









EDUCATION IN FIGURES

POCKET DATA BOOK











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This pocket data book contains the main indicators describing the development trends of general, secondary vocational, higher education, vocational training, and additional education in the Russian Federation. The publication also covers key education indicators for the OECD countries. The data book includes information of the Federal State Statistics Service, Ministry of Education of the Russian Federation, Ministry of Science and Higher Education of the Russian Federation, Pederal Treasury, Organisation for Economic Co-operation and Development (OECD), as well as results of methodological and analytical studies of the HSE Institute for Statistical Studies and Economics of Knowledge.

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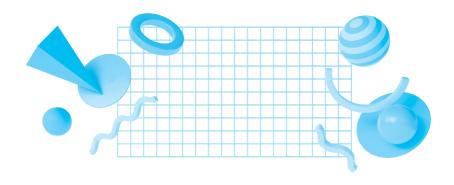
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Symbols used in tables are:

- ... 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.

Official statistical data for Russia are published without including the data for Donetsk People's Republic (DPR), Lugansk People's Republic (LPR), Zaporizhzhia, and Kherson Regions.



INFOGRAPHICS: 2022

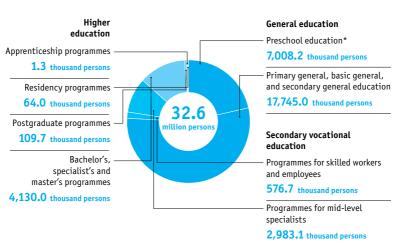
Education Infograhics: 2022

Expenditure on education as a percentage of GDP by country*



^{*} For Russia, the data refer to 2021, for countries other than Russia – 2019; for Republic of Korea, United States, expenditure for ISCED 1–8.

Enrolment



^{*} Including child care programmes.

Personnel*

Preschool education



ducators**	
------------	--



苗 Age, %

Higher - 53.1

Under 30 - **11.3** 60 and over - 7.3

Primary general, basic general, and secondary general education



eachers



Education, %



🛱 Age, %

1,079.6 thousand persons

Higher - 86.6

Under 35 - 23.3

60 and over - 14.7

^{*} Excluding part-timers and independent contractors.

^{**} Including senior educators.

Secondary vocational education



,	Teachers	Education, %	📋 Age, %
	146.3 thousand persons	Higher – 94.5	Under 35 – 22.7 60 and over – 21.2
,	Industrial training instructors	Education, %	🗎 Age, %
	20.8 thousand persons	Higher – 50.5	Under 35 – 22.4

60 and over - 21.5

Higher education*



Teaching staff	Scientific degree, %	럼 Age, %
212.8 thousand persons	Doctors of Sciences – 15.2 Candidates of Sciences – 57.9	Under 30 – 5.2 60 and over – 28.7
	Phn _ 0 3	

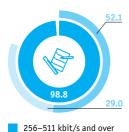
^{*} Bachelor's, specialist's, and master's programmes.

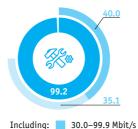
Educational institutions by top Internet access speed, %*

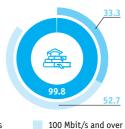




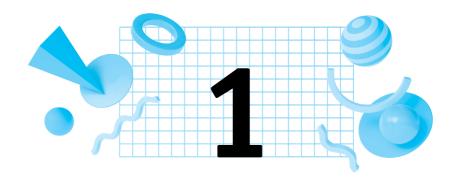
Higher education institutions







* At the end of 2021.



OF THE POPULATION

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1.1. Educational attainment of population aged 25-64 by gender*

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

	Total	Males	Females
Educational attainment:			
higher – highly-qualified personnel training programmes	15	14	16
higher – master's programmes	23	20	26
higher – specialist's programmes	209	180	236
higher – bachelor's programmes	77	67	86
secondary vocational – programmes for mid-career professionals	274	269	279
secondary vocational – programmes for skilled workers and employees	149	173	128
secondary general	182	197	168
basic general	63	71	55
primary general	6	6	6
No primary general education	2	2	2

^{*} According to the 2020 census of Russia's population.

1.2. Educational attainment of population aged 25-34 by gender*

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

	Total	Males	Females
Educational attainment:			
higher – highly-qualified personnel training programmes	13	11	14
higher – master's programmes	37	31	43
higher – specialist's programmes	213	179	247
higher – bachelor's programmes	133	113	152
secondary vocational – programmes for mid-career professionals	236	249	222
secondary vocational – programmes for skilled workers and employees	125	150	100
secondary general	174	189	159
basic general	61	69	53
primary general	7	6	7
No primary general education	3	3	2

^{*} According to the 2020 census of Russia's population.

1.3. Adult population with basic general education or lower (ISCED level 0, 1, and 2) by country: 2021

(as a percentage of all population in each age group)

	Population aged 25–64	Population aged 25–34
Russia*	7.1	7.0
Canada	6.9	4.8
France	17.8	11.9
Germany	14.7	14.2
Italy	37.3	23.2
Japan		
Republic of Korea	9.7	2.0
Sweden	15.1	16.1
United Kingdom	18.3	12.1
United States	8.3	6.3

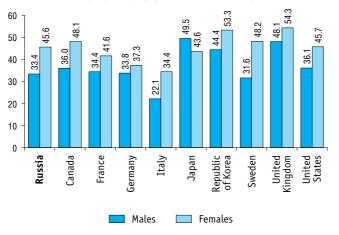
^{*} Here and below in table 1.4 and figure 1.5, according to the 2020 census of Russia's population (as a percentage of the total population who specified their level of education).

1.4. Adult population with higher education (ISCED level 6, 7, and 8) by country: 2021

(as a percentage of all population in each age group)

	Population aged 25–64	Population aged 25–34
Russia	32.4	39.5
Canada	35.6	41.9
France	26.3	38.1
Germany	30.6	35.5
Italy	19.9	28.2
Japan	34.2	46.6
Republic of Korea	37.4	48.6
Sweden	37.1	39.9
United Kingdom	41.3	51.2
United States	39.5	40.8

1.5. Individuals aged 25–34 with higher education (ISCED level 6, 7, and 8) as a percentage of the total population in each age group by gender and country: 2021



1.6. Participation of the population in education by age and country*

(percentage)

		Participation of the population aged, years							
	6-14	15–19	20-24	25–29	30-39	40 and over			
Russia (2022)**	99.6	89.1	38.7	8.22	2.2	2.0			
Russia (2020)	98.9	89.7	38.1	7.5	2.0	1.7			
Canada***	100	72.8	36.3	11.3	4.5	0.5			
France	100	87.8	38.2	7.5	1.9	0.2			
Germany	98.8	86.8	51	21.5	5.4	0.4			
Italy	98.7	85.6	37.4	13.3	3.8	0.5			
Japan	100								

^{*} For countries other than Russia, the data refer to 2020.

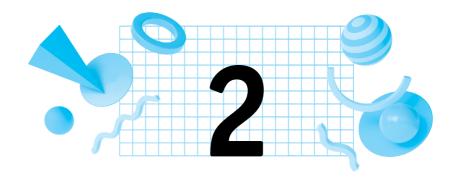
^{**} Preliminary data.

^{***} Excluding ISCED level 4.

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(continued)

		Participation of the population aged, <i>years</i>							
	6-14	15–19	20-24	25–29	30-39	40 and over			
Republic of Korea	98.7	86.2	50.2	7.9	1.6	0.4			
Sweden	99.3	87.1	45.5	26.1	15.9	3.2			
United Kingdom	97.1	83.5	33.4	9.9	5.7	1.3			
United States	100	84.4	37.7	13.1	5.9	1.2			



FUNDING

26

2.1. Expenditure on education in the Russian Federation

(billion roubles)

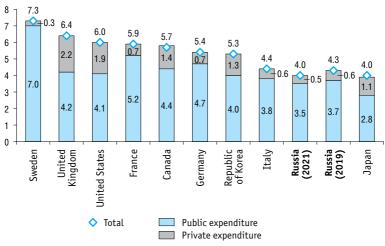
	2006	2010	2019	2020	2021	2022
Total:						
at current prices	1376.4	2259.1	4695.3	4942.9	5423.9	
at constant 2021 prices	4873.5	5116.2	5637.2	5881.6	5423.9	
Public expenditure:						
at current prices	1036.4	1893.9	4050.7	4324.0	4690.7	5459.5
at constant 2021 prices	3669.8	4289.1	4863.2	5145.1	4690.7	4714.4

2.2. Expenditure on education by type

(billion roubles)

	2006	2010	2019	2020		2021	
					Total	Public expendi- ture	Expendi- ture from non- budgetary sources
Total	1376.4	2259.1	4695.3	4942.9	5423.9	4690.7	733.2
Preschool education	175.1	365.5	964.8	987.0	1030.2	1030.2	
General education	491.3	854.7	1743.3	1897.8	2122.4	2021.0	101.5
Additional education of children	0.0	0.0	297.5	292.9	316.2	288.0	28.2
Secondary vocational education	178.9	194.8	323.7	342.5	373.2	305.6	67.6
Higher education	388.6	640.6	992.3	1061.7	1130.2	649.7	480.5
Vocational training, retraining, and vocational development	9.2	13.2	94.4	87.4	105.8	50.3	55.5
Other expenditure on education	133.3	190.3	279.3	273.7	345.8	345.8	

2.3. Expenditure on education as a percentage of GDP by country*



^{*} For countries other than Russia, the data refer to 2019; here and below in figure 2.7, for Canada, Japan, Republic of Korea, and United States, expenditure for ISCED 1–8.

2.4. Expenditure on education per student by educational attainment and country* (USD PPPs)

		Edu	ucational attainm	ent	
	preschool (ISCED level 0)	primary general (ISCED level 1)	basic general, secondary general (ISCED 2 and 3)	secondary vocational – programmes for mid-level specialists (ISCED level 5)	higher (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)
Russia (2021)	5275**	n(3)***	4509	4490****	14756
Russia (2019)	5184**	n(3)***	4260	4778****	14803
Canada	n(2)***	10570****	14564	16881	25765
France	9555	9312	13475	15922	18808
Germany	13975	10622	14390	7459	19636
Italy	10458	10570	10558	4472	12248
Japan	8118	9379	11493	13944*****	20944*****

(continued)

		Edi	ucational attainm	ent	
	preschool (ISCED level 0)	primary general (ISCED level 1)	basic general, secondary general (ISCED 2 and 3)	secondary vocational – programmes for mid-level specialists (ISCED level 5)	higher (ISCED level 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)
South Korea		13341	17078	6468	12541
Sweden	15794	13234	13311	6857	28039
United Kingdom	6595	11936	13041	28667	29766
United States	***	13780	15538	n(5)***	35347

^{*} For countries other than Russia, the data refer to 2019.

^{**} Public expenditure.

^{***} Here and below in Section 5, the 'n' symbol means that the data in this field are included into another column, which number is indicated in brackets after 'n'.

^{****} Including secondary vocational education – programmes for skilled workers and employees (ISCED level 4).

^{*****} Including ISCED level 2.

^{*****} Including partially ISCED level 4.

2.5. Public expenditure on education by level of the budget system

	2000	2005	2010	2019	2020	2021	2022
Federal budget:							
billion roubles	38.1	162.1	442.8	826.5	956.9	1064.4	1312.3
as a percentage of the federal budget expenditure	3.7	4.6	4.4	4.5	4.2	4.3	4.2
Consolidated budgets of Russian regions:							
billion roubles	176.6	628.6	1450.9	3356.3	3552.5	3897.6	4532.8
as a percentage of the expenditures of consolidated budgets of Russian regions	17.1	21.4	21.9	24.7	22.8	23.1	23.1
budgets of Russiali regions	17.1	21.4	21.9	24.7		23.1	23.1

32

2.6. Public expenditure on education by subsection of the budget expenditure classification

(billion roubles)

	2000	2005	2010	2019	2020	2021	2022
Consolidated budget of the Russian Federation and budgets of state extra- budgetary funds	214.7	801.8	1893.9	4050.7	4324.0	4690.7	5459.5
Preschool education	32.0	113.0	321.3	964.8	987.0	1030.2	1129.2
General education	107.9	356.0	827.4	1643.3	1817.5	2021.0	2443.8
Additional education of children*				266.8	270.2	288.0	315.5
Secondary vocational education	23.6	82.8	163.8	268.0	284.0	305.6	356.8
Higher education**	24.4	125.9	377.8	585.2	644.3	649.7	712.0
Professional (vocational) training, retraining, and development programmes***	1.4	6.7	13.2	43.3	47.4	50.3	51.0

(continued)

	2000	2005	2010	2019	2020	2021	2022
Youth policies****		24.8	49.5	81.2	70.7	106.5	149.1
Applied research in education		1.8	15.7	14.7	16.3	17.8	37.7
Other issues in the field of education****	25.4	90.8	125.1	183.4	186.7	221.5	264.5

^{*} In 2000, 2005, and 2010, the expenses were included in the 'General education' subsection.

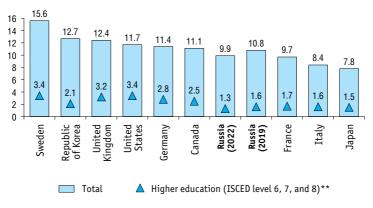
^{**} In 2000 and 2005, 'Higher professional education' subsection; in 2010, 'Higher and postgraduate professional education' subsection.

^{***} In 2000 and 2005, 'Retraining and upgrading of professional skills' subsection.

^{****} In 2005 and 2010, 'Youth policies and children's rehabilitation and recovery' subsection.

^{*****} In 2000, 'Other expenditure on education' subsection.

2.7. Public expenditure on education as a percentage of the total public expenditure by country*

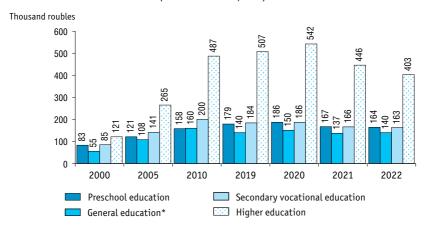


^{*} For countries other than Russia, the data refer to 2019.

^{**} The data for the United States include expenditure for ISCED level 5; for Japan – partially including expenditure for ISCED level 4.

2.8. Public expenditure on education per student by subsection of the budget expenditure classification

(at constant 2022 prices)



^{*} In 2000, 2005, and 2010, expenditure on additional education of children were included in the 'General education' subsection.

36

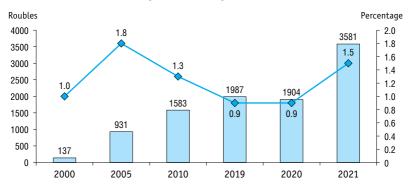
2.9. Paid educational services

	2000	2005	2010	2020	2021*	2022**
Paid educational services: million roubles	41530	152670	326100	655972	792750	880490
as a percentage: of the previous year, in comparable prices	121.7	107.7	99.1	86.5	116.9	105.0
of all paid educational services rendered to the population	6.9	6.7	6.6	7.1	7.0	7.0
Paid educational services per capita, roubles	285	1064	2283	4479	5435	

^{*} The data have been adjusted to include administrative data on the revenues from toll roads and paid parking spaces on public-access roads, as well as incomes of the self-employed with a breakdown into types of services based on the adjusted total of the continuous federal statistical survey on SMEs activities.

^{**} Preliminary data.

2.10. Household expenditure on paid educational services*



- Expenditure on paid educational services per household member a year
- Educational services as a percentage of consumer expenditure

^{*} According to a sampled household budget survey.

2.11. Average consumer prices for selected paid educational services

(at the end of the year; roubles)

	2000	2005	2010	2020	2021	2022
Attending day care centres, per day	9.19	26.53	54.86	104.88	111.85	132.51
Additional studies for preschool children, per academic hour				223.08	232.19	256.18
Tuition at private general education institutions, per month*	1703.76	4168.46	9420.77	20852.05	24259.39	27617.67
Additional studies in state and municipal intramural full-time general education institutions, per academic hour			79.08	155.62	149.33	144.25
Tuition at secondary vocational education institutions, per semester	4232.07	8672.05	13981.85	32938.91	36858.32	39678.95
Tuition at state and municipal higher education institutions, per semester	7033.69	16026.90	25520.38	73170.35	77930.09	77926.25

	2000	2005	2010	2020	2021	2022
Tuition at private higher education institutions, per semester	8310.66	15153.15	22983.61	53247.17	63013.78	56387.03
Foreign languages courses, per academic hour	31.09	72.24	148.21	311.21	330.17	330.42
Professional training courses, per academic hour	21.87	49.60	82.21	136.9	156.18	159.79
Basic category B driving course, per course			17725.13	27303.98	29354.72	30735.51

 $^{^{\}star}$ In 2000 and 2005, tuition at secondary general education institutions.

2.12. Enrolment, entrants, and graduates within secondary vocational education programmes for skilled workers and employees by source of funds

(thousand persons)

	2019	2020	2021	2022
Enrolment, at the beginning of the academic year*	543.4	576.5	577.7	576.7
Of whom studying:	545.4	376.3	377.7	3/6./
at the expense of budgetary funds	523.3	547.2	543.4	537.4
at state and municipal institutions	522.7	546.7	542.9	536.9
at private institutions	0.6	0.4	0.4	0.5
under commercial contracts of paid educational services provision	20.1	29.3	34.3	39.3
at state and municipal institutions	18.9	28.2	31.6	35.2
at private institutions	1.2	1.1	2.7	4.2
Entrants	209.7	213.8	206.9	209.5
Of whom studying:				
at the expense of budgetary funds	197.6	196.5	190.0	189.0
at state and municipal institutions	197.1	196.3	189.9	188.7
at private institutions	0.5	0.2	0.2	0.3

	2019	2020	2021	2022
under commercial contracts of paid				_
educational services provision	12.1	17.3	16.9	20.6
at state and municipal institutions	11.1	16.3	14.5	17.0
at private institutions	1.0	1.0	2.4	3.6
Graduates	165.5	142.5	158.1	161.2
Of whom studying:				
at the expense of budgetary funds	160.4	137.1	149.8	150.4
at state and municipal institutions	160.3	137.0	149.7	150.2
at private institutions	0.1	0.1	0.1	0.2
under commercial contracts of paid	- 4	- 4		40.0
educational services provision	5.1	5.4	8.3	10.8
at state and municipal institutions	4.5	4.8	7.3	9.4
at private institutions	0.6	0.5	0.9	1.5

 $^{^{\}star}$ At the beginning of 2019/20, 2020/21, 2021/22, 2022/23 academic years, respectively.

2.13. Enrolment, entrants, graduates within secondary vocational education programmes for mid-level specialists by source of funds

(thousand persons)

	2000	2005	2010	2020	2021	2022
Enrolment, at the beginning						
of the academic year*	2360.8	2590.7	2125.7	2759.8	2856.2	2983.1
Of whom studying:						
at the expense of budgetary funds	1590.1	1603.9	1485.9	1703.9	1725.8	1785.3
at state and municipal institutions	1590.1	1603.9	1485.7	1698.6	1720.2	1777.9
at private institutions			0.2	5.3	5.6	7.4
under commercial contracts of paid educational services provision	770.7	986.8	639.8	1055.9	1130.4	1197.8
at state and municipal institutions	718.5	869.1	541.2	771.4	797.4	815.6
at private institutions	52.2	117.7	98.6	284.5	333.0	382.2
Entrants	867.2	854.1	705.3	900.2	870.9	942.7
Of whom studying:						
at the expense of budgetary funds	516.5	500.5	489.8	499.7	496.2	535.4
at state and municipal institutions	516.5	500.5	489.7	497.7	494.3	532.2
at private institutions			0.0	2.0	2.0	3.2

	2000	2005	2010	2020	2021	2022
under commercial contracts of paid						
educational services provision	350.7	353.6	215.5	400.6	374.7	407.3
at state and municipal institutions	325.9	310.4	182.1	278.2	252.9	265.1
at private institutions	24.8	43.2	33.5	122.4	121.8	142.2
Graduates	579.3	684.4	572.1	552.8	573.8	612.5
Of whom studying:						
at the expense of budgetary funds	414.2	399.3	356.8	360.3	363.0	368.8
at state and municipal institutions	414.2	399.3	356.8	359.6	361.9	367.6
at private institutions			0.0	0.7	1.1	1.2
under commercial contracts of paid						
educational services provision	165.1	285.1	215.3	192.4	210.8	243.8
at state and municipal institutions	153.5	252.1	178.9	141.6	150.9	171.2
at private institutions	11.6	33.0	36.4	50.9	59.9	72.6

^{*} Here and below in table 2.14, at the beginning of 2000/01, 2005/06, 2010/11, 2020/21, 2021/22, 2022/23 academic years, respectively.

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2.14. Enrolment, entrants, and graduates within bachelor's, specialist's, and master's programmes by source of funds (thousand persons)

	2000	2005	2010	2019	2020	2021
Enrolment, at the beginning of the academic year	4741.4	7064.6	7049.8	4049.3	4044.2	4130.0
Of whom studying:						
at the expense of budgetary funds	2802.0	3002.7	2619.8	1904.6	1934.6	2008.3
at state and municipal institutions	2802.0	3002.7	2619.3	1896.6	1925.7	1998.1
at private institutions			0.5	8.0	8.9	10.2
under commercial contracts of paid educational services provision	1939.4	4061.9	4430.0	2144.8	2109.6	2121.7
at state and municipal institutions	1468.8	2982.6	3229.5	1818.5	1764.4	1746.5
at private institutions	470.6	1079.3	1200.6	326.3	345.2	375.2
Entrants	1292.5	1640.5	1399.5	1093.3	1129.1	1201.5
Of whom studying:						
at the expense of budgetary funds	586.8	613.7	519.2	521.9	554.2	592.1
at state and municipal institutions	586.8	613.7	519.0	518.7	551.3	588.6
at private institutions			0.2	3.3	2.8	3.5

	2000	2005	2010	2019	2020	2021
under commercial contracts of paid						
educational services provision	705.7	1026.8	880.1	571.4	574.9	609.5
at state and municipal institutions	553.5	758.8	676.4	464.4	459.0	481.1
at private institutions	152.2	268.0	203.8	107.0	115.9	128.4
Graduates	635.1	1151.7	1467.9	849.4	813.3	816.3
Of whom studying:						
at the expense of budgetary funds	451.8	517.2	546.7	405.8	393.6	380.3
at state and municipal institutions	451.8	517.2	546.6	404.3	392.2	378.6
at private institutions			0.1	1.5	1.4	1.7
under commercial contracts of paid						
educational services provision	183.3	634.5	921.2	443.6	419.7	436.0
at state and municipal institutions	127.1	461.2	631.2	363.2	343.2	348.0
at private institutions	56.2	173.3	290.1	80.4	76.5	87.9

2.15. Enrolment, entrants, and graduates within postgraduate, residency, and apprenticeship programmes by sources of funds

(at the end of the year; thousand persons)

	2020	2021	2022
Enrolment in postgraduate programmes	87.8	90.2	109.7
Of whom studying:			
at the expense of budgetary funds	55.8	57.1	58.4
under commercial contracts of paid educational services	;		
provision	31.0	32.0	50.3
at the expense of institutions' own funds	1.0	1.1	1.1
Entrants to postgraduate programmes	27.7	28.0	45.1
Of whom studying:			
at the expense of budgetary funds	17.0	17.0	17.7
under commercial contracts of paid educational services	;		
provision	10.5	10.8	27.0
at the expense of institutions' own funds	0.3	0.2	0.3
Graduates of postgraduate programmes	14.0	14.3	13.9
Of whom studying:			
at the expense of budgetary funds	9.8	10.1	9.5
under commercial contracts of paid educational services	;		
provision	4.0	4.1	4.2
at the expense of institutions' own funds	0.1	0.1	0.1

	2020	2021	2022
Enrolment in residency programmes	55.8	58.6	64.0
Of whom studying:			
at the expense of budgetary funds	29.0	32.1	35.9
under commercial contracts of paid educational services			
provision	26.7	26.5	28.1
at the expense of institutions' own funds	0.0	0.0	0.0
Entrants to residency programmes	29.0	30.8	34.8
Of whom studying:			
at the expense of budgetary funds	15.3	17.0	19.3
under commercial contracts of paid educational services	;		
provision	13.7	13.7	15.4
at the expense of institutions' own funds	0.0	0.0	0.0
Graduates of residency programmes	24.1	26.5	27.4
Of whom studying:			
at the expense of budgetary funds	10.7	13.3	14.7
under commercial contracts of paid educational services	;		
provision	13.3	13.1	12.7
at the expense of institutions' own funds	0.0	0.0	0.0

	2020	2021	2022
Enrolment in apprenticeship programmes	1.0	1.2	1.3
Of whom studying:			
at the expense of budgetary funds	0.8	0.9	0.9
under commercial contracts of paid educational services			
provision	0.2	0.3	0.3
at the expense of institutions' own funds	0.0	0.0	0.0
Entrants to apprenticeship programmes	0.5	0.6	0.6
Of whom studying:			
at the expense of budgetary funds	0.4	0.5	0.4
under commercial contracts of paid educational services			
provision	0.1	0.2	0.2
at the expense of institutions' own funds	_	0.0	0.0
Graduates of apprenticeship programmes	0.4	0.4	0.5
Of whom studying:			
at the expense of budgetary funds	0.3	0.3	0.3
under commercial contracts of paid educational services			
provision	0.1	0.1	0.1
at the expense of institutions' own funds	0.0	0.0	0.0

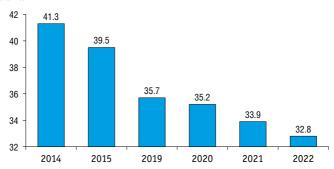


INSTITUTIONS ENGAGED IN EDUCATIONAL ACTIVITY

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3.1. Preschool education institutions*





^{*} Including institutions under capital repair, as well as those which activities have been suspended.

3.2. Institutions implementing primary general, basic general, and secondary general education programmes*

(at the beginning of the academic year)

	2000/01	2005/06	2010/11	2019/20	2020/21	2021/22	2022/23
Total	68804	63174	50793	40823	40346	39908	39440
State and municipal institutions	68169	62448	50128	39966	39462	39037	38549
Urban areas	22694	21743	19505	16907	16812	16700	16591
Rural areas	45475	40705	30623	23059	22650	22337	21958
Private institutions	635	726	665	857	884	871	891
Urban areas			620	770	792	779	805
Rural areas			45	87	92	92	86

^{*} Including institutions under capital repair.

3.3. Educational institutions implementing secondary vocational education programmes

(at the beginning of the academic year)

	2019/20	2020/21	2021/22	2022/23
Vocational education institutions – total	3300	3273	3239	3200
State and municipal institutions	2922	2890	2850	2810
Private institutions	378	383	389	390
Separate subdivisions (branches) of vocational education institutions – total	630	608	604	628
State and municipal institutions	561	537	526	532
Private institutions	69	71	78	96
Higher education institutions – total	342	338	345	361
State and municipal institutions	292	294	299	312
Private institutions	50	44	46	49
Separate subdivisions (branches) of higher education institutions – total	420	435	429	438
State and municipal institutions	363	379	375	391
Private institutions	57	56	54	47

3.4. Institutions implementing bachelor's, specialist's, and master's programmes*

(at the beginning of the academic year)

	2000/01	2005/06	2010/11	2020/21	2021/22	2022/23
Total	965	1068	1115	710	717	722
State and municipal institutions	607	655	653	497	501	500
Private institutions	358	413	462	213	216	222

^{*} In the 2000/01, 2005/06, 2010/11 academic years, including higher education institutions; in 2020/21, 2021/22, 2022/23 academic years, including research institutes implementing master's programmes.

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3.5. Institutions implementing postgraduate programmes

	2000	2005	2010	2020	2021	2022
Total	1362	1473	1568	1189	1174	1152
Of which:						
research institutes	797	833	809	588	572	559
higher education institutions	565	640	748	566	565	556
additional professional (vocational) education institutions			11	18	17	19

3.6. Institutions implementing residency and apprenticeship programmes

	Residency programmes			ticeship ammes
	2021	2022	2021	2022
Total	200	203	38	36
Of which:				
research institutes	90	93	-	_
higher education institutions	85	82	38	36
additional professional (vocational) education institutions	8	11	-	-

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3.7. Institutions implementing vocational training programmes

	2019	2020	2021	2022
Vocational education institutions	2885	2971	3125	3063
Separate subdivisions (branches) of vocational education institutions	202	229	259	284
General education institutions	180	142	166	195
Separate subdivisions (branches) of general education institutions	1 188	3 216	2 239	1 246
Higher education institutions	100	210	239	240
Separate subdivisions (branches) of higher education institutions	105	121	145	158
Additional education institutions	123	129	134	114
Separate subdivisions (branches) of additional education institutions	_	_	_	_

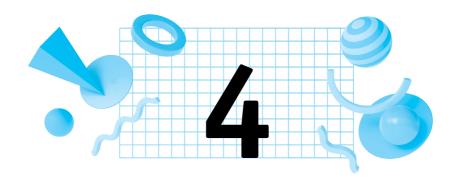
	2019	2020	2021	2022
Additional professional (vocational) education institutions	922	1070	1138	1279
Separate subdivisions (branches) of additional professional (vocational) education institutions	42	50	54	63
Other institutions*	539	634	687	727

^{*} Including separate subdivisions (branches).

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3.8. Institutions implementing additional professional (vocational) programmes

	2019	2020	2021	2022
Additional professional (vocational) education institutions	2117	2021	2134	2322
Vocational education institutions	2051	1952	2126	2213
Higher education institutions	1110	1117	1105	1110
Research institutes	134	136	149	179
Other institutions	623	617	692	789



ENROLMENT

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4.1. Enrolment by educational attainment and country* (million persons)

Total Education preschool secondary vocational primary basic general, (ISCED general secondary general, and programmes for level 0) (ISCED secondary vocational mid-level specialists. level 1) programmes for skilled higher (ISCED workers and employees level 5, 6, 7, and 8) (ISCED level 2, 3, and 4) Russia (2022) 32.6 7.0 7.7 10.6 7.3 Russia (2020) 31.9 7.4 7.4 10.1 7.0 Canada 7.5 24 27 18 France 15.7 2.5 4.3 6.2 2.8 Germany 17.3 3.4 3.0 7.6 3.3 Italv 109 14 28 46 20 Japan 20.0 29 64 68 39 Republic of Korea 10.2 1.8 2.7 2.7 3.0 Sweden 3.0 0.6 0.9 10 0.5 United Kingdom 27 159 22 49 6 1 United States 24.5 26.4 18.8

^{*} For countries other than Russia, the data refer to 2020.

4.2. Enrolment in institutions implementing preschool education and child care programmes*

	2000	2005	2010	2020	2021	2022
Enrolment, thousand persons	4263.0	4530.4	5388.0	7442.9	7340.6	7008.1
Urban areas	3408.5	3611.0	4280.6	6019.6	5937.0	5657.8
Rural areas	854.5	919.4	1107.3	1423.4	1403.6	1350.4
In the total enrolment – girls	2013.0	2144.1	2607.0	3589.6	3545.1	3377.4
Enrolment per 100 study places, persons	81	95	107	102	99	97
Urban areas	88	102	113	106	103	100
Rural areas	62	75	90	87	85	85
Short-term groups enrolment, thousand persons	_	70.7	126.2	132.3	164.8	115.7

^{*} Including children for whom only child care is provided; in 2000, 2005, and 2010, preschool education institutions.

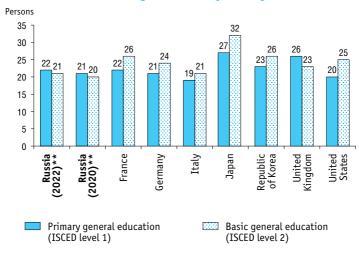
4.3. Enrolment in primary general, basic general, and secondary general education programmes

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

	2000/01	2005/06	2010/11	2020/21	2021/22	2022/23
Enrolment	20553.5	15630.9	13642.4	16893.7	17314.2	17745.0
State and municipal institutions	20492.9	15558.5	13568.9	16749.9	17156.7	17567.1
Urban areas	14389.1	10844.7	9761.3	12785.8	13159.2	13524.9
Rural areas	6103.8	4713.7	3807.6	3964.1	3997.5	4042.2
Private institutions	60.6	72.3	73.5	143.8	157.5	178.0
Urban areas			68.8	131.2	143.7	163.4
Rural areas			4.7	12.6	13.7	14.6
Graduates who have received*:						
basic general education certificate	2199.5	1944.1	1354.1	1473.6	1398.6	1427.4
secondary general education certificate	1457.8	1466.0	789.3	687.8	680.9	637.3

^{*} In 2000, 2005, 2010, 2020, 2021, and 2022, respectively.

4.4. Average class size by country*



^{*} For countries other than Russia, the data refer to 2020.

^{**} For Russia, excluding individual institutions and classes for students with mental deficiency (mental development disorders).

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4.5. Secondary vocational education programmes for skilled workers and employees (thousand persons)

	2000*	2005*	2010*	2020	2021	2022
Enrolment, at the end of the year	1614.9	1445.5	938.4	576.5**	577.7**	576.7**
Of whom – female	639.2	537.1	339.7	174.2	176.0	174.0
Entrants	764.5	614.7	504.1	213.8	206.9	209.5
Graduates	687.2	625.2	482.2	142.5	158.1	161.2

^{*} The data refer to state and municipal educational institutions.

^{**} At the beginning of the 2020/21, 2021/22, and 2022/23 academic years.

4.6. Graduates of secondary vocational education programmes for skilled workers and employees by field of education (thousand persons)

	2016	2020	2021	2022
Total	184.4	142.5	158.1	161.2
Engineering and industrial technology sciences Of which:	139.7	105.3	105.9	92.0
civil engineering and technology	15.4	16.5	16.9	19.4
computer engineering	7.9	6.7	6.4	6.0
electrical and thermal power engineering	6.6	6.9	7.0	6.9
mechanical engineering	24.6	24.9	26.8	13.1
surface transport engineering and technology	36.6	31.7	31.4	31.4
Healthcare and medical sciences	1.5	1.1	1.1	1.0
Agriculture and agricultural sciences	19.7	15.9	15.8	15.2
Social sciences	19.1	16.5	31.1	32.1
Of which:				
economics and management	8.3	5.5	4.8	4.6
services sector and tourism	9.5	10.1	25.4	26.4
Humanities	1.7	1.1	1.1	1.3
Culture and the arts	2.6	2.7	3.0	19.6

4.7. Secondary vocational education programmes for mid-level specialists

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

	2000/01	2005/06	2010/11	2020/21	2021/22	2022/23
Enrolment	2360.8	2590.7	2125.7	2759.8	2856.2	2983.1
Intramural full-time	1721.5	1960.3	1578.2	2318.6	2412.7	2532.9
Intramural part-time	93.4	70.7	54.3	57.8	59.3	67.9
Extramural*	545.9	559.7	493.2	383.5	384.2	382.3
Of the total enrolment:						
female enrolment in institutions:	1293.6	1327.0	1071.8	1376.3	1439.9	1512.6
state and municipal	2308.6	2473.0	2026.8	2470.1	2517.6	2593.5
private	52.2	117.7	98.9	289.8	338.6	389.6
Entrants**	867.2	854.1	705.3	900.2	870.9	942.7
Graduates**	579.3	684.4	572.1	552.8	573.8	612.5

^{*} At the beginning of the 2010/11 academic year and earlier, including external studies.

^{**} In 2000, 2005, 2010, 2020, 2021, and 2022, respectively.

4.8. Graduates of secondary vocational education programmes for mid-level specialists by field of education

(thousand persons)

	2016	2020	2021	2022
Total	469.1	552.8	573.8	612.5
Mathematical and natural sciences	0.3	0.3	0.3	0.3
Engineering and industrial technology sciences	200.0	237.5	239.6	274.4
Of which:				
civil engineering and technology	26.4	30.1	29.2	29.2
computer engineering	27.7	32.5	36.1	41.3
information security	1.6	2.5	3.1	3.6
surface transport engineering and technology	41.9	46.5	45.9	47.6
Healthcare and medical sciences	54.7	70.6	73.6	51.3
Agriculture and agricultural sciences	18.3	24.3	24.9	26.2
Social sciences	135.7	144.0	157.1	179.8
Of which:				
economics and management	73.7	66.7	68.5	73.2
law	36.3	51.7	59.8	71.5
Education and pedagogical sciences	29.2	38.1	38.9	39.8
Humanities	10.6	14.3	14.8	15.6
Culture and the arts	20.4	23.7	24.5	25.2

4.9. Enrolment and entrants within bachelor's, specialist's, and master's programmes

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

	2000/01	2005/06	2010/11	2020/21	2021/22	2022/23
Enrolment	4741.4	7064.6	7049.8	4049.3	4044.2	4130.0
Intramural full-time	2625.1	3508.0	3073.7	2429.3	2474.8	2568.3
Intramural part-time	302.2	371.2	304.7	206.1	264.8	341.0
Extramural*	1814.1	3185.4	3671.3	1413.9	1304.6	1220.7
Of the total enrolment:						
female enrolment in institutions:	2686.3	4113.8	4030.1	2127.1	2118.2	2138.2
state and municipal	4270.8	5985.3	5848.7	3715.1	3690.1	3744.6
private .	470.6	1079.3	1201.1	334.2	354.1	385.4
Entrants**	1292.5	1640.5	1399.5	1093.3	1129.1	1201.5

^{*} At the beginning of the 2010/11 academic year and earlier, including external studies.

At the beginning of the 2022/23 academic year, enrolment in bachelor's programmes – 2,776.3 thousand persons, specialist's programmes – 824.0 thousand persons, master's programmes – 529.7 thousand persons (67.2, 20.0, 12.8% of the total enrolment, respectively).

^{**} In 2000, 2005, 2010, 2020, 2021, and 2022, respectively.

4.10. Graduates of bachelor's, specialist's, and master's programmes (thousand persons)

	2000	2005	2010	2020	2021	2022
Total	635.1	1151.7	1467.9	849.4	813.3	816.3
Graduates who received:						
incomplete higher education certificate	2.4	4.3	8.0	-	-	-
bachelor's diploma	70.9	84.5	126.6	558.8	528.9	540.7
specialist's diploma	553.3	1051.8	1306.9	105.4	108.0	110.5
master's diploma	8.4	11.1	26.3	185.2	176.4	165.2

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4.11. Graduates of bachelor's, specialist's, and master's programmes by field of education (thousand persons)

	2020	2021	2022
Total	849.4	813.3	816.3
Mathematical and natural sciences	34.9	34.0	35.9
Engineering and industrial technology			
sciences	241.6	234.5	233.1
Of which:			
civil engineering and technology	29.5	27.8	30.6
computer engineering	30.3	31.1	36.2
information security	4.6	4.9	3.3
surface transport engineering and			
technology	25.4	25.0	26.5
Healthcare and medical sciences	42.3	42.8	45.1
Agriculture and agricultural sciences	30.7	29.7	30.2

	2020	2021	2022
Social sciences	349.6	325.9	323.5
Of which:			
economics and management	184.4	169.1	159.9
law	110.8	101.3	89.2
Education and pedagogical sciences	88.9	86.9	87.9
Humanities	39.2	37.5	37.8
Culture and the arts	22.3	21.8	22.9

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4.12. Percentage distribution of graduates of bachelor's, specialist's, and master's programmes (ISCED level 6 and 7) by field of education and country*

	Education	Arts and humanities	Social sciences, journalism, and information	Business, management, and law	Natural sciences, mathematics, and statistics
Russia (2022)	10.8	5.5	13.8	24.3	4.8
Russia (2020)	10.5	5.1	14.7	25.4	4.6
Canada	7.7	8.5	15.1	23.4	11.0
France	5.6	10.2	9.9	31.9	9.3
Germany	10.0	9.6	7.1	26.5	6.9
Italy	12.9	16.1	14.2	17.4	7.1
Japan	7.4	16.8	8.9	22.0	3.9
Republic of Korea	8.0	16.7	7.5	16.0	5.6
Sweden	16.4	5.5	13.9	13.9	3.9
United Kingdom	7.7	15.2	17.3	23.7	9.3
United States	7.8	9.6	15.5	21.7	8.8

	Information and communication technologies	Engineering, manufacturing and construction industries	Agriculture, forestry, fisheries; and veterinary sciences	Healthcare and social services	Services sector
Russia (2022)	5.9	21.5	3.7	6.3	3.5
Russia (2020)	5.0	22.1	3.6	5.9	3.2
Canada	4.4	10.3	0.8	14.0	3.2
France	4.0	11.1	0.8	14.0	2.9
Germany	5.0	23.5	1.7	6.4	2.9
Italy	1.3	13.5	2.2	12.4	2.9
Japan	**	17.5	3.3	10.3	2.6
Republic of Korea	4.6	19.6	1.5	13.5	6.9
Sweden	3.7	16.5	0.7	24.1	1.5
United Kingdom	4.2	8.8	0.8	12.7	0.0
United States	5.2	7.4	1.0	19.9	3.2

^{*} For countries other than Russia, the data refer to 2020.

^{**} The data are distributed across other fields of education.

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4.13. Postgraduate programmes*

(thousand persons)

	2000	2005	2010	2020	2021	2022
Enrolment, at the end of the year	117.7	142.9	157.4	87.8	90.2	109.7
Of whom – female	51.8	61.8	72.8	38.5	39.4	37.7
Entrants	43.1	46.9	54.6	27.7	28.0	45.1
Graduates	24.8	33.6	33.8	14.0	14.3	13.9
Of whom defended their thesis	7.5	10.7	9.6	1.2	1.5	1.8

^{*} Since 2019, the enrolment within postgraduate programmes includes foreign citizens and individuals without citizenship enrolled on general terms of enrolment.

At the end of 2022, enrolment in postgraduate programmes – 95.6 thousand persons (87.1% of the total enrolment); at the end of 2021 – 78.1 thousand persons (86.7% of the total enrolment).

4.14. Graduates of postgraduate programmes by field of education (persons)

	2020	2021	2022
Total	13957	14326	13865
Of which:			
Physics and astronomy	738	739	705
Biological sciences	671	754	734
Computer science and engineering	841	928	920
Clinical medicine	1323	1295	1226
Economics and management	1229	1149	1133
Law	757	764	754
Education and pedagogical sciences	811	877	845
Linguistics and literary studies	616	615	593

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4.15. Residency programmes (thousand persons)

	2	2020		2021		2022	
	Total	Of whom - female	Total	Of whom – female	Total	Of whom - female	
Enrolment, at the end of the year	55.8	38.2	58.6	40.0	64.0	43.3	
Entrants	29.0	19.7	30.8	20.7	34.8	23.5	
Graduates	24.1	16.2	26.5	18.1	27.4	18.8	

4.16. Graduates of residency programmes by field of education (thousand persons)

	2020	2021	2022
Total	24.1	26.5	27.4
Clinical medicine	23.5	25.9	26.8
Of which by occupations:			
obstetrics and gynaecology	1.5	1.6	1.6
anaesthesiology and intensive-care medicine	1.3	1.4	1.6
neurology	1.2	1.1	1.2
therapy	1.7	1.9	2.0
dental orthopaedics	1.2	1.2	1.2
Health sciences and preventive medicine	0.2	0.3	0.3
Pharmacology and pharmacy	0.3	0.3	0.3

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4.17. Apprenticeship programmes

(thousand persons)

	2020		2021		2022	
	Total	Of whom – female	Total	Of whom – female	Total	Of whom – female
Enrolment, at the end of the year	1.0	0.5	1.2	0.7	1.3	0.7
Entrants	0.5	0.3	0.6	0.4	0.7	0.4
Graduates	0.4	0.2	0.4	0.2	0.5	0.2

4.18. Graduates of apprenticeship programmes by field of education

(persons)

	2020	2021	2022
Total	353	412	468
Architecture	1	1	4
Performing arts and creative writing	14	26	38
Musical arts	306	357	399
Fine and applied arts	28	22	21
Screen arts	4	6	6

4.19. Enrolment of international students in secondary vocational education programmes for mid-level specialists and higher education programmes (ISCED level 5, 6, 7, and 8) by country*

	Internati	Russian residents	
	Thousand persons	As a percentage of the total	abroad, thousand persons**
Russia (2022)	394.3	5.4	_
Russia (2020)	350.8	5.1	_
Canada	323.2	18.2	1.5
France	252.4	9.2	2.8
Germany	368.7	11.2	11.1
Italy	58.5	2.9	1.6
Japan	222.7	5.7	0.5
Republic of Korea	111.6	3.7	0.5
Sweden	31.9	7.0	0.3
United Kingdom	550.9	20.1	3.4
United States	957.5	5.1	4.9

^{*} For countries other than Russia, the data refer to 2020.

^{**} According to the data of recipient countries.

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4.20. Individuals who completed their studies within vocational training programmes

	20)20	2021		2022	
	Thousand persons	Percentage	Thousand persons	Percentage	Thousand persons	Percentage
Total	1889.6	100	2007.4	100	2003.3	100
Of whom within:						
vocational training programmes for skilled workers and employees retraining programmes	1243.4	65.8	1390.3	69.3	1394.3	69.6
for skilled workers and employees	241.1	12.8	253.2	12.6	261.8	13.1
programmes aimed at upgrading professional skills of skilled workers and employees	405.1	21.4	363.9	18.1	347.1	17.3

4.21. Enrolment in institutions implementing additional general education programmes for children by field of education*

(thousand persons)

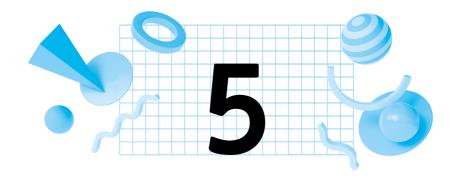
	2020	2021	2022
Fields of education:			
technical	2823.4	3217.5	3463.0
scientific	2917.9	3198.2	3392.1
tourism and local studies	1044.9	1063.4	1151.0
social and liberal	6189.6	6789.4	7560.5
general development programmes:			
in arts	6699.5	7008.2	7426.2
in physical education and sports	4748.5	4979.4	5455.1
pre-vocational education programmes:			
in arts	926.9	1014.5	1042.0
in physical training and sports	618.2	759.4	607.3

^{*} According to Rosstat data.

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4.22. Individuals who completed their studies within additional professional (vocational) programmes

	2020		2021		2022	
	Thousand persons	Percentage	Thousand persons	Percentage	Thousand persons	Percentage
Total	6663.8	100	6961.3	100	8186.6	100
Of whom within:						
professional (vocational) development programmes	6014.6	90.3	6292.3	90.4	7414.0	90.6
retraining programmes	649.2	9.7	669.0	9.6	772.6	9.4



PERSONNEL

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5.1. Number of students per teacher (educator) by country* (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 (2022)	13	n(4)	n(4)	20	17	13
Russia (2020)	14	n(4)	n(4)	19	17	12
Canada	n(2)	16	n(2)	13		
France	23	18	15	13	12	18
Germany	7	15	13	12	13	12
Italy	12	11	11	11	-	21
Japan	13	16	13	11		
South Korea	8	16	13	11		

	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)
Sweden	14	13	11	13	10	10
United Kingdom***	35	20	17	16	n(6)	13
United States		15	15	15	n(6)	13****

^{*} The data for Russia in part of ISCED level 0 refer to educators (including senior educators) excluding part-timers and independent contractors in part of ISCED level 5 – teachers and industrial training instructors within secondary vocational education programmes for mid-level specialists; in part of ISCED level 6, 7, and 8 – the teaching staff within bachelor's, specialist's, and master's programmes (ISCED level 6 and 7).

^{**} The data for countries other than Russia refer to ISCED level 3 general programmes; for Canada, Japan, and Sweden, all programmes (general and vocational).

^{***} For countries other than Russia, the data refer to 2020.

^{****} Including ISCED level 4.

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5.2. Female teachers (educators) as a percentage of the total number of teachers (educators) by country*

	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 (2022)	99.7	99.3	n(4)	83.8	77.3	59.1
Russia (2020)	99.6	99.4	n(4)	83.6	75.2	58.2
Canada	n(2)	75.0	n(2)	75.0	53.8	44.0
France	91.1	83.9	60.2	59.9	54.2	42.8
Germany	94.8	87.4	66.4	56.8	32.4	40.0
Italy	98.7	95.6	77.0	63.6	-	37.9
Japan	96.9	63.9	43.5	31.7****	50.1****	24.5****
Republic of Korea	99.4	77.3	71.0	54.7	44.6	33.8
Sweden	96.4	81.6	65.4	54.0	44.8	46.3

	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)
United Kingdom*** United States	92.6	86.3 86.8	65.0 66.8	61.8 58.1	n(6) n(6)	46.0 50.6****

^{*} For Russia, the data do not include part-timers and independent contractors: in part of ISCED level 0 – educators (including senior educators); in part of ISCED level 5 – teachers and industrial training instructors who taught under secondary education programmes for mid-level specialists; in part of ISCED level 6, 7, and 8 – in part of ISCED level 6, 7, and 8 – teaching staff within bachelor's, specialist's, and master's programmes (ISCED level 6 and 7).

^{**} The data for foreign countries refer to ISCED level 3 general programmes; for Canada, Japan, and Sweden, all programmes (general and vocational).

^{***} For countries other than Russia, the data refer to 2020.

^{****} Including ISCED level 4.

5.3. Educators in institutions implementing preschool education and child care programmes*

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

	2005**	2010**	2019	2020	2021	2022
Educators, thousand persons	446.7	485.2	539.9	543.2	537.5	525.4
Of whom:						
have educational attainment:						
higher	116.4	173.2	279.6	284.7	284.1	279.1
secondary vocational and pedagogical – programmes for mid-						
level specialists	278.4	261.2	247.1	245.1	239.6	243.5
female		483.2	537.8	541.1	536.4	523.9
individuals under 30***		96.5	65.6	63.1	60.8	59.3
individuals aged 60 and over		19.6	35.2	37.3	38.3	38.5
Number of children per educator, persons	10	11	14	14	14	13

^{*} Including separate divisions (including branches).

^{**} The data for 2005 and 2010 refer to preschool education institutions [including separate subdivisions (branches)] and general education institutions that have structural subdivisions implementing preschool education programmes; for 2005, including part-timers.

^{***} Here and below in this section, the employees' specified age refers to the number of full years as of January 1 of the year following the reporting year.

5.4. Teachers 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)

	2011/12	2019/20	2020/21	2021/22	2022/23
Teachers, thousand persons	1060.4	1083.3	1087.3	1083.4	1079.6
Of whom within primary general education programmes	278.9	318.8	321.9	323.6	325.2
Of the total number of teachers:					
have educational attainment:					
higher	888.1	942.6	946.3	940.9	935.0
of which pedagogical	841.9	912.2	916.2	911.1	901.9
secondary vocational – programmes for mid-level specialists	160.7	133.0	133.7	134.5	135.7
of which pedagogical	140.8	124.3	125.4	126.3	127.1

^{*} Including separate divisions (including branches).

	2011/12	2019/20	2020/21	2021/22	2022/23
female	930.6	956.8	960.0	957.7	955.5
individuals under 35		247.5	251.7	252.0	251.6
individuals aged 60 and over	210.0**	140.3	147.8	153.2	158.7
Number of students per teacher,	13	18	19	19	20
persons	13	10	19	19	20

^{**} Individuals of retirement age.

5.5. Teachers in educational institutions implementing secondary vocational education programmes*

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

	2017/18	2019/20	2020/21	2021/22	2022/23
Teachers (excluding part-timers and independent contractors)	137.0	140.7	142.2	144.0	146.3
Of whom:					
within educational programmes:					
for skilled workers and employees	21.0	21.8	21.5	21.7	22.0
for mid-level specialists	102.4	106.0	108.5	110.0	113.3
have higher education	132.5	135.2	136.4	137.1	176.9
female	106.6	108.7	109.6	111.1	138.3
individuals under 35	30.9	31.2	31.5	32.4	33.2
individuals aged 60 and over	28.7	30.2	30.7	30.5	31.0

^{*} Here and below in table 5.6, including separate subdivisions (branches).

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	2017/18	2019/20	2020/21	2021/22	2022/23
Part-timers	31.0	30.4	30.2	30.6	32.9
Of whom:					
within educational programmes:					
for skilled workers and employees	1.9	1.9	1.9	1.7	2.0
for mid-level specialists	23.7	24.2	24.0	24.5	26.8
employees of enterprises and organisations – total	11.7	14.2	13.5	13.7	15.4
including enterprises and organisations of the real sector of the economy	5.0	5.9	5.7	6.1	7.7

5.6. Industrial training instructors in educational institutions implementing secondary vocational education programmes

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

	2017/18	2019/20	2020/21	2021/22	2022/23
Industrial training instructors (excluding part-timers and independent contractors)	25.0	23.1	22.8	21.6	20.8
Of whom:					
within educational programmes:					
for skilled workers and employees	17.4	15.9	15.6	14.7	14.2
for mid-level specialists	4.9	5.0	5.1	5.0	4.9
have higher education	12.2	11.6	11.5	10.8	10.5
female	12.7	11.1	10.9	10.2	9.8
individuals under 35	5.1	4.8	4.7	4.6	4.6
individuals aged 60 and over	4.3	4.6	4.7	4.5	4.5

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	2017/18	2019/20	2020/21	2021/22	2022/23
Part-timers	0.4	0.5	0.5	0.5	0.7
Of whom:					
within educational programmes:					
for skilled workers and employees	0.2	0.2	0.3	0.2	0.4
for mid-level specialists	0.2	0.2	0.2	0.2	0.2
employees of enterprises and organisations – total	0.2	0.2	0.3	0.3	0.3
including enterprises and organisations of the real sector of the economy	0.1	0.2	0.2	0.2	0.2

At the beginning of the 2022/23 academic year, the number of students enrolled in programmes for skilled workers and employees per teacher and industrial training instructor – 14; enrolled in programmes for midlevel specialists – 15 (at the beginning of the 2022/22 academic year, 14 and 16, respectively).

5.7. Teaching staff in institutions implementing bachelor's, specialist's, and master's programmes*

(at the beginning of the academic year)

	2017/18	2019/20	2020/21	2021/22	2022/23
Teaching staff (excluding part-timers and independent contractors), thousand persons Of whom:	245.1	229.3	223.1	217.7	215.1
within bachelor's, specialist's, and master's programmes with scientific degree:	243.0	227.0	220.9	215.5	212.8
Doctor of Sciences	37.8	35.8	34.6	33.4	32.3
Candidate of Sciences	140.5	131.8	128.5	125.9	123.3
PhD	0.6	0.9	0.8	0.8	0.7
female	139.9	131.4	128.5	126.6	125.8
individuals under 30	14.8	11.7	10.7	10.1	11.0
individuals aged 60 and over	69.5	66.4	64.6	62.5	61.2

^{*} Including separate divisions (including branches).

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	2017/18	2019/20	2020/21	2021/22	2022/23
Part-timers, thousand persons Of which:	58.1	58.6	60.0	61.5	65.7
within bachelor's, specialist's, and master's programmes	56.7	57.2	58.7	60.1	64.1
Number of students per member of teaching staff, <i>persons</i>	11	12	12	12	13

5.8. Teachers and industrial training instructors implementing vocational training programmes*

(at the end of the year; thousand persons)

		Teachers		Industrial training instructors			
	2020	2021	2022	2020	2021	2022	
Teachers and industrial training instructors (excluding part-timers and independent contractors)	19.1	18.1	17.2	14.1	12.9	13.7	
Of whom:							
have higher education	17.1	16.0	15.1	6.1	5.7	5.8	
female	8.6	8.2	7.5	3.2	2.5	2.8	
individuals under 35	3.7	3.2	2.9	2.6	2.1	2.2	
individuals aged 60 and over	3.2	3.2	3.0	2.3	2.3	2.2	

^{*} Including separate divisions (including branches).

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		Teachers		Industrial training instructors			
	2020	2021	2022	2020	2021	2022	
Part-timers	4.6	4.1	5.0	1.2	1.1	3.0	
Of whom employees of enterprises and organisations	2.1	1.8	2.8	0.3	0.2	2.2	
Including enterprises and organisations of the real sector of the economy	0.8	0.8	1.4	0.1	0.1	2.2	

5.9. Teaching staff in additional education institutions implementing additional general education programmes for children*

(at the end of the year; thousand persons)

	2018	2019	2020	2021	2022
Teaching staff (excluding part-timers and independent contractors)	799.0	765.2	687.5	668.7	678.6
Of whom:					
have higher education	617.6	592.6	530.6	515.8	524.0
of which pedagogical	563.3	541.4	482.8	467.7	471.1
have secondary vocational education – programmes for mid-level specialists	171.5	162.5	147.2	141.4	141.3
of which pedagogical	148.2	142.1	127.9	122.4	121.6
female	656.6	630.0	560.3	541.9	527.4
individuals under 30	114.4	107.6	96.1	93.9	96.3
individuals aged 60 and over	101.7	101.2	94.0	91.0	96.6
Part-timers	121.1	119.8	109.4	109.3	112.9

^{*} Including separate divisions (including branches).

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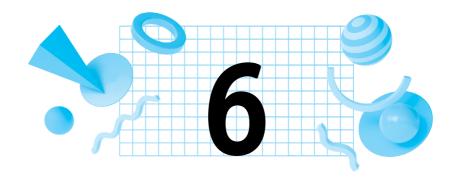
5.10. Teaching staff in institutions implementing additional professional (vocational) programmes*

(at the end of the year; thousand persons)

	2019	2020	2021	2022
Teaching staff (excluding part-timers and independent contractors)	30.6	25.2	30.8	28.9
Of whom:				
with scientific degree:				
Doctors of Sciences	4.6	3.2	3.0	2.8
Candidate of Sciences	12.2	9.7	10.2	8.5
PhD	0.0	0.0	0.0	0.0
female	18.5	15.6	19.5	18.5
individuals under 30	1.6	1.3	1.8	2.0
individuals aged 60 and over	8.3	6.3	7.2	6.9
Part-timers	14.9	13.6	19.5	17.2
Of whom employees of enterprises and organisations**	5.1	5.2	8.2	6.7
Including enterprises and organisations of the real sector of the economy	1.7	1.4	3.1	2.7

^{*} Including separate divisions (including branches).

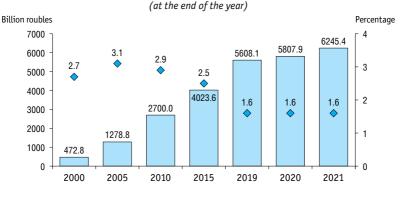
^{**} Since 2021, including other teaching staff.



FIXED ASSETS

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6.1. Fixed assets of the education sector*



Fixed assets of education sector (at initial cost)
 ◆ As a percentage of the total fixed assets value in the national economy

As a percentage of the total fixed assets value in the national economy

^{*} The 2000 data are presented according to Russian Classification of Economy Branches; for 2005, 2010, and 2015, according to OKVED, an ISIC/NACE-compatible Russian Classification of Economic Activities; for 2019–2021 – according to OKVED2, an ISIC/NACE-compatible Russian Classification of Economic Activities (rev. 2).

6.2. New premises of educational institutions

	2000	2005	2010	2020	2021	2022
Preschool education institutions, thousand places	6.8	5.0	22.9	97.3	79.9	71.5
Of which preschool education institutions in rural areas,		•	0.5	47.4	10.4	447
thousand places	3.0	0.9	3.5	17.4	16.4	14.7
General education institutions, thousand study places	133.8	73.0	67.8	138.7	151.3	187.7
Of which general education institutions in rural areas, thousand study places	53.5	27.9	20.2	18.4	31.5	37.8
Vocational education institutions, thousand square metres of the total floor area of education and laboratory spaces (buildings)*				17.7	26.6	41.1
Vocational education institutions implementing secondary vocational education programmes for skilled workers						
and employees, thousand study places	0.6	0.3	1.2			

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	2000	2005	2010	2020	2021	2022
Vocational education institutions implementing secondary vocational education programmes for mid-level specialists, thousand square metres of the total floor area of education and laboratory spaces (buildings)	18.2	11.5	60.4			
Higher education institutions, thousand square metres of the total floor area of education and laboratory spaces (buildings)	105.6	161.3	219.7	54.1	51.9	95.0

^{*} Including the data on new premises of vocational education institutions implementing secondary vocational education programmes for skilled workers and employees, programmes for mid-level specialists, and (or) vocational training.

6.3. Technical state and amenities of preschool education institutions

(at the end of the year)

	2013	2015	2019*	2020	2021	2022**
Buildings which:		,	,			
require capital repair, thousand units	5.6	4.0	2.9	2.9	3.1	3.7
as a percentage of all buildings	10.6	7.8	6.2	6.2	7.0	9.5
are in emergency state, thousand units	0.5	0.2	0.1	0.2	0.1	0.1
as a percentage of all buildings	0.9	0.5	0.3	0.4	0.2	0.3
Institutions, which facilities have all kinds of amenities (water supply and plumbing, central heating, sewerage systems), thousand units	40.8	38.6	33.1	33.1	32.6	
as a percentage of all institutions	90.3	90.5	93.1	93.8	96.3	
Buildings which are equipped with (as a percentage of all buildings):						
water supply and plumbing						96.4
sewerage						96.0
central heating						93.6

^{*} Since 2019, including separate subdivisions (branches).

^{**} Including buildings where the institutions occupy only part of the premises (floors).

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6.4. Technical state, amenities, and accessibility of institutions implementing primary general, basic general, and secondary general education programmes to students with limited mobility*

(at the end of the year)

	Total			U	Urban areas			Rural areas		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	
Buildings which:										
require capital repair, thousand units	7.4	7.2	17.2	2.8	3.0	7.3	4.6	4.3	9.9	
as a percentage of all buildings	10.7	10.5	24.7	9.5	9.9	23.7	11.7	11.0	25.5	
are in emergency state, thousand units	0.5	0.5	0.5	0.1	0.1	0.1	0.4	0.3	0.4	
as a percentage of all buildings	0.7	0.7	0.8	0.4	0.4	0.5	0.9	0.9	1.0	
are equipped with: water supply and plumbing,	04.0	00.0	00.0	00.0	00.7	00.0	00.0	00.0	04.0	
thousand units	61.9	62.6	63.9	28.3	28.7	29.6	33.6	33.9	34.3	
as a percentage of all buildings	89.9	91.2	91.6	95.1	95.7	95.9	86.0	87.7	88.2	

	Total		Urban areas			Rural areas			
	2019	2020	2021	2019	2020	2021	2019	2020	2021
sewerage, thousand units	61.3	62.1	63.3	28.2	28.6	29.5	33.1	33.5	33.8
as a percentage of all buildings	89.1	90.4	90.8	94.7	95.2	95.5	84.8	86.7	87.1
central heating, thousand units	62.2	63.0	64.3	28.3	28.6	29.5	33.9	34.4	34.7
as a percentage of all buildings	90.4	91.8	92.2	95.0	95.4	95.7	86.8	89.0	89.5
are fully accessible, thousand units	32.6	33.7	35.6	16.9	17.4	18.5	15.7	16.3	17.1
as a percentage of all buildings	47.3	49.1	51.1	56.6	57.9	59.8	40.2	42.2	44.1

^{*} Including separate subdivisions (branches); from 2019, including buildings where the institutions occupy only part of the premises (floors).

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6.5. Educational facilities of institutions implementing primary general, basic general, and secondary general education programmes*

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

	2019	2020	2021
Institutions which have the following facilities:			
assembly hall	59.6	60.3	60.8
gym	90.1	90.6	91.0
canteen or dining room	97.6	98.4	98.6
library	95.1	95.3	95.6
equipped classrooms for:			
basics of computer engineering	91.7	92.0	92.3
physics	75.8	76.3	77.7
chemistry	74.4	74.9	76.0
biology	74.3	74.2	74.8
geography	68.2	68.0	68.1
foreign languages	60.9	61.2	61.6
health and safety	55.6	56.2	56.8
extracurricular activities	39.9	41.4	42.6
labour instruction classrooms (workshops)	68.9	68.8	68.5
household arts classroom	57.4	57.5	57.4

^{*} Including separate subdivisions (branches).

6.6. Floor area of education and laboratory spaces (buildings) per student*

(at the end of the year; square metres)

	2019	2020	2021
Institutions implementing primary general, basic genera	l,		
and secondary general education programmes	4.3	4.3	4.2
State and municipal institutions	4.3	4.2	4.2
Private institutions	7.0	7.1	6.7
Institutions implementing secondary vocational			
education programmes**	12.6	11.7	11.4
State and municipal institutions	12.9	12.1	11.9
Private institutions	7.9	6.4	5.9
Higher education institutions	13.9	13.3	13.0
State and municipal institutions	14.0	13.4	13.1
Private institutions	13.3	12.0	10.7

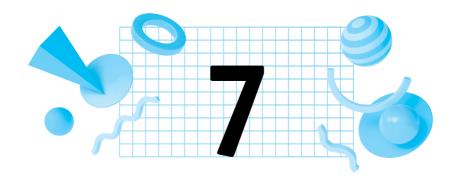
^{*} Excluding floor areas that are leased, subleased, or under capital repair.

 $[\]ensuremath{^{**}}$ Floor areas of education and laboratory spaces.

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6.7. Availability of student dormitories (at the end of the year)

	2015	2019	2020	2021
Students, enrolled in programmes for skilled workers and employees, who need a place in a dormitory, thousand persons	103.6	98.2	99.3	96.5
Of whom living in dormitories, percentage	92.8	94.2	93.8	94.8
Students, enrolled in programmes for mid-level specialists, who need a place in a dormitory, thousand persons	311.4	364.3	368.1	370.6
Of whom living in dormitories, percentage	90.8	91.9	91.0	92.0
Students, enrolled in bachelor's, specialist's, and master's programmes, who need a place in a dormitory,	007.4	004.0	055.7	201.0
thousand persons	897.4	894.6	855.7	861.0
Of whom living in dormitories, percentage	86.7	85.5	82.4	81.1



DIGITALISATION OF EDUCATION

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7.1. Personal computers in preschool education institutions*(at the end of the year)

	2021	2022
Personal computers, thousand units	333.7	345.3
Of which:		
with Internet access:		
thousand units	211.8	223.0
as a percentage of all personal computers	63.5	64.6
available for children's use:		
thousand units	63.4	67.5
as a percentage of all personal computers	19.0	19.5
units per 1,000 students	8.6	9.6

^{*} Excluding institutions under capital repair.

7.2. Availability of personal computers used for educational purposes

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

	2020			2021		
	Total	Within local area networks	With Internet access	Total	Within local area networks	With Internet access
Educational institutions implementing primary general, basic general, and secondary general education programmes	15.9	8.6	12.0	16.8	9.0	12.8
Educational institutions implementing secondary vocational education programmes	17.6	13.6	15.1	18.4	14.6	16.2
Higher education institutions	22.8	21.4	21.5	22.4	21.3	21.3

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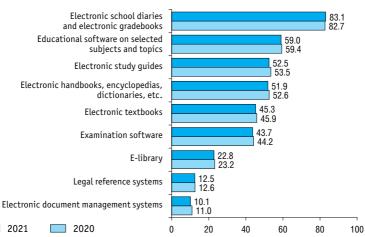
7.3. Distribution of educational institutions by top Internet access speed: 2021

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

	Under 256 kbit/s	256-511 kbit/s	512-999 kbit/s	1–1.9 Mbit/s	2- 29.9 Mbit/s	30-49.9 Mbit/s	50-99.9 Mbit/s	Over 100 Mbit/s
Educational institutions implementing primary general, basic general, and secondary general education programmes	1.2	1.6	1.7	2.3	12.1	9.8	42.3	29.0
Educational institutions implementing secondary vocational education programmes	0.8	1.2	1.4	2.3	19.2	12.9	27.1	35.1
Higher education institutions	0.2	0.2	0.4	0.8	12.2	10.1	23.2	52.7

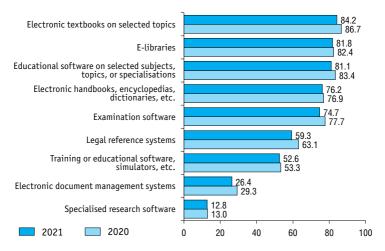
7.4. Availability of specialised software in educational institutions implementing primary general, basic general, and secondary general education programmes

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



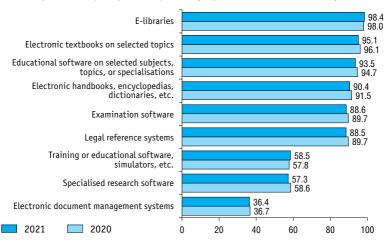
7.5. Availability of specialised software in educational institutions implementing secondary vocational education programmes

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



7.6. Availability of specialised software in higher education institutions

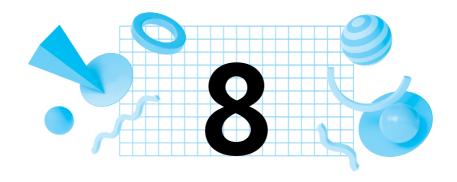
(at the end of the year; as a percentage of all educational institutions)



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7.7. Enrolment by mode of educational programme implementation (at the beginning of the academic year)

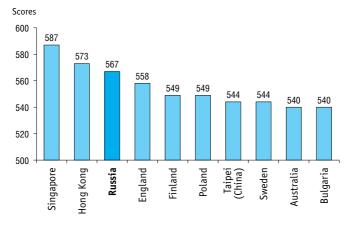
		E-learning		Distance learning			
	2020/2021	2021/2022	2022/2023	2020/2021	2021/2022	2022/2023	
Primary general, basic general, and secondary general education programmes:							
thousand persons	3095.4	3543.4	3948.2	2621.3	2940.7	3026.7	
as a percentage of the total	18.3	20.5	22.2	15.5	17.0	17.1	
Secondary vocational education programmes:							
thousand persons	1075.8	1159.5	1336.8	1428.8	1473.6	1599.3	
as a percentage of the total	32.2	33.8	37.6	42.8	42.9	44.9	
Higher education programmes:							
thousand persons	1530.9	1849.0	1906.6	1936.9	2171.9	2007.1	
as a percentage of the total	37.5	45.3	45.7	47.4	53.2	48.1	



RESULTS OF PROGRESS IN INTERNATIONAL READING LITERACY STUDY (PIRLS)

8.1. Top-10 countries in reading comprehension of 4th grade students*

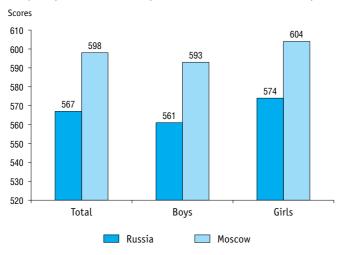
(average scale score according to the international 1000-score scale)



* Source: here and below in this section, IEA (https://www.iea.nl). Excluding countries (save for those given in figure 8.7), where students' assessment has been done in the beginning of 5th grade.

8.2. Reading comprehension of 4th grade students in Russia by gender: 2021

(average scale score according to the international 1000-score scale)



8.3. Trends in reading comprehension of 4th grade students in Russia*

(average scale score according to the international 1000-score scale)

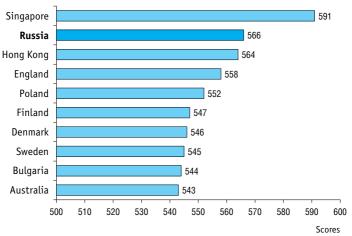


^{*} The trends between 2016 and 2021 are marked with dotted lines because PIRLS 2021 has revealed a general declining trend, which likely proves that the assessment has been done during the COVID-19 pandemic. That is why one should exercise caution when interpreting these results.

8.4. Top-10 countries by literary and informational texts' reading performance of 4th grade students: 2021

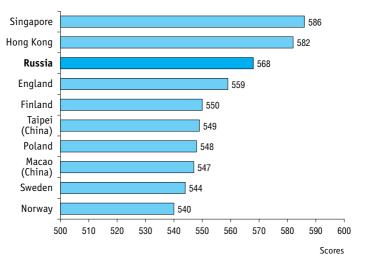
(average scale score according to the international 1000-score scale)

Literary texts



(continued)

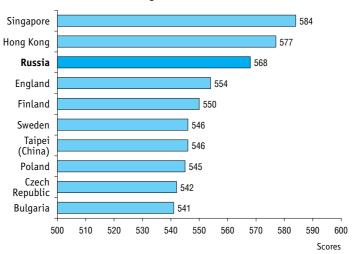
Informational texts



8.5. Top-10 countries by reading skills of 4th grade students: 2021

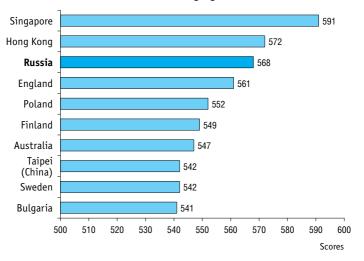
(average scale score according to the international 1000-score scale)

Focus on and retrieve explicitly stated information; make straightforward inferences



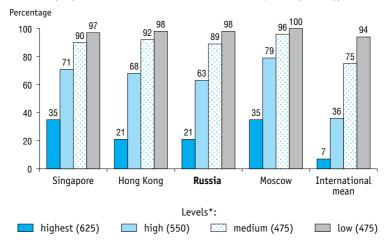
(continued)

Interpret and integrate ideas and information; examine and evaluate content, language and textual elements



8.6. Reading literacy level of 4th grade students: 2021

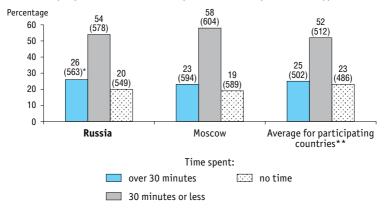
(4th grade students who have achieved each level of reading literacy)



^{*} Scores are given in parenthesis.

8.7. 4th grade students' use of digital devices to search and read information by category of time spent: 2021

(4th grade students who use digital devices during the school day)



^{*} Average scale score in reading comprehension is given in parenthesis according to the international 1000-score scale of 4th grade students in each group.

^{**} Including the assessment of students who started 5th grade.

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 annual reports of the Treasury of Russia on the implementation of the consolidated budget of the Russian Federation and state extra-budgetary funds according to Section 0700 'Education' were used as the source of data on public expenditure; the data on extra-budgetary funds were taken from the results of the federal statistical monitoring of institutions implementing the programmes of preschool education, primary general, basic general, and secondary general education, secondary vocational education, higher education, vocational training, additional general education programmes, additional professional (vocational) programmes. From 2019, since there is no statistical information on the expenses from non-budgetary funds, the data for preschool education include only public expenditure.

Expenditure on education is given in current and constant prices calculated using the GDP deflator.

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 rendered to the population are monetary equivalent of the following educational services rendered to the population: child care and instruction

at preschool education institutions, fee-based learning activities at educational institutions of all forms of ownership, additional education services and instruction of children and adults in sports, music, art, choreographic and other schools, during paid courses, extracurricular activities, workshops, study (hobby) groups, studios under educational institutions, private tutors, day care camps under educational institutions and other services. This indicator is calculated by Rosstat in accordance with Official Statistical Methodology of Compiling Official Data on Paid Services Rendered to the Population approved by the Rosstat order no. 927 of December 17, 2021.

Average consumer prices for the Russian Federation are calculated as the weighted average of prices for each service, inlcuding the annually adjusted consumption of that service in Russian regions.

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.

Progress in International Reading Literacy Study (PIRLS) is a monitoring survey done to compare the levels of reading and comprehension performance by 4th grade students in different countries of the world, as well as to find differences in the national education systems in order to improve the teaching of reading. The survey is done by the International Association for the Evaluation of Educational Achievement (IEA) and has been conducted every five years since 2001. Unlike in the previous cycles, the PIRLS 2021 has used the web interface that allows to effectively transfer the data in digital form. This enabled including various reading texts in a visually appealing format which motivates the students to read, work with texts and answer questions. The data have been collected within two years during the COVID-19 pandemic.

43 Russian regions have been selected to participate in PIRLS 2021, and in them - 204 educational institutions to conduct the main survey (on computers) and 92 auxiliary surveys (on paper). The sample included 7.9 thousand students from 309 4th grades.

Statistical data for foreign countries are based on the sources: Education at a Glance 2022: 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.

Electronic Resource

EDUCATION IN FIGURES: 2023

Pocket Data Book

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