basic general and below (ISCED level 0, 1, and 2)	Secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	Secondary vocational – programmes for mid-level specialists, higher (ISCED level 5, 6, 7, and 8)	Basic general and below (ISCED level 0, 1, and 2)	Secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	Secondary vocational – programmes for mid-level specialists, higher (ISCED level 5, 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Russia	53.9	72.2	82.3	11.7	6.5	3.8
OECD countries						
Australia	56.5	74.5	81.5	7.6	6.0	4.6
Austria	53.9	76.4	86.0	11.7	4.5	3.2
Belgium	46.9	73.4	86.2	10.7	4.9	3.2
Canada	54.0	70.2	79.5	12.3	9.5	6.7
Chile	62.4	71.9	84.5	6.3	7.0	5.6
Colombia	61.8	65.6	74.2	12.2	15.7	14.6
Costa Rica	57.3	64.3	76.8	17.7	16.9	11.7
Czech Republic	57.0	83.5	85.6	9.6	2.2	1.4
Denmark	60.7	82.1	87.6	6.2	3.5	4.1
Estonia	62.5	79.4	85.2	10.4	6.6	4.7
Finland	54.1	75.3	86.8	11.9	7.3	4.2
France	53.3	72.5	85.0	11.8	7.4	4.7
Germany	62.6	82.2	88.7	8.2	3.1	2.5
Greece	51.8	62.2	75.4	18.8	17.4	11.5
Hungary	55.6	79.3	85.9	10.0	3.5	1.7

(continued)

	Employment rate by educational attainment (employed population as a percentage of the total population with the respective educational attainment)			Unemployment rate by educational attainment (unemployed population as a percentage of the labour force with the respective educational attainment)		
	Basic general and below (ISCED level 0, 1, and 2)	Secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	Secondary vocational – programmes for mid-level specialists, higher (ISCED level 5, 6, 7, and 8)	Basic general and below (ISCED level 0, 1, and 2)	Secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	Secondary vocational – programmes for mid-level specialists, higher (ISCED level 5, 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Iceland	70.4	81.4	87.6	7.2	6.5	4.4
Ireland	52.0	71.7	84.5	6.4	5.3	3.7
Israel	48.8	70.7	86.8	4.8	4.7	3.2
Italy	51.7	70.5	80.8	11.9	7.2	5.1
Japan	...	...	86.0**	...	...	1.9**
Latvia	64.8	75.5	86.8	16.3	8.7	5.2
Lithuania	54.5	73.2	89.9	21.4	10.5	4.1
Luxembourg	60.5	74.9	85.0	8.0	4.8	4.6
Mexico	62.6	67.7	76.3	3.2	4.3	4.7
Netherlands	63.1	82.2	89.5	4.6	2.7	2.4
New Zealand	70.8	81.8	87.9	4.9	3.5	2.7
Norway	60.7	79.5	89.2	7.2	3.5	2.6
Poland	46.9	71.5	89.1	8.2	2.8	1.8
Portugal	69.7	81.7	87.9	6.2	6.6	5.1
Republic of Korea	61.4	70.4	77.0	4.3	3.9	3.2
Slovakia	36.5	77.0	82.7	27.5	5.6	3.3
Slovenia	48.3	75.7	90.4	9.7	4.9	3.0
Spain	56.5	68.9	79.9	20.0	14.5	9.5

(continued)

	Employment rate by educational attainment <i>(employed population as a percentage of the total population with the respective educational attainment)</i>			Unemployment rate by educational attainment <i>(unemployed population as a percentage of the labour force with the respective educational attainment)</i>		
	Basic general and below (ISCED level 0, 1, and 2)	Secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	Secondary vocational – programmes for mid-level specialists, higher (ISCED level 5, 6, 7, and 8)	Basic general and below (ISCED level 0, 1, and 2)	Secondary general and secondary vocational – programmes for skilled workers and employees (ISCED level 3 and 4)	Secondary vocational – programmes for mid-level specialists, higher (ISCED level 5, 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Sweden	63.2	85.1	89.3	18.5	4.7	4.6
Switzerland	69.1	81.2	88.9	8.7	4.6	3.5
Türkiye	50.1	60.0	73.6	12.4	11.9	10.7
United Kingdom	64.5	80.4	86.3	5.0	3.2	2.7
United States	55.1	69.0	81.9	8.3	5.7	3.1
BRICS countries						
Brazil	52.1	66.3	79.1	12.2	11.8	6.3
China	...	...	...	...	...	...
India	57.5	62.9	61.9	1.1	4.4	8.9
South Africa	40.1	52.6	72.7	31.8	26.2	13.0

* The data for Chile refer to 2017, for Brazil – 2018, for Denmark, India, Türkiye, and Japan – 2019.

** Including ISCED level 4.

12.4. EXPENDITURE ON EDUCATION IN RUSSIA AND OECD COUNTRIES: 2018

(million PPPs)

	Total*	Of which				
		preschool education (ISCED level 0)	primary general, basic general and secondary general education (ISCED level 1, 2, and 3)	secondary vocational education – programmes for skilled workers and employees (ISCED level 4)	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Russia (2020)	190987.0	38135**	73328.0	n(5)	13234.0	41023.0
Russia (2018)	173082.0	34118**	63263.0	n(5)	12165.0	37837.0
Australia	83504.0	7298.0	50734.0	1188.0	2092.0	22192.0
Austria	27119.0	3461.0	14806.0	102.0	1256.0	7494.0
Belgium	33969.0	...	24836.0	n(3)	201.0	8931.0
Canada	...	n(3)	63900.0	...	11702.0	30450.0
Chile	36666.0	6143.0	19465.0	–	1715.0	9343.0
Colombia	40140.0	3311.0	29373.0	...	n(6)	6894.0
Costa Rica	...	...	...	...	...	...
Czech Republic	20663.0	2500.0	12686.0	20.0	23.0	5194.0
Denmark	...	4412.0	11430.0	–	635.0	5082.0
Estonia	2861.0	594.0	1447.0	43.0	–	777.0
Finland	17323.0	3216.0	9899.0	n(3)	–	4208.0
France	184875.0	23023.0	115273.0	654.0	9631.0	36294.0
Germany	241889.0	44223.0	127383.0	9681.0	3.0	56571.0
Greece	...	...	9099.0	...	–	2743.0
Hungary	16038.0	2444.0	7834.0	784.0	51.0	3275.0
Iceland	1649.0	364.0	925.0	13.0	8.0	234.0
Ireland	14350.0	765.0	9269.0	692.0	n(6)	3624.0
Israel	27263.0	4523.0	17310.0	13.0	806.0	4244.0
Italy	121677.0	14941.0	83226.0	n(3)	87.0	23424.0

(continued)

	Total*	Of which				
		preschool education (ISCED level 0)	primary general, basic general and secondary general education (ISCED level 1, 2, and 3)	secondary vocational education – programmes for skilled workers and employees (ISCED level 4)	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Japan	...	9825.0	135940.0	n(3,5,6)	10924.0	61823.0
Latvia	2885.0	473.0	1661.0	41.0	89.0	620.0
Lithuania	4495.0	1022.0	2245.0	129.0	–	1099.0
Luxembourg	2719.0	370.0	2053.0	1.0	3.0	292.0
Mexico	135302.0	13666.0	82238.0	–	n(6)	36449.0
Netherlands	55242.0	3789.0	34736.0	–	79.0	16638.0
New Zealand	14373.0	1740.0	8774.0	356.0	341.0	3162.0
Norway	26591.0	5967.0	14132.0	116.0	155.0	5841.0
Poland	63909.0	10390.0	38327.0	674.0	6.0	14513.0
Portugal	17819.0	...	13710.0	n(3)	89.0	4020.0
Republic of Korea	111750.0	...	77433.0	–	3825.0	30492.0
Slovakia	7446.0	1106.0	4688.0	59.0	20.0	1573.0
Slovenia	4243.0	845.0	2563.0	–	33.0	799.0
Spain	95717.0	14075.0	57553.0	n(3)	3606.0	20483.0
Sweden	...	9980.0	21526.0	150.0	194.0	8328.0
Switzerland	...	...	7072.0	n(3)	...	...
Türkiye	116657.0	...	77572.0	–	n(6)	39086.0
United Kingdom	200242.0	12682.0	125619.0	–	4395.0	57546.0
United States	1209008.0	...	697488.0	4949.0	n(6)	506572.0

* Here and below in tables 12.5–12.7, including expenditures not allocated to programmes; for Belgium, Portugal, Republic of Korea, United States, Türkiye – expenditures on ISCED level 1–8.

** Public expenditure.

12.5. PUBLIC EXPENDITURE ON EDUCATION IN RUSSIA AND OECD COUNTRIES: 2018

(million PPPs)

	Total	Of whom				
		preschool education (ISCED level 0)	primary general, basic general and secondary general education (ISCED level 1, 2, and 3)	secondary vocational education – programmes for skilled workers and employees (ISCED level 4)	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Russia (2020)	167073	38135	70226	n(5)	10972	24893
Russia (2018)	148753	34118	59675	n(5)	10200	22471
Australia	64127	4749	43499	1159	2029	12690
Austria	26354	3059	14649	79	1322	7246
Belgium	33680	...	24724	n(3)	209	8747
Canada	...	n(3)	58200	...	9365	19781
Chile	25176	4655	14170	–	903	5447
Colombia	32846	1883	23244	...	n(6)	7658
Costa Rica	6838	318	4081	–	n(6)	1628
Czech Republic	18657	2409	12025	13	21	4017
Denmark	...	3368	11932	–	740	6571
Estonia	2516	512	1397	43	–	564
Finland	17205	2956	10031	n(3)	–	4218
France	169155	21503	108650	593	8557	29852
Germany	227473	37652	120876	7027	8	57888
Greece	...	...	8427	63	–	2129
Hungary	14399	2202	7298	751	44	2476
Iceland	1555	322	903	13	8	245
Ireland	13982	658	9195	359	n(6)	3769
Israel	22093	3352	15659	31	625	2410

(continued)

	Total	Of whom				
		preschool education (ISCED level 0)	primary general, basic general and secondary general education (ISCED level 1, 2, and 3)	secondary vocational education – programmes for skilled workers and employees (ISCED level 4)	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Italy	110887	12404	78312	n(3)	80	20092
Japan	...	5119	125561	n(3,5,6)	3217	30245
Latvia	2520	452	1591	41	69	367
Lithuania	3966	874	2168	119	–	805
Luxembourg	2600	354	1960	1	5	279
Mexico	108758	11317	70667	–	n(6)	23628
Netherlands	53455	3452	32976	–	113	16914
New Zealand	12365	1348	7541	319	312	2846
Norway	28306	5147	14950	134	202	7486
Poland	56053	8523	34220	441	6	12863
Portugal	15188	...	12391	n(3)	69	2728
Republic of Korea	89313	...	70232	–	2183	16897
Slovakia	6823	950	4512	60	20	1280
Slovenia	3984	649	2515	–	42	776
Spain	79620	11165	50849	n(3)	3221	14385
Sweden	...	9411	22451	295	440	9315
Switzerland	29677	2416	18815	n(3)	n(6)	7892
Türkiye	92632	...	58307	–	n(6)	34325
United Kingdom	158555	7683	106935	–	3325	40611
United States	895418	...	643476	2798	n(6)	249145

12.6. EXPENDITURE ON EDUCATION AS A PERCENTAGE OF GDP IN RUSSIA AND OECD COUNTRIES: 2018

	Total	Of which expenditure		Of which				
		public	private*	preschool education (ISCED level 0)	primary general, basic general and secondary general education (ISCED level 1, 2, and 3)	secondary vocational education – programmes for skilled workers and employees (ISCED level 4)	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Russia (2020)	4.6	4.0	0.6	0.9**	1.8	n(7)	0.3	1.0
Russia (2018)	4.1	3.5	0.6	0.8**	1.5	n(7)	0.3	0.9
Australia	6.5	4.7	1.7	0.6	3.9	0.1	0.2	1.7
Austria	5.4	5.0	0.4	0.7	2.9	0.0	0.2	1.5
Belgium	5.6	5.4	0.2	...	4.1	0.0	0.0	1.5
Canada	...	...	...	n(5)	3.5	...	0.6	1.7
Chile	7.9	5.2	2.6	1.3	4.2	–	0.4	2.0
Colombia	5.4	4.0	1.4	0.4	4.0	...	n(8)	0.9
Costa Rica	...	...	...	...	...	...	...	...
Czech Republic	4.7	4.2	0.5	0.6	2.9	0.0	0.0	1.2
Denmark	...	...	...	1.3	3.4	–	0.2	1.5
Estonia	6.0	5.4	0.6	1.2	3.0	0.1	–	1.6
Finland	6.3	6.1	0.2	1.2	3.6	n(5)	–	1.5
France	5.9	5.3	0.6	0.7	3.7	0.0	0.3	1.2
Germany	5.3	4.6	0.7	1.0	2.8	0.2	0.0	1.2
Greece	...	...	...	...	2.9	...	–	0.9
Hungary	5.2	4.5	0.6	0.8	2.5	0.3	0.0	1.1
Iceland	8.0	7.4	0.6	1.8	4.5	0.1	0.0	1.1
Ireland	3.5	3.1	0.3	0.2	2.2	0.2	n(8)	0.9
Israel	7.6	6.0	1.6	1.3	4.8	0.0	0.2	1.2
Italy	4.7	4.1	0.6	0.6	3.2	n(5)	0.0	0.9

(continued)

	Total	Of which expenditure		Of which				
		public	private*	preschool education (ISCED level 0)	primary general, basic general and secondary general education (ISCED level 1, 2, and 3)	secondary vocational education – programmes for skilled workers and employees (ISCED level 4)	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Japan	...	...	...	0.2	2.6	n(5,7,8)	0.2	1.2
Latvia	4.9	4.3	0.6	0.8	2.8	0.1	0.2	1.0
Lithuania	4.4	3.9	0.6	1.0	2.2	0.1	–	1.1
Luxembourg	3.8	3.7	0.1	0.5	2.9	0.0	0.0	0.4
Mexico	5.3	4.0	1.2	0.5	3.2	–	n(8)	1.4
Netherlands	5.5	4.5	1.0	0.4	3.5	–	0.0	1.7
New Zealand	7.0	5.6	1.4	0.8	4.3	0.2	0.2	1.5
Norway	8.7	8.4	0.2	2.0	4.6	0.0	0.1	1.9
Poland	5.3	...	...	0.9	3.2	0.1	0.0	1.2
Portugal	5.0	4.2	0.8	...	3.8	n(5)	0.0	1.1
Republic of Korea	5.1	4.0	1.1	...	3.5	–	0.2	1.4
Slovakia	4.3	3.8	0.5	0.6	2.7	0.0	0.0	0.9
Slovenia	5.3	4.6	0.6	1.0	3.2	–	0.0	1.0
Spain	5.0	4.1	1.0	0.7	3.0	n(5)	0.2	1.1
Sweden	7.3	7.0	0.3	1.8	4.0	0.0	0.0	1.5
Switzerland	...	4.8	...	...	...	...	...	...
Türkiye	5.1	3.7	1.4	...	3.4	–	n(8)	1.7
United Kingdom	6.6	4.8	1.7	0.4	4.1	–	0.1	1.9
United States	6.0	4.1	1.9	...	3.5	0.0	n(8)	2.5

* For Hungary, Israel, Iceland, Latvia, Netherlands, United States, including government subsidies for households and other private organisations referred to educational organisations.

** Public expenditure.

12.7. PUBLIC EXPENDITURE ON EDUCATION AS A PERCENTAGE OF THE TOTAL PUBLIC EXPENDITURE IN RUSSIA AND OECD COUNTRIES: 2018

	Total	Of which				
		preschool education (ISCED level 0)	primary general, basic general and secondary general education (ISCED level 1, 2, and 3)	secondary vocational education – programmes for skilled workers and employees (ISCED level 4)	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Russia (2020)	10.2	2.3	4.3	n(5)	0.7	1.5
Russia (2018)	10.7	2.5	4.3	n(5)	0.7	1.6
Australia	13.2	1.0	9.0	0.2	0.4	2.6
Austria	10.7	1.2	6.0	0.0	0.5	2.9
Belgium	10.7	...	7.9	n(3)	0.1	2.8
Canada	...	n(3)	7.5	...	1.2	2.6
Chile	21.4	4.0	12.0	–	0.8	4.6
Colombia	9.9	0.6	7.0	...	n(6)	2.3
Costa Rica	...	...	...	...	...	...
Czech Republic	10.5	1.4	6.8	0.0	0.0	2.3
Denmark	...	2.0	7.1	–	0.4	3.9
Estonia	13.4	2.7	7.4	0.2	–	3.0
Finland	11.8	2.0	6.9	n(3)	–	2.9
France	9.7	1.2	6.2	0.0	0.5	1.7
Germany	11.2	1.9	6.0	0.3	0.0	2.9
Greece	...	...	5.5	0.0	–	1.4
Hungary	10.1	1.5	5.1	0.5	0.0	1.7
Iceland	17.2	3.6	10.0	0.1	0.1	2.7
Ireland	13.2	0.6	8.7	0.3	n(6)	3.6
Israel	15.3	2.3	10.8	0.0	0.4	1.7

(continued)

	Total	Of which				
		preschool education (ISCED level 0)	primary general, basic general and secondary general education (ISCED level 1, 2, and 3)	secondary vocational education – programmes for skilled workers and employees (ISCED level 4)	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Italy	8.8	1.0	6.2	n(3)	0.0	1.6
Japan	...	0.2	6.1	n(3,5,6)	0.2	1.5
Latvia	10.8	1.9	6.8	0.2	0.3	1.6
Lithuania	11.5	2.5	6.3	0.3	–	2.3
Luxembourg	8.7	1.2	6.6	0.0	0.0	0.9
Mexico	15.5	1.6	10.1	–	n(6)	3.4
Netherlands	12.7	0.8	7.8	0.0	0.0	4.0
New Zealand	15.2	1.7	9.3	0.4	0.4	3.5
Norway	15.7	2.8	8.3	0.1	0.1	4.1
Poland	...	1.7	6.8	0.1	0.0	2.6
Portugal	9.8	...	8.0	n(3)	0.0	1.8
Republic of Korea	13.1	...	10.3	–	0.3	2.5
Slovakia	9.5	1.3	6.3	0.1	0.0	1.8
Slovenia	11.3	1.8	7.2	–	0.1	2.2
Spain	10.0	1.4	6.4	n(3)	0.4	1.8
Sweden	15.3	3.5	8.3	0.1	0.2	3.4
Switzerland	14.9	1.2	9.5	n(3)	n(6)	4.0
Türkiye	11.6	...	7.3	–	n(6)	4.3
United Kingdom	12.3	0.6	8.3	–	0.3	3.2
United States	11.5	...	8.3	0.0	n(6)	3.2

12.8. RATIO OF PUBLIC AND PRIVATE EXPENDITURE ON EDUCATION IN RUSSIA AND OECD COUNTRIES: 2018

(percentage)

	Total*		Of which							
			preschool education (ISCED level 0)		primary general, basic general and secondary general education (ISCED 1, 2 and 3)**		secondary vocational education – programmes for mid-level specialists (ISCED level 5)		higher education (ISCED level 6, 7, and 8)	
	Public expenditure	Private expenditure***	Public expenditure	Private expenditure***	Public expenditure	Private expenditure***	Public expenditure	Private expenditure***	Public expenditure	Private expenditure***
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Russia (2020)	87.5	12.5	...	...	95.8	4.2	82.9****	17.1****	60.7	39.3
Russia (2018)	85.9	14.1	...	...	94.3	5.7	83.9****	16.1****	59.4	40.6
Australia	73.0	27.0	65.1	34.9	83.3	16.7	87.9	12.1	50.1	49.9
Austria	93.3	6.7	87.7	12.3	96.8	3.2	96.3	3.7	88.4	11.6
Belgium	95.8	4.2	...	...	97.5	2.5	97.7	2.3	91.1	8.9
Canada	...	...	n(5)	n(6)	91.1	8.9	58.3	41.7	50.3	49.7
Chile	66.5	33.5	75.7	24.3	71.5	28.5	48.8	51.2	53.2	46.8
Colombia	74.2	25.8	55.0	45.0	76.5	23.5	n(9)	n(10)	79.7	20.3
Costa Rica	...	...	...	...	...	...	...	...	...	...
Czech Republic	89.4	10.6	90.3	9.7	92.4	7.6	93.2	6.8	82.5	17.5
Denmark	...	...	76.3	23.7	96.7	3.3	85.5	14.5	88.2	11.8
Estonia	90.2	9.8	86.1	13.9	95.9	4.1	–	–	82.4	17.6
Finland	97.3	2.7	91.9	8.1	99.4	0.6	–	–	96.4	3.6
France	90.2	9.8	93.4	6.6	93.2	6.8	83.0	17.0	80.6	19.4
Germany	86.8	13.2	85.1	14.9	87.6	12.4	79.5	20.5	85.2	14.8
Greece	...	...	...	...	92.2	7.8	–	–	86.1	13.9
Hungary	87.5	12.5	90.1	9.9	91.8	8.2	65.7	34.3	69.5	30.4
Iceland	92.0	8.0	88.4	11.6	96.7	3.3	91.6	8.4	91.6	8.4
Ireland	90.5	9.5	86.0	14.0	89.7	10.3	n(9)	n(10)	93.7	6.3
Israel	79.0	21.0	73.8	26.2	89.4	10.6	61.2	38.8	51.9	48.1
Italy	87.9	12.1	81.1	18.9	92.4	7.6	91.9	8.1	76.0	24.0
Japan	...	...	52.1	47.9	92.3	7.7	14.1	85.9	35.3	64.7

(continued)

	Total*		Of which							
			preschool education (ISCED level 0)		primary general, basic general and secondary general education (ISCED 1, 2 and 3)**		secondary vocational education – programmes for mid-level specialists (ISCED level 5)		higher education (ISCED level 6, 7, and 8)	
	Public ex- penditure	Private ex- penditure***	Public ex- penditure	Private ex- penditure***	Public ex- penditure	Private ex- penditure***	Public ex- penditure	Private ex- penditure***	Public ex- penditure	Private ex- penditure***
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Latvia	88.3	11.7	95.6	4.4	94.5	5.5	76.3	23.7	67.6	32.4
Lithuania	87.5	12.5	85.6	14.4	95.5	4.5	–	–	72.0	28.0
Luxembourg	97.0	3.0	98.0	2.0	97.1	2.9	...	...	95.1	4.9
Mexico	76.4	23.6	82.7	17.3	82.6	17.4	n(9)	n(10)	58.2	41.8
Netherlands	82.0	18.0	87.0	13.0	86.7	13.3	78.0	22.0	71.1	28.9
New Zealand	80.3	19.7	77.5	22.5	84.9	15.1	67.5	32.5	69.9	30.1
Norway	95.2	4.8	86.3	13.7	99.5	0.5	83.9	16.1	94.1	5.9
Poland	...	...	83.7	16.3	90.4	9.6	98.0	2.0	89.6	10.4
Portugal	84.4	15.6	...	...	89.3	10.7	75.8	24.2	68.1	31.9
Republic of Korea	79.0	21.0	...	...	89.5	10.5	57.1	42.9	55.3	44.7
Slovakia	88.5	11.5	86.2	13.8	93.8	6.3	91.9	8.1	74.4	25.6
Slovenia	87.9	12.1	76.9	23.1	91.0	9.0	92.6	7.4	89.6	10.4
Spain	80.8	19.2	78.1	21.9	86.4	13.6	80.1	19.9	66.9	33.1
Sweden	96.1	3.9	94.3	5.7	99.8	0.2	100	–	88.4	11.6
Switzerland	...	...	...	...	...	...	...	...	...	...
Türkiye	72.9	27.1	...	...	72.9	27.1	n(9)	n(10)	72.8	27.2
United Kingdom	73.8	26.2	60.6	39.4	85.2	14.8	65.6	34.4	52.5	47.5
United States	68.2	31.8	...	...	91.7	8.3	n(9)	n(10)	35.6	64.4

* Including expenditures not allocated to programmes; for Belgium, Portugal, Republic of Korea, United States, Türkiye – expenditures on ISCED level 1–8.

** For countries other than Russia, including ISCED level 4, save for United Kingdom, Denmark, Costa Rica, Mexico, Netherlands, Slovenia, Türkiye, Republic of Korea, Chile; for Japan – ISCED level 4 is partially taken into account in ISCED level 5, 6, 7, and 8.

*** For Hungary, Germany, Greece, Israel, Iceland, Canada, Colombia, Latvia, Netherlands, Norway, United States, Türkiye and Japan, including government subsidies for households and other private organisations referred to educational organisations.

**** Including ISCED level 4.

12.9. TRENDS IN RATIO OF PUBLIC AND PRIVATE EXPENDITURE ON EDUCATION IN RUSSIA AND OECD COUNTRIES (percentage)

	Public expenditure				Private expenditure*			
	2015	2016	2017	2018	2015	2016	2017	2018
Russia	85.3	87.4	86.9	85.9	14.7	12.6	13.1	14.1
Australia	74.4	74.1	72.2	73.0	25.6	25.9	27.8	27.0
Austria	95.0	95.0	94.4	93.3	5.0	5.0	5.6	6.7
Belgium	95.6**	95.4**	95.5**	95.8**	4.3**	4.4**	4.4**	4.2**
Canada	...	...	...	...	...	...	...	...
Chile	...	72.1	67.0	66.5	...	27.9	33.0	33.5
Colombia	59.6	57.6	68.5	74.2	40.4	42.4	31.5	25.8
Costa Rica	...	...	...	...	...	...	...	...
Czech Republic	91.9	91.4	88.1	89.4	8.1	8.6	11.9	10.6
Denmark	...	...	...	...	...	...	...	...
Estonia	86.6	90.3	90.5	90.2	13.4	9.7	9.5	9.8
Finland	96.9	97.0	96.9	97.3	3.1	3.0	3.1	2.7
France	90.6	90.3	90.4	90.2	9.4	9.7	9.6	9.8
Germany	85.5	85.8	86.3	86.8	14.5	14.2	13.7	13.2
Greece	...	...	...	...	...	...	...	...
Hungary	87.5	84.5	86.9	87.5	12.5	15.5	13.1	12.5
Iceland	91.2	91.3	90.9	92.0	8.8	8.7	9.1	8.0
Ireland	90.6	90.3	90.1	90.5	9.4	9.7	9.9	9.5
Israel	79.5	77.9	79.4	79.0	20.5	22.1	20.6	21.0
Italy	89.6	89.7	89.9	87.9	10.4	10.3	10.1	12.1
Japan	...	...	...	...	...	...	...	...
Latvia	92.3	91.5	89.1	88.3	7.7	8.5	10.9	11.7
Lithuania	87.2	87.2	87.5	87.5	12.8	12.8	12.5	12.5

(continued)

	Public expenditure				Private expenditure*			
	2015	2016	2017	2018	2015	2016	2017	2018
Luxembourg	97.4	97.0	97.2	97.0	2.6	3.0	2.8	3.0
Mexico	82.1	80.6	85.9	76.4	17.9	19.4	14.1	23.6
Netherlands	82.6	82.8	82.1	82.0	17.4	17.2	17.9	18.0
New Zealand	81.0	80.4	79.3	80.3	19.0	19.6	20.7	19.7
Norway	95.7	95.4	95.2	95.2	4.3	4.6	4.8	4.8
Poland	90.9	90.4	90.1	...	9.1	9.6	9.9	...
Portugal	83.7**	84.1**	83.9**	84.4**	16.3**	15.9**	16.1**	15.6**
Republic of Korea	...	76.4**	77.6**	79.0**	...	23.6**	22.4**	21.0**
Slovakia	88.4	87.6	89.3	88.5	11.6	12.4	10.7	11.5
Slovenia	86.7	86.6	87.3	87.9	13.7	12.9	12.7	12.1
Spain	80.8	80.7	81.0	80.8	19.2	19.3	19.0	19.2
Sweden	96.0	96.0	96.0	96.1	4.0	4.0	4.0	3.9
Switzerland	...	...	...	...	...	...	...	...
Türkiye	75.3**	74.9**	75.6**	72.9**	24.7**	25.1**	24.4**	27.1**
United Kingdom	77.3	76.0	75.1	73.8	22.7	24.0	24.9	26.2
United States	67.5**	67.6**	67.7**	68.2**	32.5**	32.4**	32.3**	31.8**

* For Hungary, Germany, Israel, Iceland, Colombia, Latvia, Netherlands, Norway, United States, and Türkiye, including government subsidies for households and other private organisations referred to educational organisations.

** Expenditures on ISCED level 1–8.

12.10. EXPENDITURE ON EDUCATION PER STUDENT IN RUSSIA AND OECD COUNTRIES: 2017
(USD PPPs)

	Total*	Of which				
		preschool education (ISCED level 0)	primary general education (ISCED level 1)	basic general and secondary general education (ISCED 2 and 3)**	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Russia (2020)	5581	5302***	n(4)	4363	4493****	14928
Russia (2018)	5125	4571***	n(4)	3944	4663****	14311
Australia	13108	7700	10745	14162	10304	22806
Austria	15841	11281	13151	16747	19066	20704
Belgium	14702	...	11482	14758	13815	20696
Canada	14905	n(3)	10629*****	14575	18669	27983
Chile	7172	7722	6425	6287	4938	10296
Colombia	3145	...	3158	3274	n(7)	2863
Costa Rica	...	...	...	...	...	...
Czech Republic	9983	6818	6614	11191	23186	16126
Denmark	...	15679	12292	10892	20145	19628
Estonia	9965	8929	8362	8506	–	17433
Finland	12487	14154	10056	11061	–	18170
France	11929	9164	8724	13006	15706	17940
Germany	14255	13509	10096	13926	12112	19324
Greece	5656	...	6768	7109	–	3503
Hungary	9029	7421	5784	7319	5058	14117
Iceland	16747	19463	14414	14735	15675	15675
Ireland	11026	8877	8539	10634	n(7)	17152
Israel	8838	5226	9696	9555	5735	15786
Italy	11248	10110	9947	11962	5989	12353
Japan	...	7841	8977	11330	14102*****	20657*****
Latvia	7439	6035	6611	7455	8897	10551

(continued)

	Total*	Of which				
		preschool education (ISCED level 0)	primary general education (ISCED level 1)	basic general and secondary general education (ISCED 2 and 3)**	secondary vocational education – programmes for mid-level specialists (ISCED level 5)	higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Lithuania	7454	7884	6456	6508	–	9905
Luxembourg	24332	20924	21143	25421	3126	54325
Mexico	3571	2686	2958	2878	n(7)	7907
Netherlands	14115	10254	9891	14726	12072	20971
New Zealand	11571	13631	8868	11138	11874	18966
Norway	18883	21286	15410	16441	22800	25506
Poland	8703	7574	8562	8220	26705	11189
Portugal	10371	...	8812	11001	6602	11987
Republic of Korea	12914	...	12535	14978	6016	12685
Slovakia	7643	6623	7305	6873	8844	12172
Slovenia	10262	9731	9385	9772	4487	15429
Spain	9895	7981	8329	10290	9903	14828
Sweden	15306	15794	12911	13500	7111	27886
Switzerland	...	12407	...	...	...	...
Türkiye	5723	...	3945	5058	n(7)	10008
United Kingdom	14005	6442	11679	12765	29173	29969
United States	18593	...	13139	14859	n(7)	34036

* For Germany, including expenditures not allocated to programmes; for Belgium, Greece, Colombia, Portugal, Republic of Korea, United States, and Türkiye – expenditures on ISCED level 1–8.

** For Belgium, Spain, Italy, Portugal, and Finland, including ISCED level 4; for Japan, ISCED level 4 is partially taken into account.

*** Public expenditure.

**** Including ISCED level 4.

***** Including ISCED level 2.

***** ISCED level 4 has been partially included.

12.11. TRENDS IN EXPENDITURE OF EDUCATION PER STUDENT IN RUSSIA AND OECD COUNTRIES
(USD PPPs)

	2012	2015	2016	2017	2018
Russia	5565	5254	4897	4768	5125
Australia	10744	11961	11294	12404	13108
Austria	12883	14161	15095	15290	15841
Belgium	12219*	12964*	13650*	14211*	14702*
Canada	12686*	13123*	14248*	14338*	14905
Chile	5485	5123	6411	6979	7172
Colombia	2744*	3115*	3583*	3523*	3145*
Costa Rica	...	...	...	...	...
Czech Republic	7211	10898	11056	8427	9983
Denmark	...	...	...	...	...
Estonia	6025	7771	8066	8740	9965
Finland	11238	11673	11989	11888	12487
France	9817	10616	11034	11501	11929
Germany	11100**	12168**	12909**	13505**	14255**
Greece	5297*	5540*	...	5294*	5656*
Hungary	...	6961	8032	8342	9029
Iceland	10654	17857	13992	14306	16747
Ireland	...	9896	10222	10372	11026
Israel	7100	...	7932	8369	8838
Italy	...	8938	9192	10185	11248
Japan	...	...	...	...	...
Latvia	5416	7209	6708	6941	7439
Lithuania	5698	6241	6354	6645	7454
Luxembourg	...	22402	21533	22591	24332

(continued)

	2012	2015	2016	2017	2018
Mexico	3390	3686	3705	3285	3571
Netherlands	11621	12360	12737	13320	14115
New Zealand	9487	10612	11063	11896	11571
Norway	16064	16516	16900	18142	18883
Poland	6490	7276	7419	7924	8703
Portugal	8546*	9198*	9516*	10207*	10371*
Republic of Korea	...	10881*	11367*	11969*	12914*
Slovakia	6040	8188	7059	7125	7643
Slovenia	9086	8790	9179	9747	10262
Spain	8467	8757	9226	9659	9895
Sweden	13110	14151	14665	14862	15306
Switzerland	15812	...	...	...	...
Türkiye	4632*	5698*	6229*	5542*	5723*
United Kingdom	11835	12990	12947	13292	14005
United States	15600*	16691*	17254*	17993*	18593*

* Expenditures on ISCED level 1–8.

** Including expenses not allocated to programmes.

12.12. PARTICIPATION OF GRADUATES OF SECONDARY VOCATIONAL EDUCATION IN PROGRAMMES FOR MID-LEVEL SPECIALISTS IN RUSSIA AND OECD COUNTRIES BY FIELD OF EDUCATION (ISCED LEVEL 5): 2019

(percentage)

	Education	Arts and humanities	Social sciences, journalism, and information	Business, management, and law	Natural sciences, mathematics, and statistics	Information and communication technologies (ICT)	Engineering, manufacturing and construction industries	Agriculture, forestry, and veterinary science	Healthcare and social security	Services sector	General programmes, qualifications, and specialties not elsewhere classified
Russia (2020)	6.9	3.7	1.4	20.1	1.8	6.5	35.5	1.9	13.1	9.1	...
Russia (2019)	6.9	3.6	1.4	20.8	1.9	6.1	35.6	1.8	13.1	8.9	...
Australia	10.6	12.8	1.2	45.2	0.9	4.2	7.1	0.6	14.4	3.0	0.1
Austria	8.9	4.1	0.0	20.2	0.0	4.2	34.3	2.9	3.4	22.0	0.1
Belgium	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	0.0	0.0
Canada	1.9	8.7	3.4	28.8	2.7	5.5	15.7	1.4	18.4	9.3	4.2
Chile	13.4	2.0	0.1	23.3	0.6	2.9	19.3	2.1	24.0	12.3	0.0
Colombia	1.1	4.1	3.7	41.3	3.1	7.6	21.9	3.2	2.6	11.3	0.0
Costa Rica	...	...	...	...	...	...	...	...	...	...	...
Czech Republic	0.0	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denmark	0.0	13.9	0.4	42.9	0.1	6.0	14.0	1.6	2.9	18.3	0.0
Estonia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
France	0.1	4.7	1.2	44.5	4.2	2.7	21.5	3.5	10.7	6.0	0.8
Germany	0.0	3.0	0.0	0.0	0.0	0.0	28.2	17.8	5.8	45.3	0.0
Greece	-	-	-	-	-	-	-	-	-	-	-
Hungary	0.5	3.2	2.5	63.4	0.0	8.5	0.7	8.3	1.8	11.2	0.0
Iceland	16.4	5.5	0.0	6.9	0.0	5.5	0.0	2.7	0.0	63.0	0.0
Ireland	13.8	7.3	5.3	23.2	5.5	2.7	13.1	0.5	16.8	6.8	4.9
Israel	...	...	...	...	...	...	...	...	...	...	...

(continued)

	Education	Arts and humanities	Social sciences, journalism, and information	Business, management, and law	Natural sciences, mathematics, and statistics	Information and communication technologies (ICT)	Engineering, manufacturing and construction industries	Agriculture, forestry, fishing, and veterinary science	Healthcare and social security	Services sector	General programmes, qualifications, and specialties not elsewhere classified
Italy	0.0	2.1	0.0	10.9	6.1	12.4	30.4	9.4	0.0	14.5	14.2
Japan	9.2	9.8	4.0	11.5	0.0	...*	14.0	0.9	22.0	18.5	10.3
Latvia	10.9	1.0	0.2	25.4	0.1	5.5	12.4	1.0	32.3	11.3	0.0
Lithuania	–	–	–	–	–	–	–	–	–	–	–
Luxembourg	0.0	10.0	0.0	27.4	0.0	3.1	14.7	0.0	39.0	5.8	0.0
Mexico	0.1	1.8	0.3	28.9	1.6	9.5	39.0	2.5	6.5	9.9	0.0
Netherlands	3.1	2.9	7.2	50.6	0.0	5.4	7.0	1.7	10.7	11.5	0.0
New Zealand	4.8	20.5	3.5	22.6	3.3	7.9	7.3	4.4	9.3	13.6	2.9
Norway	3.9	18.1	0.0	0.6	1.3	1.9	56.8	0.1	1.7	15.8	0.0
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	0.0	0.0
Portugal	0.0	10.5	0.3	19.7	1.9	16.2	19.3	6.3	11.1	14.7	0.0
Republic of Korea	5.4	12.5	0.2	11.0	0.6	5.1	22.4	1.0	22.5	19.3	0.0
Slovakia	8.2	43.3	0.0	7.8	0.0	0.0	8.6	0.7	24.8	6.6	0.0
Slovenia	0.0	7.4	0.0	16.3	1.4	7.3	30.1	3.4	1.7	32.5	0.0
Spain	9.0	7.4	0.9	19.0	1.0	8.8	17.0	1.0	19.8	16.1	0.0
Sweden	0.2	12.2	2.1	32.1	0.1	10.0	26.7	2.4	5.9	7.9	0.4
Switzerland	19.0	13.7	14.8	0.0	0.0	0.0	10.6	0.0	41.9	0.0	0.0
Türkiye	0.0	8.6	0.5	34.1	0.2	3.4	12.4	3.0	27.8	10.1	0.0
United Kingdom	7.4	10.9	6.9	27.5	7.2	4.9	9.2	1.5	22.4	1.0	1.3
United States	1.6	43.2	4.6	11.0	4.9	3.5	6.3	0.7	18.2	6.2	0.0

* The data are distributed across other fields of education.

12.13. PARTICIPATION OF GRADUATES OF HIGHER EDUCATION IN BACHELOR'S, SPECIALIST'S, AND MASTER'S PROGRAMMES IN RUSSIA AND OECD COUNTRIES BY FIELDS OF EDUCATION (ISCED LEVEL 6 AND 7): 2019

(percentage)

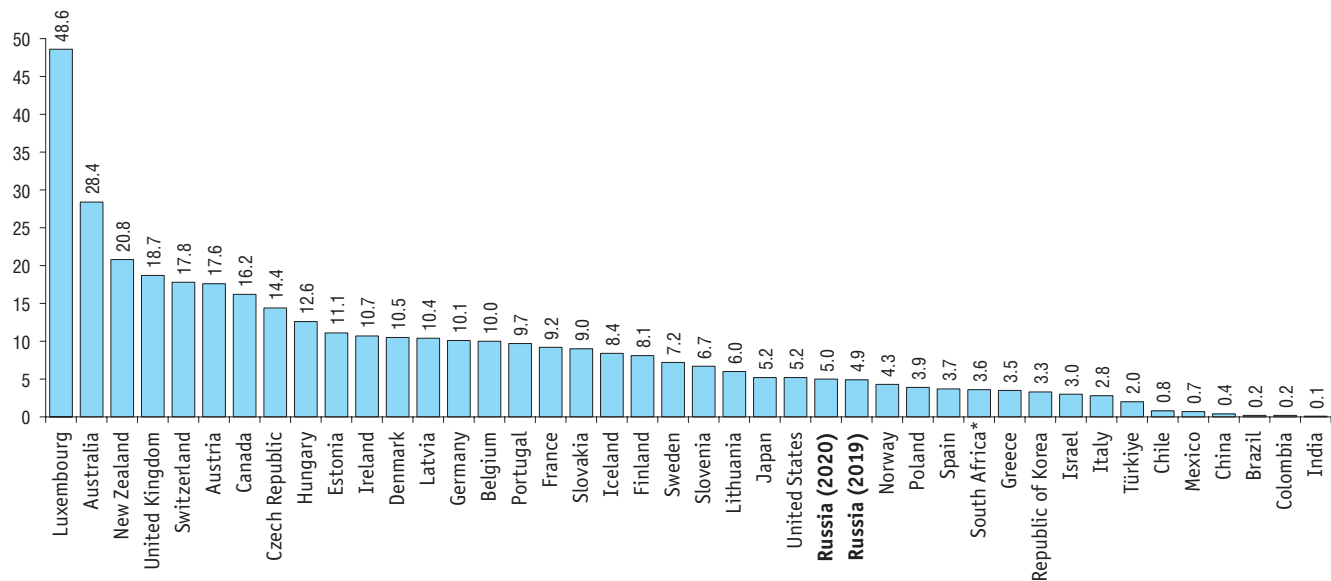
	Education	Arts and humanities	Social sciences, journalism, and information	Business, management, and law	Natural sciences, mathematics, and statistics	Information and communication technologies (ICT)	Engineering, manufacturing and construction industries	Agriculture, forestry, fishing, and veterinary science	Healthcare and social security	Services sector	General programmes, qualifications, and specialties not elsewhere classified
Russia (2020)	10.5	5.1	14.7	25.4	4.6	5.0	22.1	3.6	5.9	3.2	...
Russia (2019)	10.2	3.8	16.6	26.6	4.4	4.8	21.4	3.6	5.7	3.0	...
Australia	7.5	9.5	7.3	33.4	6.0	6.4	8.4	0.7	20.1	0.9	0.0
Austria	12.8	9.1	11.0	26.3	8.1	4.6	14.9	1.0	10.9	1.5	0.0
Belgium	8.1	9.7	10.6	21.5	3.5	2.2	11.5	2.0	24.8	1.4	4.7
Canada	7.9	8.7	15.1	23.3	11.4	3.7	10.1	0.8	14.0	3.2	2.0
Chile	16.4	3.6	6.7	27.2	1.3	3.0	15.0	1.6	19.9	5.3	0.0
Colombia	12.3	2.9	12.1	42.5	1.6	1.2	17.7	1.4	7.6	0.8	0.0
Costa Rica	...	...	...	...	...	...	...	...	...	...	...
Czech Republic	13.6	8.0	10.7	19.3	5.1	5.2	14.9	3.5	12.4	7.3	0.0
Denmark	6.2	11.2	11.7	23.4	6.1	4.9	11.4	1.0	22.9	1.3	0.0
Estonia	8.3	12.3	7.9	24.3	5.8	7.9	13.5	1.9	12.3	5.9	0.0
Finland	6.7	11.0	6.8	19.2	4.1	7.4	16.5	2.2	21.3	4.8	0.0
France	5.6	9.8	9.7	31.4	9.1	3.9	11.2	0.9	15.4	3.0	0.1
Germany	10.2	10.2	7.0	25.5	7.2	4.6	24.7	1.7	6.1	2.7	0.1
Greece	8.7	11.8	15.0	20.1	8.8	3.4	15.0	2.6	11.0	3.7	0.0
Hungary	15.4	9.1	10.6	24.1	3.5	4.8	15.5	3.6	8.5	4.6	0.4
Iceland	13.9	9.7	16.7	21.1	4.8	5.7	9.6	1.0	15.1	2.5	0.0
Ireland	8.3	11.7	6.3	26.8	7.9	8.8	8.9	1.6	16.4	3.2	0.1
Israel	22.8	7.5	17.0	22.9	4.2	5.2	8.9	0.5	10.2	0.0	0.8

(continued)

	Education	Arts and humanities	Social sciences, journalism, and information	Business, management, and law	Natural sciences, mathematics, and statistics	Information and communication technologies (ICT)	Engineering, manufacturing and construction industries	Agriculture, forestry, fishing, and veterinary science	Healthcare and social security	Services sector	General programmes, qualifications, and specialties not elsewhere classified
Italy	7.1	17.1	14.7	18.0	7.5	1.2	15.0	2.4	13.8	2.9	0.4
Japan	7.6	15.5	7.7	21.7	4.1	...*	17.9	3.3	10.3	2.6	9.3
Latvia	8.1	8.8	10.0	29.5	3.7	4.0	12.4	1.6	14.4	7.5	0.0
Lithuania	5.9	8.7	9.3	24.7	4.2	3.7	19.1	3.0	18.7	2.7	0.1
Luxembourg	13.6	10.7	11.2	47.9	3.8	4.3	7.0	0.4	0.2	1.0	0.0
Mexico	11.0	3.4	20.8	24.1	2.4	4.6	17.2	2.0	11.7	2.8	0.0
Netherlands	9.2	8.7	14.1	27.6	6.5	3.1	8.5	1.1	16.0	5.1	0.1
New Zealand	10.5	9.1	10.7	25.2	7.9	6.4	9.6	1.2	17.7	1.5	0.3
Norway	18.5	7.4	12.0	17.5	4.0	4.4	9.9	0.8	20.6	4.8	0.2
Poland	13.3	6.7	8.7	23.8	3.1	3.8	13.8	1.7	17.4	7.2	0.6
Portugal	4.4	9.9	11.6	20.9	6.0	1.5	19.7	2.2	17.8	6.0	0.1
Republic of Korea	8.2	17.0	7.6	16.0	5.6	4.5	19.6	1.5	13.4	6.6	0.1
Slovakia	13.7	6.8	11.2	21.4	5.4	4.0	12.2	2.5	16.5	6.3	0.0
Slovenia	12.9	8.8	10.8	18.8	6.8	3.6	15.4	3.4	14.0	5.5	0.0
Spain	19.6	9.5	9.7	19.8	5.8	2.3	11.2	1.1	16.4	4.6	0.0
Sweden	15.5	5.5	13.9	14.3	4.0	3.4	17.3	0.5	24.1	1.5	0.0
Switzerland	9.9	7.2	6.7	28.8	5.5	2.7	16.0	1.4	15.6	5.7	0.6
Türkiye	10.7	13.5	12.6	27.8	3.9	0.6	14.9	1.7	9.6	4.7	0.0
United Kingdom	8.1	15.5	12.8	24.2	13.8	3.8	8.6	0.9	12.0	0.0	0.4
United States	7.9	11.3	14.3	22.1	8.2	4.7	7.3	1.0	17.3	5.9	0.0

* The data are distributed across other fields of education.

12.14. INTERNATIONAL STUDENTS AND POSTGRADUATES AS A PERCENTAGE OF THE TOTAL ENROLMENT IN RUSSIA, OECD COUNTRIES, AND BRICS COUNTRIES: SECONDARY VOCATIONAL EDUCATION – PROGRAMMES FOR MID-LEVEL SPECIALISTS AND HIGHER EDUCATION (ISCED LEVEL 5, 6, 7, AND 8): 2019



* The data refer to 2018.

12.15. PARTICIPATION OF THE POPULATION IN EDUCATION IN RUSSIA AND OECD COUNTRIES BY AGE: 2019
(percentage)

	Participation of population aged, years					
	6–14	15–19	20–24	25–29	30–39	40 and over
Russia (2020)	98.9	89.7	38.1	7.5	2.0	1.7
Russia (2019)	99.0	89.1	37.6	7.0	2.0	1.7
Australia	99.9	87.9	55.4	26.4	15.1	6.8
Austria	98.8	79.7	35.6	17.7	6.1	1.2
Belgium	98.8	94.2	49.9	13.5	7.0	3.2
Canada*	100	72.3	36.3	11.2	4.5	0.7
Chile	98.2	81.7	43.9	14.9	6.2	1.4
Colombia	97.1	60.9	25.3	11.5	5.9	1.5
Costa Rica	96.7	63.7	22.9	10.6	2.2	3.2
Czech Republic	98.3	90.0	41.5	10.1	2.5	0.8
Denmark	99.6	86.4	52.7	27.9	8.5	2.0
Estonia	97.3	87.7	37.4	14.3	7.0	1.8
Finland	98.4	86.6	47.4	29.4	15.7	5.5
France	100	86.9	38.5	7.6	1.7	0.4
Germany	98.9	86.9	50.6	21.8	5.5	0.5
Greece	96.8	87.6	54.4	24.9	10.4	2.9
Hungary	95.3	82.9	34.1	10.1	3.7	1.3
Iceland	98.8	84.9	41.8	21.5	10.1	3.7
Ireland	100	93.6	42.8	11.9	5.7	3.1
Israel	96.5	66.1	20.9	19.0	5.7	1.6
Italy	98.6	85.9	38.3	13.3	3.4	0.7
Japan	100	...	...	...	...	...
Latvia	98.6	92.2	46.2	15.5	6.4	1.2

(continued)

	Participation of population aged, years					
	6–14	15–19	20–24	25–29	30–39	40 and over
Lithuania	100	93.3	44.2	11.3	4.9	0.9
Luxembourg	97.7	76.5	19.5	5.8	1.7	0.3
Mexico	99.7	62.7	26.2	9.8	4.0	2.1
Netherlands	99.8	92.5	...	...	...	...
New Zealand	99.0	82.2	43.0	18.6	11.9	5.2
Norway	99.2	87.2	46.9	19.4	8.1	2.6
Poland	96.6	92.4	48.1	11.0	3.4	0.9
Portugal	99.6	89.5	37.5	9.8	4.2	1.6
Republic of Korea	99.3	83.9	49.7	8.0	1.6	0.6
Slovakia	94.8	83.5	31.7	6.3	2.0	0.6
Slovenia	98.7	94.1	56.3	12.0	2.4	0.5
Spain	97.7	87.0	47.1	15.8	5.8	2.0
Sweden	99.2	88.0	43.7	25.8	15.6	4.9
Switzerland	99.9	84.9	41.0	17.6	4.7	0.8
Türkiye	100	68.9	51.4	32.2	15.8	3.2
United Kingdom	97.5	83.4	32.5	9.7	5.7	2.1
United States	100	83.0	36.4	13.2	6.5	2.0

* Excluding ISCED level 4.

12.16. PARTICIPATION OF CHILDREN IN PRESCHOOL EDUCATION IN RUSSIA AND OECD COUNTRIES: 2019
(percentage)

	Participation of children under 3 in early childhood programmes (ISCED level 1)	Participation of children aged 3–5 in preschool education programmes (ISCED level 2)*
Russia (2020)	25.2	84.0
Russia (2019)	24.2	83.3
Australia	41.0	83.2
Austria	22.2	89.9
Belgium	46.3	98.3
Canada	...	...
Chile	22.9	79.7
Colombia	25.9	84.3
Costa Rica	1.8	62.3
Czech Republic	5.9	86.3
Denmark	55.8	97.7
Estonia	30.9	91.2
Finland	35.4	85.1
France	4.1	100
Germany	38.5	94.0
Greece	10.3	68.8
Hungary	4.9	92.9
Iceland	58.2	96.8
Ireland	25.0	100
Israel	57.5	99.5
Italy	5.2	94.8
Japan	34.8	94.0
Latvia	30.5	93.0

(continued)

	Participation of children under 3 in early childhood programmes (ISCED level 1)	Participation of children aged 3–5 in preschool education programmes (ISCED level 2)*
Lithuania	29.9	87.4
Luxembourg	1.3	88.4
Mexico	4.1	80.5
Netherlands	61.9	90.5
New Zealand	48.7	90.4
Norway	58.0	97.1
Poland	12.4	87.2
Portugal	...	92.2
Republic of Korea	65.2	93.3
Slovakia	4.9	77.8
Slovenia	44.3	92.1
Spain	39.6	97.3
Sweden	47.3	94.5
Switzerland	0.0	49.4
Türkiye	0.2	43.2
United Kingdom	...	100
United States	...	...

* For countries other than Russia where the typical (or established by law) age of admission to ISCED level 1 is five years or under, including ISCED level 1.

**12.17. FEMALE TEACHING PERSONNEL (TEACHERS) AS A PERCENTAGE OF THE TOTAL NUMBER OF TEACHING PERSONNEL (TEACHERS)
IN RUSSIA AND OECD COUNTRIES: 2019***
(percentage)

	Preschool education (ISCED level 0)	Primary general education (ISCED level 1)	Basic general education (ISCED level 2)	Secondary general education (ISCED level 3)	Secondary vocational education – programmes for mid-level specialists, higher education (ISCED level 5, 6, 7, 8)
	(1)	(2)	(3)	(4)	(5)
Russia (2020)	99.6	99.4	n(4)	83.6	63.9
Russia (2019)	99.6	99.3	n(4)	83.7	63.6
OECD countries					
Austria	98.3	92.0	72.3	63.7	42.8
Belgium	96.7	82.7	66.1	63.8	48.9
Canada	n(2)	75.2	n(2)	75.2	49.5
Chile	98.6	80.8	68.8	57.9	...
Colombia	96.6	77.1	51.2	49.1	38.4
Costa Rica	93.6	78.8	57.6	58.5	43.9
Czech Republic	99.5	94.4	77.9	59.7	38.1
Denmark	89.4	68.4	62.1	52.5	43.7
Estonia	99.5	90.2	82.3	77.4	49.3
Finland	97.3	80.0	74.8	69.4	52.1
France	91.1	83.5	60.2	60.1	44.9
Germany	95.1	87.4	66.4	58.9	39.5
Greece	98.7	72.6	67.3	56.9	35.7
Hungary	99.6	95.8	76.4	68.1	41.1
Iceland	93.1	82.8	82.7	...	...
Ireland	98.4	85.5	n(4)	70.0	46.1
Israel	99.4	85.5	78.8	70.8	48.2

(continued)

	Preschool education (ISCED level 0)	Primary general education (ISCED level 1)	Basic general education (ISCED level 2)	Secondary general education (ISCED level 3)	Secondary vocational education – programmes for mid-level specialists, higher education (ISCED level 5, 6, 7, 8)
	(1)	(2)	(3)	(4)	(5)
Italy	98.7	95.4	76.9	67.8	37.8
Japan	96.9	64.4	43.0	30.8**	28.4**
Latvia	99.2	92.1	84.4	83.8	54.6
Lithuania	99.0	96.7	82.6	80.9	55.3
Luxembourg	95.8	76.1	n(4)	55.3	35.0
Mexico	94.2	67.9	53.7	50.1	...
Netherlands	88.0	87.4	54.3	54.3	46.3
New Zealand	97.3	84.7	67.7	62.1	51.9
Norway	91.1	74.8	74.8	55.4	46.9
Poland	97.9	82.9	75.7	69.8	46.2
Portugal	99.1	80.9	71.8	68.9**	45.1
Republic of Korea	99.0	77.5	70.8	55.1	35.1
Slovakia	99.6	90.2	76.1	73.5	46.6
Slovenia	97.4	88.6	n(2)	66.7	42.7
Spain	92.8	77.2	60.8	58.2	44.4
Sweden	96.5	81.7	65.4	53.9	46.0
Switzerland	97.0	83.3	56.1	48.1	35.5
Türkiye	94.4	64.0	58.3	52.2	44.8
United Kingdom	95.4	86.1	63.2	61.8	46.3
United States	93.0	86.8	66.8	58.1	50.2**

(continued)

	Preschool education (ISCED level 0)	Primary general education (ISCED level 1)	Basic general education (ISCED level 2)	Secondary general education (ISCED level 3)	Secondary vocational education – programmes for mid-level specialists, higher education (ISCED level 5, 6, 7, 8)
	(1)	(2)	(3)	(4)	(5)
BRICS countries					
Brazil	94.7	88.2	66.3	59.1	46.2
China	97.4	69.0	57.0	...	...
India	96.9	54.4	48.3	...	42.2
South Africa	...	...	...	56.6	...

* For Ireland, the data for state institutions other than ISCED level 0; for Israel, the data for state institutions; and for Canada, the data for state institutions of ISCED level 5, 6, 7, and 8. For Russia, the data on personnel (excluding part-timers and independent contractors): educators (including senior educators) of institutions implementing preschool education and child care programmes (ISCED level 0); teachers of institutions implementing primary general, basic general, and secondary general education programmes (ISCED level 1, 2, and 3); teachers and industrial training instructors implementing secondary vocational education – programmes for mid-level specialists; and teaching staff implementing higher education programmes – bachelor's, specialist's, and master's programmes (ISCED level 5, 6, and 7).

** Including ISCED level 4 programmes.

12.18. ENROLMENT PER MEMBER OF TEACHING PERSONNEL (TEACHER) IN RUSSIA, OECD COUNTRIES, AND BRICS COUNTRIES: 2019* (persons)

	Preschool education (ISCED level 0)	Primary general education (ISCED level 1)	Basic general education (ISCED level 2)	Secondary general education (ISCED level 3)**	Secondary vocational education – programmes for mid-level specialists (ISCED level 5)	Higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Russia (2020)	14	n(4)	n(4)	19	17	12
Russia (2019)	14	n(4)	n(4)	18	16	12
OECD countries						
Australia	...	15	n(4)	12	...	16
Austria	12	12	9	10	8	15
Belgium	...	13	9	10	n(6)	21
Canada	n(2)	16	n(2)	13	...	...
Chile	23	19	19	20	...	...
Colombia	...	23	27	24	24	28
Costa Rica	11	12	14	14	...	...
Czech Republic	13	19	13	11	11	17
Denmark	5	12	11	11	15	15
Estonia	8	13	10	15	–	13
Finland	...	14	9	18	–	15
France	23	19	14	11	13	18
Germany	7	15	13	12	13	12
Greece	...	9	8	10	–	...
Hungary	13	10	11	11	n(6)	11
Iceland	4	11	10	...	...	...
Ireland	4	15	...	13	n(6)	23
Israel	...	15	13	...	...	16

(continued)

	Preschool education (ISCED level 0)	Primary general education (ISCED level 1)	Basic general education (ISCED level 2)	Secondary general education (ISCED level 3)**	Secondary vocational education – programmes for mid-level specialists (ISCED level 5)	Higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
Italy	12	11	11	10***	–	20
Japan	14	16	13	12***	...	...
Latvia	9	12	9	11	13	18
Lithuania	10	14	10	9	–	15
Luxembourg	12	9	n(4)	9	9	5
Mexico	20	24	32	23	19	18
Netherlands	16	16	16	18	17	15
New Zealand	5	16	16	12	15	17
Norway	10	10	10	11	8	9
Poland	15	10	10	10	9	14
Portugal	...	12	9	9***	n(6)	15
Republic of Korea	8	17	13	11	...	...
Slovakia	12	17	13	13	8	11
Slovenia	17	11	n(2)	14	18	14
Spain	12	14	12	10	11	13
Sweden	14	13	11	13	10	10
Switzerland	18	15	12	12	–	14
Türkiye	...	18	15	11	47	20
United Kingdom	37	20	16	18	n(6)	11
United States	...	15	15	15	n(6)	14***

(continued)

	Preschool education (ISCED level 0)	Primary general education (ISCED level 1)	Basic general education (ISCED level 2)	Secondary general education (ISCED level 3)**	Secondary vocational education – programmes for mid-level specialists (ISCED level 5)	Higher education (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)	(6)
BRICS countries						
Brazil	17	24	25	23	3	24
China	17	16	13	14	...	...
India	31	28	19	24	n(6)	25
South Africa	...	...	...	29	...	...

* For Ireland and Switzerland, the data refer only to state institutions; for Israel, to state institutions of ISCED level 2 and 3. For Russia, in part of ISCED level 0, the data refer to educators (including senior educators), in part of ISCED level 5, including industrial training instructors

** For countries other than Russia, general ISCED level 3 programmes.

*** Including ISCED level 4 programmes.

12.19. AVERAGE CLASS SIZE IN RUSSIA AND OECD COUNTRIES: 2019*

(persons)

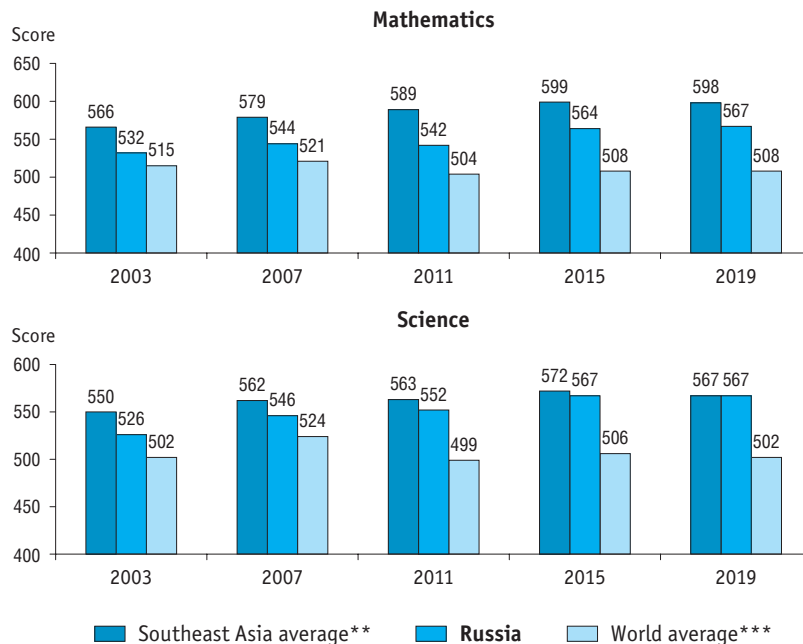
	Primary general education (ISCED level 1)			Basic general education (ISCED level 2)		
	Total	State and municipal institutions	Private institutions	Total	State and municipal institutions	Private institutions
Russia (2020)	21	22	14	20	21	13
Russia (2019)	21	21	14	20	20	13
Australia	23	23	24	22	22	24
Austria	18	18	19	21	21	21
Belgium	...	...	...	...	...	...
Canada	...	...	...	...	...	...
Chile	31	29	32	30	29	31
Colombia	23	25	18	30	32	24
Costa Rica	16	16	16	33	36	19
Czech Republic	21	21	15	22	22	18
Denmark	20	20	17	20	21	19
Estonia	19	19	16	19	19	14
Finland	20	20	18	19	19	19
France	23	22	25	25	25	26
Germany	21	21	21	24	24	23
Greece	17	17	22	20	20	23
Hungary	22	22	20	21	21	21
Iceland	19	19	15	20	20	14
Ireland	...	24	...	...	...	...
Israel	26	27	25	28	29	24
Italy	19	19	19	21	21	21

(continued)

	Primary general education (ISCED level 1)			Basic general education (ISCED level 2)		
	Total	State and municipal institutions	Private institutions	Total	State and municipal institutions	Private institutions
Japan	27	27	28	32	32	33
Latvia	17	17	10	16	16	15
Lithuania	17	18	16	19	19	20
Luxembourg	...	15	...	...	18	...
Mexico	24	25	20	27	27	23
Netherlands	...	23	...	...	...	...
New Zealand	...	...	...	...	...	...
Norway	–	–	–	–	–	–
Poland	18	18	11	19	20	16
Portugal	21	21	20	22	22	23
Republic of Korea	23	23	27	26	26	25
Slovakia	18	18	18	20	20	19
Slovenia	19	19	19	20	20	19
Spain	22	21	24	25	25	27
Sweden	20	20	18	22	22	22
Switzerland	...	19	...	...	19	...
Türkiye	23	23	17	25	26	17
United Kingdom	26	27	24	23	25	23
United States	20	21	16	25	26	18

* For Russia, excluding individual institutions and classes for students with mental deficiency (mental development disorders).

12.20. TRENDS IN MATHEMATICS AND SCIENCE AVERAGE SCORES OF 4TH GRADE STUDENTS* (average scale score according to the international 1000-score scale)



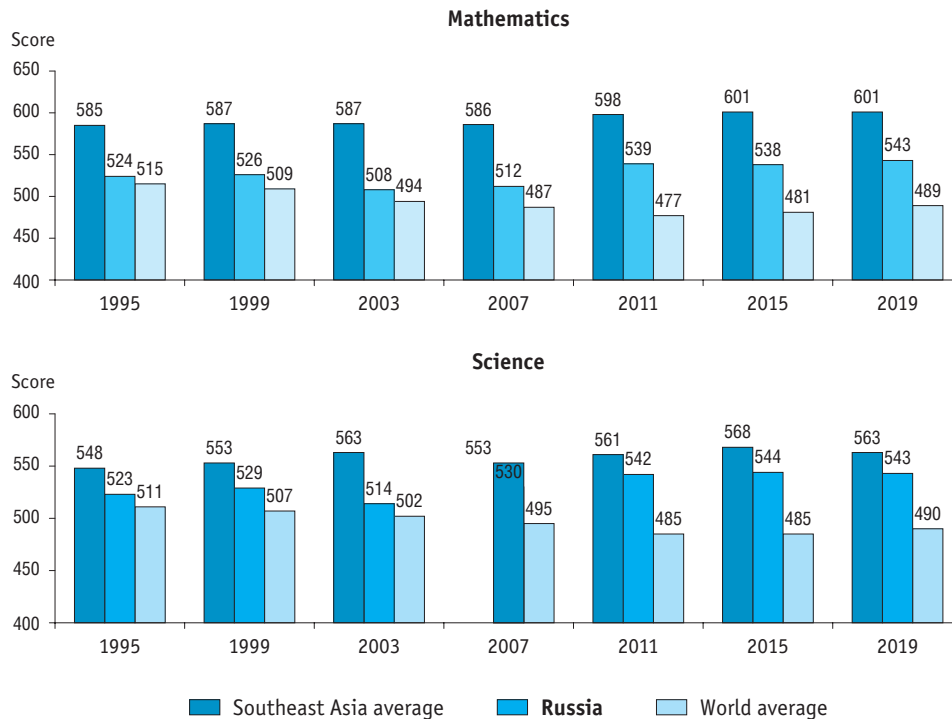
* Here and below in figure 12.21 and tables 12.22, 12.23, according to TIMSS-2019 International Results in Mathematics and Science. The data refer to the years in which Russia participated in the corresponding study.

** Southeast Asian countries represented here and below in figure 12.21 – Singapore, Hong Kong, Republic of Korea, Japan, and Chinese Taipei – traditionally hold the leading positions in the TIMSS rating.

*** Here and below in figure 12.21, the world average is an average indicator for countries that participated in the study.

12.21. TRENDS IN MATHEMATICS AND SCIENCE AVERAGE SCORES OF 8TH GRADE STUDENTS

(average scale score according to the international 1000-score scale)



12.22. MATHEMATICS AND SCIENCE ACHIEVEMENT OF 4TH GRADE STUDENTS: 2019
(average scale score according to the international 1000-score scale)

	Mathematics		Science	
	Average score	Rank	Average score	Rank
Russia	567	6	567	3
Albania	494	39	489	39
Armenia	498	38	466	43
Australia	516	27	533	14
Austria	539	13	522	23
Azerbaijan	515	28	427	50
Bahrain	480	44	493	38
Belgium (fl.)	532	17	501	35
Bosnia and Herzegovina	452	47	459	44
Bulgaria	515	29	521	24
Canada	512	32	523	21
Chile	441	51	469	42
Chinese Taipei	599	4	558	5
Croatia	509	34	524	20
Cyprus	532	18	511	30
Czech Republic	533	16	534	13
Denmark	525	21	522	22
England	556	8	537	12
Finland	532	19	555	6
France	485	41	488	40
Georgia	482	42	454	45
Germany	521	25	518	28
Hong Kong	602	2	531	15
Hungary	523	22	529	17
Iran	443	50	441	48
Ireland	548	9	528	18
Italy	515	30	510	32
Japan	593	5	562	4
Kazakhstan	512	31	494	37
Kosovo	444	49	413	52

(continued)

	Mathematics		Science	
	Average score	Rank	Average score	Rank
Kuwait	383	55	392	54
Latvia	546	10	542	7
Lithuania	542	12	538	10
Malta	509	35	496	36
Montenegro	453	46	453	46
Morocco	383	54	374	55
Netherlands	538	14	518	27
New Zealand	487	40	503	34
Northern Ireland	566	7	518	26
Northern Macedonia	472	45	426	51
Norway	543	11	539	8
Oman	431	52	435	49
Pakistan	328	57	290	57
Philippines	297	58	249	58
Poland	520	26	531	16
Portugal	525	20	504	33
Qatar	449	48	449	47
Republic of Kosovo	444	49	413	52
Republic of Korea	600	3	588	2
Saudi Arabia	398	53	402	53
Serbia	508	36	517	29
Singapore	625	1	595	1
Slovakia	510	33	521	25
South Africa	374	56	324	56
Spain	502	37	511	31
Sweden	521	24	537	11
Türkiye	523	23	526	19
UAE	481	43	473	41
United States	535	15	539	9

12.23. MATHEMATICS AND SCIENCE ACHIEVEMENT OF 8TH GRADE STUDENTS: 2019
(average scale score according to the international 1000-score scale)

	Mathematics		Science	
	Average score	Rank	Average score	Rank
Russia	543	6	543	5
Australia	517	10	528	9
Bahrain	481	24	486	22
Chile	441	31	462	28
Chinese Taipei	612	2	574	2
Cyprus	501	17	484	23
Egypt	413	34	389	37
England	515	13	517	14
Finland	509	14	543	6
France	483	22	489	21
Georgia	461	27	447	33
Hong Kong	578	5	504	17
Hungary	517	11	530	8
Iran	446	29	449	32
Ireland	524	7	523	10
Israel	519	9	513	16
Italy	497	19	500	18
Japan	594	4	570	3
Jordan	420	33	452	31
Kazakhstan	488	21	478	24
Kuwait	403	36	444	34
Lebanon	429	32	377	38
Lithuania	520	8	534	7
Malaysia	461	28	460	29

(continued)

	Mathematics		Science	
	Average score	Rank	Average score	Rank
Morocco	388	39	394	36
New Zealand	482	23	499	19
Norway	503	15	495	20
Oman	411	35	457	30
Portugal	500	18	519	13
Qatar	443	30	475	25
Republic of Korea	607	3	561	4
Romania	479	25	470	27
Saudi Arabia	394	37	431	35
Singapore	616	1	608	1
South Africa	389	38	370	39
Sweden	503	16	521	12
Türkiye	496	20	515	15
UAE	473	26	473	26
United States	515	12	522	11

TECHNICAL NOTES

Sources of statistical data for foreign countries: OECD (2021), Education at a Glance 2021: OECD Indicators. OECD Publishing, Paris (<https://www.oecd.org/education/education-at-a-glance/>); OECD Database (<https://stats.oecd.org/>).

When education systems are compared across countries,

the Russian education system is presented in accordance with the levels of education of the International Standard Classification of Education (ISCED 2011), used for generating comparable data on key indicators of education systems in different countries.

Russian education system as compared to the International standard classification of education

Level by ISCED 2011	Equivalent in the Russian education system
<p>ISCED LEVEL 0 – EARLY CHILDHOOD EDUCATION</p> <p>Programmes have an educational intent and are typically designed with a holistic approach in mind, in order to support early cognitive, physical, social, and emotional development of children and then introduce them to organised instruction outside the family. ISCED level 0 programmes target children below the age of entry into ISCED level 1.</p> <p>There are two categories of ISCED level 0 programmes: early childhood educational development (ISCED level 01) and preschool education (ISCED level 02). The former has educational content designed for younger children (in the age range of 0 to 2 years), whilst the latter is typically designed for children from the age of 3 and until they start ISCED level 1</p> <p>Programmes are usually school-based or otherwise institutionalised for a group of children. The duration of the programme must be at least 2 hours per day during 100 days a year</p>	<p>Preschool education – preschool education programmes (including child care without implementing preschool education programmes)</p>
<p>ISCED LEVEL 1 – PRIMARY EDUCATION</p> <p>Programmes are typically designed to provide students with fundamental skills in reading, writing and mathematics (i.e. literacy and numeracy) and establish a solid foundation for learning and understanding core areas of knowledge, personal and social development, in preparation for ISCED level 2. Education is conducted at a basic level of complexity with little, if any, specialisation. Age is typically the only legal entry requirement at this level (in most of the countries the typical or legal age of entry is usually between 5 and 7 years of age).</p> <p>This level usually lasts 6 years, although its duration can range between 4 and 7 years. Usually, only one teacher is responsible for the whole educational process</p>	<p>Primary general education</p>

Level by ISCED 2011	Equivalent in the Russian education system
<p>ISCED LEVEL 2 – LOWER SECONDARY EDUCATION</p> <p>Programmes are typically designed to build on the learning outcomes of the previous level. Usually, the goal is to lay the foundation for lifelong learning and personal development. As a rule, ISCED level 2 programmes are organised around a more subject-oriented curriculum.</p> <p>This level requires the completion of ISCED level 1 or the ability to study ISCED level 2 content through a combination of prior education, as well as life experiences.</p> <p>ISCED level 2 ends after 8–11 years of education since the beginning of ISCED level 1 and typically lasts 9 years in total</p>	<p>Basic general education</p>
<p>ISCED LEVEL 3 – UPPER SECONDARY EDUCATION</p> <p>Programmes are typically designed to complete secondary education and prepare for tertiary education or provide skills relevant to employment, or both.</p> <p>ISCED level 3 programmes may be either general or vocational.</p> <p>ISCED level 3 usually lasts from 11 to 13 years since the beginning of ISCED level 1. ISCED level 3 requires the completion of lower secondary education (ISCED level 2) or the ability to study ISCED level 3 content through a combination of prior education, as well as life experiences</p>	<p>Secondary general education; secondary vocational education – programmes for skilled workers and employees based on secondary general education (both with or without attaining the secondary general level of education); vocational training – vocational training programmes for skilled workers and employees (for individuals without secondary general education)</p>
<p>ISCED LEVEL 4 – POST-SECONDARY NON-TERTIARY EDUCATION</p> <p>Post-secondary non-tertiary education is designed to provide learning experiences building on secondary education and prepare for joining the labour market and receiving tertiary education. It is aimed at the independent acquisition of knowledge, skills, and competencies at a level of complexity that is lower than tertiary education. ISCED level 4 programmes are typically designed to provide individuals who completed ISCED level 3 with non-tertiary qualifications required for progression to tertiary education or employment, if their ISCED level 3 qualification does not grant such access.</p> <p>ISCED level 4 programmes are not considered to be tertiary education and are typically vocational programmes that prepare for the labour market.</p> <p>Such programmes target students who have completed ISCED level 3.</p> <p>Programmes are often not significantly more advanced than programmes at ISCED level 3 but the content is typically more specialised or detailed. At the same time the programmes are clearly less advanced than those at the tertiary level</p>	<p>Secondary vocational education – programmes for skilled workers and employees based on secondary general education programmes; vocational training – vocational training programmes for skilled workers and employees; retraining programmes for skilled workers and employees; vocational development programmes aiming at upgrading professional skills of skilled workers and employees (for individuals who have attained at least secondary general level of education)</p>

(continued)

Level by ISCED 2011	Equivalent in the Russian education system
<p>ISCED LEVEL 5 – SHORT-CYCLE TERTIARY EDUCATION</p> <p>Programmes are designed to provide participants with professional knowledge and develop their professional skills and competencies. ISCED level 5 programmes are usually based on practical application of skills, occupation-specific specialisation and preparation of students to joining the labour market. However, they may also open up a way to enter other tertiary education programmes. Some academic tertiary education programmes below the level of a bachelor's programme or equivalent may also be classified as ISCED level 5.</p> <p>Entry into ISCED level 5 programmes requires the successful completion of ISCED level 3 or 4 that give access to tertiary education.</p> <p>ISCED level 5 has a minimum duration of 2 years, not exceeding 3 years</p>	<p>Secondary vocational education – programmes for mid-level specialists (including programmes based on basic general education)</p>
<p>ISCED LEVEL 6 – BACHELOR'S OR EQUIVALENT LEVEL</p> <p>Programmes are often designed to provide participants with intermediate academic and/or professional knowledge, skills and competencies, leading to a first degree or equivalent qualification. Programmes at this level are typically based on acquisition of theoretical knowledge but may include practical components and are characterised by state-of-the-art research and/or best professional practice.</p> <p>Entry into these programmes normally requires the successful completion of ISCED level 3 or 4 that give access to tertiary education.</p> <p>Programmes at this level typically have a duration of 3–4 years of intramural full-time study.</p> <p>Programmes at this level typically lead to first degrees or equivalent qualification in tertiary education</p>	<p>Higher education – bachelor's programmes</p>
<p>ISCED LEVEL 7 – MASTER'S OR EQUIVALENT LEVEL</p> <p>Programmes are often designed to provide participants with advanced academic and/or professional knowledge, skills and competencies, leading to a second degree of tertiary education or equivalent qualification. Programmes at this level may have a substantial research component but do not yet lead to the award of a doctoral qualification (PhD). Entry into ISCED level 7 programmes normally requires the successful completion of an ISCED level 6 or 7 programme</p>	<p>Higher education – specialist's and master's programmes</p>

(continued)

Level by ISCED 2011	Equivalent in the Russian education system
<p>ISCED LEVEL 8 – DOCTORAL OR EQUIVALENT LEVEL</p> <p>Programmes are primarily designed to acquire an advanced research qualification. Programmes at this level are devoted to advanced study and original research and usually conclude with the submission and defence of a thesis, dissertation, or equivalent written paper of publishable quality, representing a significant contribution to knowledge in the respective field of study.</p> <p>Entry into ISCED level 8 programmes normally requires the successful completion of an ISCED level 7 programme.</p> <p>ISCED level 8 requires at least three years of intramural full-time equivalent study with accumulative duration of intramural full-time education at tertiary level of at least 7 years</p>	<p>Higher education – postgraduate programmes (including postgraduate military studies), residency programmes and apprenticeship programmes (in the sphere of performing arts)</p>

Trends in International Mathematics and Science Study (TIMSS) was organised by the International Association for the Evaluation of Educational Achievement (IEA). The study is conducted every four years. The seventh cycle was carried out in 2019. The major objective of the study is to assess the achievements of 4th and 8th grade students in mathematics and science. Over 500 thou-

sand students from 64 countries participated in TIMSS Study in 2019 (<https://timss2019.org>). To represent Russia in TIMSS-2019, 294 educational institutions were selected for 4th grade sample, and 296 educational institutions for 8th grade sample, from nine Russian regions. The evaluation was performed on the basis of the achievement results by 4.0 thousand 4th graders and 3.9 thousand 8th graders.

Indicators of Education in the Russian Federation: 2022

Data Book

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