

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION



MINISTRY OF EDUCATION OF THE RUSSIAN FEDERATION



FEDERAL STATE STATISTICS SERVICE



## HIGHER SCHOOL OF ECONOMICS

EDUCATION IN FIGURES POCKET DATA BOOK



MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION



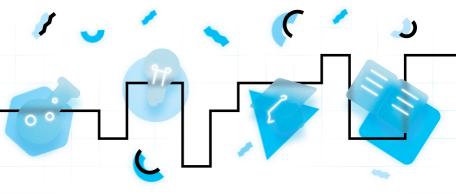
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## **EDUCATION IN FIGURES**

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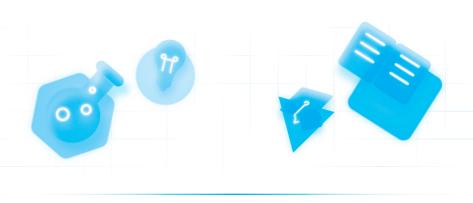
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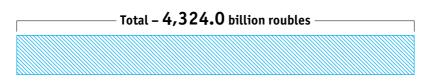
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– data not applicable.
In some tables, the sum of the breakdown may not add to the total because of rounding.

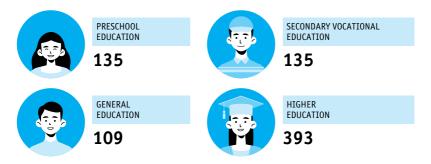


# Infographics: 2020

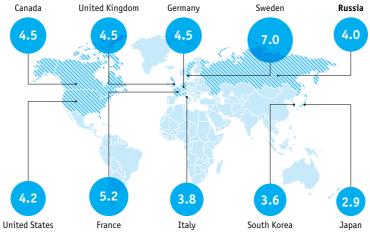
## **PUBLIC EXPENDITURE ON EDUCATION**



### Per student, thousand roubles

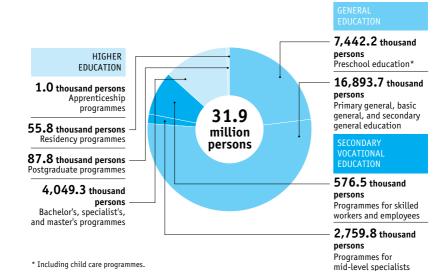


### Public expenditure on education as a percentage of GDP\*



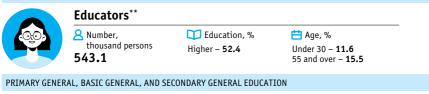
\* The data for foreign countries refer to 2017.

## ENROLMENT



## **PERSONNEL\***

### PRESCHOOL EDUCATION





### Teachers

Number, thousand persons 1,087.3 Education, %

Higher - 87.0

럼 Age, %

Under 35 – **23.1** 55 and over – **26.0** 

\* Excluding part-timers and independent contractors.

\*\* Including senior educators.

## **PERSONNEL**\*

#### SECONDARY VOCATIONAL EDUCATION



🙎 Number, thousand	📁 Education, %	럼 Age, %
persons 142.2	Higher – <b>95.9</b>	Under 35 – <b>22.2</b> 60 and over – <b>21.6</b>
Industrial traini	ng instructors	
Industrial traini	ng instructors	苗 Age, %

### HIGHER EDUCATION\*\*



**Teaching staff** 

Number, thousand persons 220.9 Scientific degree, %

Doctors of Sciences – **15.7** Candicates of Sciences – **58.2** PhD – **0.4** 

💾 Age, %

Under 30 – **4.8** 60 and over – **29.3** 

\* Excluding part-timers and independent contractors.

\*\* Bachelor's, specialist's, and master's programmes.



# Educational attainment of the population

### 1.1. Educational attainment of the population aged 25–64 by gender\*

18

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

	Total	Male	Female
Educational attainment:			
higher	304	264	339
incomplete higher	21	23	19
secondary vocational:			
programmes for mid-level specialists	347	331	361
programmes for skilled workers and employees	102	125	82
secondary general	168	187	152
basic general	52	63	43
primary general	4	5	3
No primary general education	2	2	2

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

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

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

	Total	Male	Female
Educational attainment:			
higher	405	337	472
incomplete higher	37	40	35
secondary vocational:			
programmes for mid-level specialists	283	303	263
programmes for skilled workers and employees	84	104	65
secondary general	135	149	123
basic general	48	59	37
primary general	4	6	3
No primary general education	3	3	2

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

### 1.3. Adult population with basic general education or lower (ISCED level 0, 1 and 2) by country: 2019

20

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

	Population aged 25–64	Population aged 25–34
Russia*	5.8	5.5
Canada	8.1	6.0
France	19.6	12.6
Germany	13.3	13.1
Italy	37.8	23.8
Japan		
South Korea	11.3	2.2
Sweden	16.4	16.3
United Kingdom	19.9	14.6
United States	9.2	7.2

\* Here and below in tables 1.4 and 1.5, according to the 2015 microcensus of Russia's population.

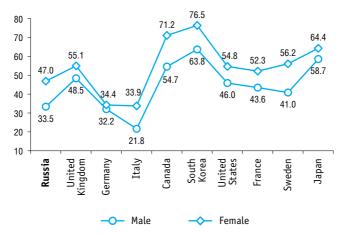
### 1.4. Adult population with higher education (ISCED level 6, 7 and 8) by country: 2019

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

	Population aged 25–64	Population aged 25–34
Russia	30.2	40.3
Canada	33.2	63.0
France	23.3	48.1
Germany	29.3	33.3
Italy	19.6	27.7
Japan	31.3	61.5
South Korea	36.1	69.8
Sweden	33.9	48.4
United Kingdom	37.2	51.8
United States	37.6	50.4



### 1.5. Population 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: 2019



## 1.6. Participation of the population in education by age and country: 2018 (percentage)

	Participation of population aged, years							
	6–14	15–19	20–24	25–29	30–39	40 and over		
Russia (2020)*	99.0	89.4	38.4	7.5	2.0	1.7		
Russia (2018)	99.1	88.7	37.8	6.7	2.1	1.7		
Canada	100	77.0	32.9	10.0	4.0	0.7		
France	100	87.0	38.2	7.6	1.7	0.4		
Germany	98.9	86.4	49.3	20.9	5.1	0.5		
Italy	97.6	85.3	37.4	12.8	3.1	0.6		
Japan	100							
South Korea	99.1	84.3	49.5	8.3	1.7	0.6		
Sweden	99.4	89.7	45.3	27.4	16.4	4.9		
United Kingdom	97.8	83.3	31.5	9.6	5.6	2.1		
United States	99.8	83.7	36.3	13.3	6.6	2.0		

\* Preliminary data.



### 1.7. Participation of the population aged 25–64 in lifelong learning by gender and labour force status: 2020

24

(as a percentage of the population; annual average)

	Total	Formal education (general or vocational)	Non-formal education (additional education/ vocational training)	Informal education
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
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



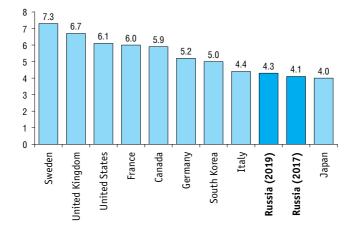
# Funding



# 2.1. Expenditure on education in the Russian Federation (billion roubles)

	2006	2010	2017	2018	2019	2020
Total:						
at current prices	1376.4	2259.1	3757.9	4268.6	4695.3	
at constant 2019 prices	4052.2	4254.0	4261.1	4400.2	4695.3	
Public expenditure:						
at current prices	1036.4	1893.9	3264.2	3668.6	4050.7	4324.0
at constant 2019 prices	3051.4	3566.3	3701.3	3781.7	4050.7	4285.6

### 2.2. Expenditure on education as a percentage of GDP by country: 2017\*



\* Here and below in tables 2.5 and 2.6, the data for Canada, South Korea, United States, Japan include expenditure under ISCED levels 1–8.

### 2.3. Public expenditure on education by level of budget system

	2000	2005	2010	2018	2019	2020
Federal budget:						
billion roubles	38.1	162.1	442.8	722.6	826.5	956.9
as a percentage of the federal budget expenditure	3.7	4.6	4.4	4.3	4.5	4.2
Consolidated budgets of Russian regions: billion roubles	176.6	628.6	1450.9	3015.6	3356.3	3552.5
as a percentage of the expenditures of consolidated budgets of Russian regions	17.1	21.4	21.9	25.4	24.7	22.8

# 2.4. Public expenditure on education by subsection of budget expenditure classification

(billion roubles)

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

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

29

\*\* In 2000 and 2005, 'Higher education' subsection; in 2010, 'Higher and postgraduate education' subsection.

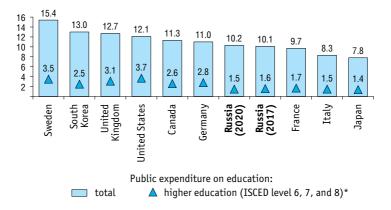
\*\*\* In 2000 and 2005, 'Retraining and upgrading of professional skills' subsection.

\*\*\*\* In 2005, 2010, 'Youth policies and children's rehabilitation and recovery' subsection.

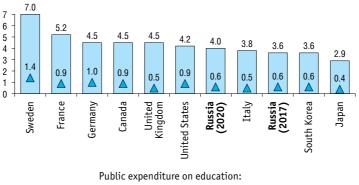
\*\*\*\*\* In 2000, 'Other expenditure on education' subsection.

# 2.5. Public expenditure on education as a percentage of the total public expenditure by country: 2017

30



\* Here and below in table 2.6, the data for United States include expenditure for ISCED level 5; data for Japan partially include expenditure for ISCED level 4.



# 2.6. Public expenditure on education as a percentage of GDP by country: 2017

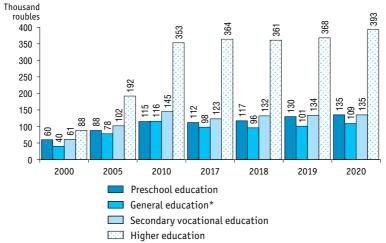
total  $\triangle$  highe

▲ higher education (ISCED level 6, 7, and 8)

# 2.7. Public expenditure on education per student by subsection of budget expenditure classification

32

(at constant 2020 prices)



\* Until 2017, the expenses on additional education of children were included in the 'General education' subsection.

### 2.8. Paid educational services\*

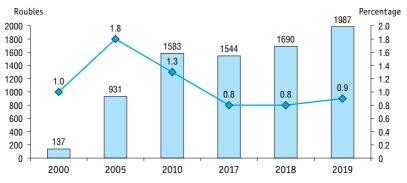
	2000	2005	2010	2017	2018	2019
Paid services:						
million roubles	41530	152670	326100	613294	655472	696769
as a percentage:						
of the previous year, <i>in comparable</i> prices	121.7	107.7	99.1	102.3	100.1	99.7
of all paid services rendered to the population	6.9	6.7	6.6	6.7	6.8	6.8
Paid services per capita, roubles	285	1064	2283	4177	4464	4748

\* Including estimates of non-observed activities.



2.9. Household expenditure on educational services\*

34



Expenditure on educational services per household member a year

• Educational services as a percentage of consumer expenditure

\* According to household budget surveys.

# **2.10. Average consumer prices for educational services** (at the end of the year; roubles)

	2000	2005	2010	2018	2019	2020
Attending day care centres, <i>per day</i> Additional studies for preschool children,	9.19	26.53	54.86	101.56	105.12	104.88
per academic hour				195.89	213.48	223.08
Tuition at private general education institutions, <i>per month</i> *	1703.76	4168.46	9420.77	20134.79	20612.15	20852.05
Additional studies at state and municipal intramural full-time general education institutions, per academic hour			79.08	140.91	157.95	155.62
Tuition at secondary vocational			73.00	140.31	157.55	155.02
education institutions, per semester	4232.07	8672.05	13981.85	31476.27	34143.28	32938.91



#### (continued)

	2000	2005	2010	2018	2019	2020
Tuition at state and municipal higher education institutions, per semester	7033.69	16026.90	25520.38	68260.10	74698.98	73170.35
Tuition at private higher education institutions, per semester	8310.66	15153.15	22983.61	51334.99	57867.67	53247.17
Foreign languages courses, per academic hour	31.09	72.24	148.21	281.33	312.05	311.21
Professional training courses, per academic hour	21.87	49.60	82.21	138.15	131.06	136.9
Basic category B driving course, per course			17725.13	26077.91	26721.79	27303.98

36

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

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

	2017	2018	2019	2020
Enrolment, at the beginning				
of the academic year*	543.2	542.1	543.4	576.5
Of whom studying:				
at the expense of budgetary funds	531.4	527.2	523.3	547.2
at state and municipal institutions	531.3	526.8	522.7	546.7
at private institutions	0.1	0.3	0.6	0.4
under commercial contracts of paid				
educational services provision	11.8	14.9	20.1	29.3
at state and municipal institutions	11.1	14.0	18.9	28.2
at private institutions	0.7	0.9	1.2	1.1

(thousand persons)

\* At the beginning of 2017/18, 2018/19, 2019/20, 2020/21 academic years, respectively.

### (continued)

	2017	2018	2019	2020
Entrants	205.5	207.1	209.7	213.8
Of whom studying:				
at the expense of budgetary funds	199.0	198.0	197.6	196.5
at state and municipal institutions	198.9	197.7	197.1	196.3
at private institutions	0.1	0.2	0.5	0.2
under commercial contracts of paid				
educational services provision	6.5	9.2	12.1	17.3
at state and municipal institutions	6.0	8.4	11.1	16.3
at private institutions	0.5	0.8	1.0	1.0
Graduates	181.1	168.6	165.5	142.5
Of whom studying:				
at the expense of budgetary funds	177.8	164.1	160.4	137.1
at state and municipal institutions	177.7	164.0	160.3	137.0
at private institutions	0.1	0.1	0.1	0.1
under commercial contracts of paid				
educational services provision	3.3	4.5	5.1	5.4
at state and municipal institutions	2.9	3.9	4.5	4.8
at private institutions	0.5	0.6	0.6	0.5

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

(thousand persons)

	2000	2005	2010	2018	2019	2020
Enrolment, at the beginning						
of the academic year*	2360.8	2590.7	2125.7	2464.3	2576.2	2759.8
Of whom studying:						
at the expense of budgetary funds	1590.1	1603.9	1485.9	1629.0	1654.9	1703.9
at state and municipal institutions	1590.1	1603.9	1485.7	1625.7	1650.6	1698.6
at private institutions			0.2	3.3	4.3	5.3
under commercial contracts of paid						
educational services provision	770.7	986.8	639.8	835.3	921.3	1055.9
at state and municipal institutions	718.5	869.1	541.2	639.0	693.0	771.4
at private institutions	52.2	117.7	98.6	196.4	228.3	284.5

\* Here and in table 2.13, at the beginning of 2000/01, 2005/06, 2010/11, 2017/18, 2018/19, 2019/20, 2020/21 academic years, respectively.

	2000	2005	2010	2018	2019	2020
Entrants	867.2	854.1	705.3	783.0	832.4	900.2
Of whom studying:						
at the expense of budgetary funds	516.5	500.5	489.8	476.4	484.7	499.7
at state and municipal institutions	516.5	500.5	489.7	474.7	483.1	497.7
at private institutions			0.0	1.7	1.6	2.0
under commercial contracts of paid						
educational services provision	350.7	353.6	215.5	306.6	347.8	400.6
at state and municipal institutions	325.9	310.4	182.1	228.4	253.6	278.2
at private institutions	24.8	43.2	33.5	78.2	94.1	122.4
Graduates	579.3	684.4	572.1	531.5	539.8	552.8
Of whom studying:						
at the expense of budgetary funds	414.2	399.3	356.8	354.6	354.5	360.3
at state and municipal institutions	414.2	399.3	356.8	354.2	354.1	359.6
at private institutions			0.0	0.4	0.5	0.7
under commercial contracts of paid						
educational services provision	165.1	285.1	215.3	176.9	185.3	192.4
at state and municipal institutions	153.5	252.1	178.9	130.5	137.9	141.6
at private institutions	11.6	33.0	36.4	46.4	47.4	50.9

## 2.13. Enrolment, entrants, and graduates within bachelor's, specialist's, and master's programmes by source of funds

(thousand persons)

	2000	2005	2010	2018	2019	2020
Enrolment, at the beginning						
of the academic year	4741.4	7064.6	7049.8	4161.7	4068.3	4049.3
Of whom studying:						
at the expense of budgetary funds	2802.0	3002.7	2619.8	1911.7	1890.1	1904.6
at state and municipal institutions	2802.0	3002.7	2619.3	1905.0	1883.3	1896.6
at private institutions			0.5	6.7	6.8	8.0
under commercial contracts of paid						
educational services provision	1939.4	4061.9	4430.0	2249.9	2178.2	2144.8
at state and municipal institutions	1468.8	2982.6	3229.5	1877.5	1853.0	1818.5
at private institutions	470.6	1079.3	1200.6	372.4	325.2	326.3

### (continued)

	2000	2005	2010	2018	2019	2020
Entrants	1292.5	1640.5	1399.5	1147.9	1129.4	1093.3
Of whom studying:						
at the expense of budgetary funds	586.8	613.7	519.2	528.0	508.2	521.9
at state and municipal institutions	586.8	613.7	519.0	525.8	506.0	518.7
at private institutions			0.2	2.2	2.2	3.3
under commercial contracts of paid						
educational services provision	705.7	1026.8	880.1	620.0	621.2	571.4
at state and municipal institutions	553.5	758.8	676.4	515.8	521.0	464.4
at private institutions	152.2	268.0	203.8	104.1	100.2	107.0

42

### (continued)

	2000	2005	2010	2018	2019	2020
Graduates	635.1	1151.7	1467.9	933.2	908.6	849.4
Of whom studying:						
at the expense of budgetary funds	451.8	517.2	546.7	406.5	413.3	405.8
at state and municipal institutions	451.8	517.2	546.6	404.8	411.7	404.3
at private institutions			0.1	1.7	1.6	1.5
under commercial contracts of paid						
educational services provision	183.3	634.5	921.2	526.7	495.3	443.6
at state and municipal institutions	127.1	461.2	631.2	406.9	388.8	363.2
at private institutions	56.2	173.3	290.1	119.8	106.6	80.4

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### 2.14. Enrolment, entrants, and graduates within postraguate, residency and apprenticeship programmes by source of funds

(at the end of the year; thousand persons)

	2019	2020
Enrolment in postgraduate programmes	84.3	87.8
Of whom studying:		
at the expense of budgetary funds	53.7	55.8
under commercial contracts of paid educational services provision	30.5	31.0
at the expense of institution's funds	-	1.0
Entrants to postgraduate programmes	24.9	27.7
Of whom studying:		
at the expense of budgetary funds	15.2	17.0
under commercial contracts of paid educational services provision	9.8	10.5
at the expense of institution's funds	_	0.3
Graduates of postgraduate programmes	15.5	14.0
Of whom studying:		
at the expense of budgetary funds	11.3	9.8
under commercial contracts of paid educational		
services provision	4.2	4.0
at the expense of institution's funds	-	0.1

### (continued)

	2019	2020
Enrolment in residency programmes	50.0	55.8
Of whom studying:		
at the expense of budgetary funds	24.5	29.0
under commercial contracts of paid educational		
services provision	25.5	26.7
at the expense of institution's funds	-	0.0
Entrants to residency programmes	26.8	29.0
Of whom studying:		
at the expense of budgetary funds	13.6	15.3
under commercial contracts of paid educational		
services provision	13.2	13.7
at the expense of institution's funds	-	0.0
Graduates of residency programmes	19.3	24.1
Of whom studying:		
at the expense of budgetary funds	8.3	10.7
under commercial contracts of paid educational		
services provision	11.0	13.3
at the expense of institution's funds	-	0.0

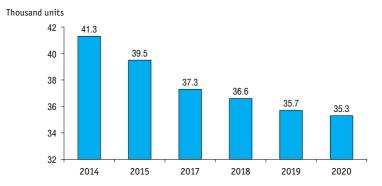
	2019	2020
Enrolment in apprenticeship programmes	0.8	1.0
Of whom studying:		
at the expense of budgetary funds	0.7	0.8
under commercial contracts of paid educational		
services provision	0.2	0.2
at the expense of institution's funds	-	0.0
Entrants to apprenticeship programmes	0.4	0.5
Of whom studying:		
at the expense of budgetary funds	0.3	0.4
under commercial contracts of paid educational		
services provision	0.1	0.1
at the expense of institution's funds	-	-
Graduates of apprenticeship programmes	0.3	0.4
Of whom studying:		
at the expense of budgetary funds	0.3	0.3
under commercial contracts of paid educational		
services provision	0.1	0.1
at the expense of institution's funds	-	0.0



Institutions engaged in educational activity

### **3.1. Preschool education institutions\*** (at the end of the year)

48



\* Including those under capital repair.

# 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	2017/18	2018/19	2019/20	2020/21
Total	68804	63174	50793	41958	41349	40823	40346
State and municipal institutions	68169	62448	50128	41103	40498	39966	39462
Urban areas	22694	21743	19505	17111	17004	16907	16812
Rural areas	45475	40705	30623	23992	23494	23059	22650
Private institutions	635	726	665	855	851	857	884
Urban areas			620	763	763	770	792
Rural areas			45	92	88	87	92

\* Including those under capital repair.



# 3.3. Educational institutions implementing secondary vocational education programmes

50

(at the beginning of the academic year)

	2017/18	2018/19	2019/20	2020/21
Vocational education institutions – total	3316	3311	3330	3273
State and municipal institutions	2999	2961	2922	2890
Private institutions	317	350	378	383
Separate subdivisions (branches) of vocational education institutions – total	599	609	630	608
State and municipal institutions	526	536	561	537
Private institutions	73	73	69	71
Higher education institutions – total	366	348	342	338
State and municipal institutions	288	289	292	294
Private institutions	78	59	50	44
Separate subdivisions (branches) of higher education institutions – total	473	443	420	435
State and municipal institutions	405	383	363	379
Private institutions	68	60	57	56

### 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	2018/19	2019/20	2020/21
Total	965	1068	1115	741	724	710
State and municipal institutions	607	655	653	496	495	497
Private institutions	358	413	462	245	229	213

\* In the 2000/01, 2005/06, 2010/11 academic years, including higher education institutions; in 2018/19, 2019/20, 2020/21 academic years, including research institutes implementing master's programmes.

### 3.5. Institutions implementing postgraduate programmes

(at the beginning of the academic year)

	2000	2005	2010	2018	2019	2020
Total Of which:	1362	1473	1568	1223	1187	1189
research institutes	797	833	809	618	599	588
higher education institutions additional vocational (professional)	565	640	748	585	567	566
education institutions			11	14	17	18

### 3.6. Institutions implementing residency and apprenticeship programmes

52

(at the end of the year)

Residency Apprenticeship programmes programmes 2019 2020 2019 2020 Total 192 36 36 178 Of which: research institutes 91 91 \_ \_ higher education institutions 79 80 36 36 additional vocational (professional) education institutions 6 7

### **3.7. Institutions implementing vocational training programmes** (at the end of the year)

	2017	2018	2019	2020
Vocational education institutions	2865	2768	2885	2971
Separate subdivisions (branches) of vocational education institutions	50	164	202	229
General education institutions	178	159	180	142
Separate subdivisions (branches) of general education institutions	2	4	1	3
Higher education institutions	159	173	188	216
Separate subdivisions (branches) of higher education institutions	80	121	105	121
Additional education institutions	109	143	123	129
Separate subdivisions (branches) of additional education institutions	1	-	-	_
Additional professional (vocational) education institutions	731	925	922	1070
Separate subdivisions (branches) of additional professional (vocational) education institutions	21	32	42	50
Other institutions*	603	535	539	634

\* Including separate subdivisions (branches).

# 3.8. Additional education institutions implementing additional general education programmes for children\*

	2000	2005	2010	2018	2019	2020
Total	8699	8876	8531	12735	11726	11474
Urban areas	6808	6691	6379	9134	8356	8180
Rural areas	1891	2185	2152	3601	3370	3294

\* The data include information on additional education institutions providing reports to the Ministry of Education of the Russian Federation.

# 3.9. Institutions implementing additional professional (vocational) programmes

(at the end of the year)

	2017	2018	2019	2020
Additional professional (vocational) education institutions	2194	1981	2117	2021
Vocational education institutions	2052	2044	2051	1952
Higher education institutions	1129	1121	1110	1117
Research institutes	118	137	134	136
Other institutions	606	552	623	617



### Enrolment



### 4.1. Enrolment by level of education and country: 2018 (million persons)

	Total			Education	
		preschool (ISCED level 0)	primary general (ISCED level 1)	basic general, secondary general, and secondary vocational – programmes for skilled workers and employees (ISCED level 2, 3, and 4)	secondary vocational – programmes for mid-level specialists, and higher (ISCED level 5, 6, 7, and 8)
Russia (2020)	31.9	7.4	7.4	10.1	7.0
Russia (2018)	31.0	7.6	7.1	9.6	6.7
Canada	7.3		2.4		1.6
France	15.6	2.5	4.3	6.1	2.6
Germany	17.1	3.2	3.0	7.7	3.1
Italy	10.9	1.5	2.9	4.6	1.9
Japan	20.2	2.8	6.5	7.0	3.9
South Korea	10.7	2.0	2.7	2.9	3.1
Sweden	2.9	0.6	0.9	1.0	0.4
United Kingdom	15.3		4.9	6.2	2.5
United States	78.6		25.0	26.1	18.9

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

(at the end of the year)

	2000	2005	2010	2018	2019	2020
Enrolment, thousand persons	4263.0	4530.4	5388.0	7582.4	7606.7	7442.2
Urban areas	3408.5	3611.0	4280.6	6083.6	6128.5	6018.9
Rural areas	854.5	919.4	1107.3	1498.9	1478.2	1423.3
Of the total enrolment – girls	2013.0	2144.1	2607.0	3665.1	3673.7	3589.3
Enrolment per 100 study places, persons	81	95	107	105	104	102
Urban areas	88	102	113	109	108	106
Rural areas	62	75	90	93	91	87
Short-term groups enrolment, thousand persons	-	70.7	126.2	169.0	157.7	132.5

\* 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

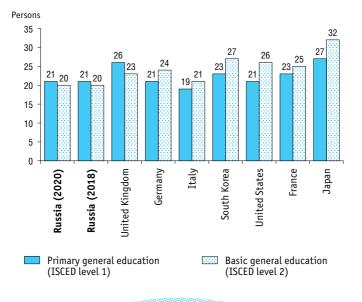
58

(thousand persons)

	2000/01	2005/06	2010/11	2018/19	2019/20	2020/21
Enrolment, at the beginning of the academic year	20553.5	15630.9	13642.4	16137.3	16565.6	16893.7
State and municipal institutions	20492.9	15558.5	13568.9	16013.6	16435.1	16749.9
Urban areas	14389.1	10844.7	9761.3	12120.5	12506.1	12785.8
Rural areas	6103.8	4713.7	3807.6	3893.0	3929.0	3964.1
Private institutions	60.6	72.3	73.5	123.7	130.4	143.8
Urban areas			68.8	112.1	118.5	131.2
Rural areas			4.7	11.6	12.0	12.6
Graduates who received:*						
a basic general education certificate	2199.5	1944.1	1354.1	1364.6	1411.4	1473.6
a secondary general education certificate	1457.8	1466.0	789.3	647.5	659.1	687.8

\* In 2000, 2005, 2010, 2016, 2018, 2019, and 2020, respectively.

### 4.4. Average class size by country: 2018



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# 4.5. Secondary vocational education programmes for skilled workers and employees

60

(thousand persons)

	2000	2005	2010	2018	2019	2020
Enrolment, at the end of the year	1614.9	1445.5	938.4	542.1*	543.4*	576.5*
Of whom female	639.2	537.1	339.7	163.6	159.3	174.2
Entrants	764.5	614.7	504.1	207.1	209.7	213.8
Graduates	687.2	625.2	482.2	168.6	165.5	142.5

\* At the beginning of the 2018/19, 2019/20, and 2020/21 academic years.

# 4.6. Graduates of secondary vocational education programmes for skilled workers and employees by field of education

(thousand persons)

	2016	2018	2019	2020
Total	184.4	168.6	165.5	142.5
Engineering and industrial technology sciences	139.7	129.2	124.8	105.3
Of which:				
civil engineering	15.4	15.7	15.2	16.5
computer science and engineering	7.9	6.8	6.5	6.7
electrical and thermal power engineering	6.6	6.6	6.7	6.9
mechanical engineering	24.6	24.9	24.7	24.9
surface transport engineering and technology	36.6	33.2	32.2	31.7
Healthcare and medical sciences	1.5	1.4	1.2	1.1
Agriculture and agricultural sciences	19.7	17.6	15.9	15.9
Social sciences	19.1	16.7	19.7	16.5
Of which:				
economics and management	8.3	6.2	5.5	5.5
services sector and tourism	9.5	9.7	13.4	10.1
Humanities	1.7	1.2	1.3	1.1
Culture and arts	2.6	2.5	2.5	2.7

#### 4.7. Secondary vocational education programmes for mid-level specialists

62

(thousand persons)

	2000/01	2005/06	2010/11	2018/19	2019/20	2020/21
Enrolment,						
at the beginning of the academic year	2360.8	2590.7	2125.7	2464.3	2576.2	2759.8
Intramural full-time	1721.5	1960.3	1578.2	2016.3	2134.4	2318.6
Intramural part-time	93.4	70.7	54.3	56.2	57.0	57.8
Extramural*	545.9	559.7	493.2	391.8	384.9	383.5
Of the total enrolment:						
female	1293.6	1327.0	1071.8	1221.3	1278.2	1376.3
enrolment in institutions:						
state and municipal	2308.6	2473.0	2026.8	2265.4	2343.6	2470.1
private	52.2	117.7	98.9	198.9	232.7	289.8
Entrants**	867.2	854.1	705.3	783.0	832.4	900.2
Graduates**	579.3	684.4	572.1	531.5	539.8	552.8

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

\*\* In 2000, 2005, 2010, 2018, 2019, and 2020, respectively.

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

(thousand persons)

	2016	2018	2019	2020
Total	469.1	531.5	539.8	552.8
Mathematics and natural sciences	0.3	0.2	0.2	0.3
Engineering and industrial technology sciences	200.0	223.2	230.9	237.5
Of which:				
civil engineering	26.4	29.4	30.5	30.1
computer science and engineering	27.7	29.5	30.3	32.5
information security	1.6	1.7	2.0	2.5
surface transport engineering and technology	41.9	45.7	45.7	46.5
Healthcare and medical sciences	54.7	65.2	68.8	70.6
Agriculture and agricultural sciences	18.3	21.6	22.5	24.3
Social sciences	135.7	148.2	143.5	144.0
Of which:				
economics and management	73.7	75.8	70.4	66.7
law	36.3	46.7	48.1	51.7
Education and pedagogical sciences	29.2	37.6	37.0	38.1
Humanities	10.6	13.2	13.9	14.3
Culture and arts	20.4	22.3	22.9	23.7

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

(thousand persons)

	2000/01	2005/06	2010/11	2018/19	2019/20	2020/21
Enrolment,						
at the beginning of the academic year	4741.4	7064.6	7049.8	4161.7	4068.3	4049.3
Intramural full-time	2625.1	3508.0	3073.7	2369.8	2386.6	2429.3
Intramural part-time	302.2	371.2	304.7	155.6	181.5	206.1
Extramural*	1814.1	3185.4	3671.3	1636.3	1500.3	1413.9
Of the total enrolment:						
female	2686.3	4113.8	4030.1	2225.6	2155.3	2127.1
enrolment in institutions:						
state and municipal	4270.8	5985.3	5848.7	3782.5	3736.3	3715.1
private	470.6	1079.3	1201.1	379.1	332.0	334.2
Entrants**	1292.5	1640.5	1399.5	1147.9	1129.4	1093.3

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

\*\* In 2000, 2005, 2010, 2018, 2019, and 2020, respectively.

At the beginning of the 2019/20 academic year, enrolment in bachelor's programmes – 2,773.4 thousand persons, specialist's programmes – 770.4 thousand persons, master's programmes – 505.5 thousand persons (68.5%, 19.0%, 12.5% of the total enrolment, respectively).

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

	2000	2005	2010	2018	2019	2020
Total	635.1	1151.7	1467.9	933.2	908.6	849.4
Graduates who received:						
an incomplete higher education certificate	2.4	4.3	8.0	_	_	_
bachelor's diploma	70.9	84.5	126.6	660.9	621.9	558.8
specialist's diploma	553.3	1051.8	1306.9	101.8	104.6	105.4
master's diploma	8.4	11.1	26.3	170.4	182.1	185.2



# 4.11. Graduates of bachelor's, specialist's, and master's programmes by field of education

66

(thousand persons)

	2018	2019	2020
Total	933.2	908.6	849.4
Mathematics and natural sciences	35.9	35.1	34.9
Engineering and industrial technology sciences	245.4	250.4	241.6
Of which:			
civil engineering	31.5	31.9	29.5
computer science and engineering	31.2	31.0	30.3
information security	4.4	4.5	4.6
surface transport engineering and technology	26.8	26.1	25.4
Healthcare and medical sciences	41.4	42.5	42.3
Agriculture and agricultural sciences	31.7	32.3	30.7
Social sciences	431.3	395.6	349.6
Of which:			
economics and management	254.4	222.4	184.4
law	120.2	117.8	110.8

			(continued)
	2018	2019	2020
Education and pedagogical sciences	89.0	92.2	88.9
Humanities	36.2	38.2	39.2
Culture and arts	22.2	22.4	22.3



#### 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: 2018

68

	Education	Art and humanities	Social sciences, journalism and information	Business, management and law	Natural sciences, mathematics and statistics
	(1)	(2)	(3)	(4)	(5)
Russia (2020)*	10.5	5.1	14.7	25.4	4.6
Russia (2018)	9.5	4.3	17.0	28.1	4.3
Canada	8.1	9.9	18.3	25.3	9.0
France	5.8	10.0	9.5	30.9	8.8
Germany	11.7	11.6	7.6	23.5	8.0
Italy	7.2	17.1	14.6	17.8	7.3
Japan	7.6	15.8	7.9	21.8	4.1
South Korea	8.2	17.0	7.5	16.2	5.7
Sweden	15.3	5.6	13.4	14.8	3.9
United Kingdom	8.5	15.5	12.7	22.9	14.3
United States	8.0	11.5	14.4	22.1	8.1

#### (continued)

	Information and com- munication technologies	Engineering, manufacturing and construction	Agriculture, forestry and fisheries; and veterinary sciences	Health and social services	Services sector
	(6)	(7)	(8)	(9)	(10)
Russia (2020)	5.0	22.1	3.6	5.9	3.2
Russia (2018)	4.7	20.4	3.4	5.3	2.9
Canada	2.5	9.9	1.8	14.3	0.6
France	3.7	11.4	0.9	16.0	2.9
Germany	5.0	21.9	1.8	6.4	2.6
Italy	1.2	15.2	2.4	14.7	2.7
Japan	n (7)*	17.9	3.3	10.1	2.6
South Korea	4.5	19.6	1.5	13.2	6.6
Sweden	3.2	16.7	0.5	25.1	1.6
United Kingdom	3.8	8.9	0.8	12.6	0.0
United States	4.5	7.3	1.0	17.0	6.0

\* The data are included into another column, which number is indicated in brackets after 'n'.

### 4.13. Postgraduate programmes\*

70

(thousand persons)

	2000	2005	2010	2018	2019	2020
Enrolment, at the end of the year	117.7	142.9	157.4	90.8	84.3	87.8
Of whom female	51.8	61.8	72.8	41.0	37.4	38.5
Entrants	43.1	46.9	54.6	27.0	24.9	27.7
Graduates	24.8	33.6	33.8	17.7	15.5	14.0
Of whom with defended thesis	7.5	10.7	9.6	2.2	1.6	1.2

\* Since 2019, enrolment in postgraduate programmes includes foreign citizens and individuals without citizenship enrolled on general terms.

At the end of 2020, enrolment in postgraduate programmes – 75.1 thousand persons (85.6% of the total enrolment); at the end of 2019 – 72.5 thousand persons (86.0% of their total enrolment).

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

	2019	2020
Total	15453	13957
Of which:		
Physics and astronomy	801	738
Biological sciences	818	671
Computer science and engineering	1164	841
Clinical medicine	1390	1323
Economics and management	1332	1229
Law	810	757
Education and pedagogical sciences	831	811
Linguistics and literary studies	717	616

# 4.15. Residency programmes (thousand persons)

	2	2019		2020
	Total	Of whom female	Total	Of whom female
Enrolment, at the end of the year	50.0	34.2	55.8	38.2
Entrants	26.8	18.4	29.0	19.7
Graduates	19.3	12.7	24.1	16.2

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

	2019	2020
Total	19.3	24.1
Clinical medicine	19.1	23.5
Of which by occupations:		
obstetrics and gynaecology	1.2	1.5
anaesthesiology and intensive-care medicine	1.2	1.3
neurology	0.9	1.2
therapy	1.0	1.7
dental orthopaedics	1.0	1.2
Health sciences and preventive medicine	0.2	0.2
Pharmacology and pharmacy	0.1	0.3

# 4.17. Apprenticeship programmes (thousand persons)

	2019		2020	
	Total	Of whom female	Total	Of whom female
Enrolment, at the end of the year	0.8	0.5	1.0	0.5
Entrants	0.4	0.2	0.5	0.3
Graduates	0.3	0.2	0.4	0.2

(persens)		
	2019	2020
Total	328	353
Architecture	4	1
Performing arts and creative writing	16	14
Musical arts	292	306
Fine and applied arts	11	28
Screen arts	5	4

### 4.18. Graduates of apprenticeship programmes by field of education (persons)



#### 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: 2018

76

	Internatio	nal students	Russian students
	Thousand persons	As a percentage of the total enrolment	abroad, thousand persons*
Russia (2020)	350.8	5.1	-
Russia (2018)	313.4	4.7	-
Canada	224.5	13.8	0.7
France	229.6	8.8	1.3
Germany	311.7	10.0	3.2
Italy	106.6	5.6	2.3
Japan	182.7	4.7	0.3
South Korea	84.7	2.7	0.6
Sweden	30.9	7.2	1.1
United Kingdom	452.1	18.3	0.8
United States	987.3	5.2	0.5

\* According to the data of the recipient countries.

# 4.20. Individuals who completed their studies within vocational training programmes

	20	18	20	19	2020	
	Thousand persons	Percentage	Thousand persons	Percentage	Thousand persons	Percentage
Total	1793.4	100	1777.9	100	1889.6	100
Of whom within:						
vocational training programmes for skilled workers and employees	1114.6	62.2	1165.9	65.6	1243.4	65.8
retraining programmes for skilled workers and employees	249.6	13.9	257.0	14.5	241.1	12.8
programmes aimed at upgrading professional skills of skilled workers and employees	429.2	23.9	355.0	20.0	405.1	21.4

### 4.21. Enrolment in additional education institutions implementing additional general education programmes for children\*

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(thousand persons)

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

\* The data include information on additional education institutions providing reports to the Ministry of Education of the Russian Federation.

# 4.22. Enrolment in institutions implementing additional general education programmes for children by field of education\*

	2018	2019	2020
Fields of education:			
technical	2120.2	2401.4	2823.4
scientific	2692.7	2773.5	2917.9
tourism and local studies	1135.5	1120.6	1044.9
social and pedagogical	6018.0	6362.9	6189.6
in arts:			
within general development programmes	7456.0	7313.3	6699.5
within prevocational education programmes	977.7	1006.2	926.9
in physical training and sport:			
within general development programmes	5100.9	4993.5	4748.5
within prevocational education programmes	988.2	742.9	618.2

(thousand persons)

\* According to Rosstat data.

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

	2018		20	)19	2020	
	Thousand persons	Percentage	Thousand persons	Percentage	Thousand persons	Percentage
Total	6024.8	100	6338.4	100	6663.8	100
Of whom within:						
professional (vocational) development programmes retraining programmes	5340.6 684.2	88.6 11.4	5603.7 734.8	88.4 11.6	6014.6 649.2	90.3 9.7



### Personnel

# 5.1. Number of students per teacher (educator) by country: 2018\* (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)***	18	17	12
Russia (2018)	14	n(4)***	n(4)***	17	21	12
Canada		17	n(2)***	13		
France	23	19	14	13	12	18
Germany	8	15	13	12	12	12
Italy	12	12	11	12	-	20
Japan	14	16	13	12		
South Korea	9	17	14	13		

#### (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)
Sweden	6	14	11	14	7	10
United Kingdom		20	16	15	n(6)***	15
United States		15	15	15	n(6)***	14

\* Here and below in table 5.2, the data for Russia refer to educators (including senior educators) in part of ISCED level 0; 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 foreign countries refer to ISCED level 3 general programmes; for Canada, United States, and Japan, all programmes (general and vocational).

\*\*\* Data are included into another column, which number is indicated in brackets after 'n'.

# 5.2. Female teachers (educators) as a percentage of the total number of teachers (educators) by country: 2018

	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, and higher education (ISCED level 5, 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)
Russia (2020)	99.6	99.4	n(4)**	83.6	63.9
Russia (2018)	99.7	99.4	n(4)**	83.7	63.4
Canada		75.0	n(2)**	75.0	49.3
France	91.1	83.0	60.6	60.0	44.0
Germany	95.5	87.3	66.4	58.8	39.8
Italy	98.9	95.5	77.0	67.9	37.4
Japan	96.9	64.4	43.0	30.8	28.4
South Korea	99.3	77.7	70.6	54.2	35.6

#### (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, and higher education (ISCED level 5, 6, 7, and 8)
	(1)	(2)	(3)	(4)	(5)
Sweden	95.6	81.9	65.2	53.8	45.1
United Kingdom	96.3	86.2	63.2	61.8	45.5
United States		87.1	67.1	57.9	49.9

\* The data for foreign countries refer to ISCED level 3 general programmes; for Canada, United States, and Japan, all programmes (general and vocational).

\*\* Data are included into another column, which number is indicated in brackets after 'n'.

### 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	2017	2018	2019	2020
Educators, thousand persons	446.7	485.2	533.8	537.1	539.9	543.1
Of whom:						
have educational attainment:						
higher	116.4	173.2	264.7	273.1	279.6	284.7
secondary vocational pedagogical –						
programmes for mid-level specialists	278.4	261.2	264.3	260.2	257.1	255.0
female		483.2	532.1	535.2	537.8	541.1
individuals under 30***		96.5	72.2	68.4	65.6	63.1
individuals aged 55 and over***		58.7	79.5	81.0	82.4	84.0
Number of children per educator, persons	10	11	14	14	14	14

\* Data for 2005 and 2010 refer to preschool education institutions and structural subdivisions of general education institutions implementing preschool education programmes.

\*\* Including part-timers.

\*\*\* Completed years as of January, 1.

### 5.4. Teachers in institutions implementing primary general, basic general, and secondary general education programmes

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

	2011/12	2017/18	2018/19	2019/20	2020/21
Teachers	1060.4	1079.9	1082.8	1083.3	1087.3
Of whom within primary general education programmes	278.9	311.3	315.7	318.8	321.9
Of the total number of teachers:					
have attained education:					
higher	888.1	938.2	941.7	942.6	946.3
of which pedagogical	841.9	904.4	910.9	912.2	916.2
secondary vocational – programmes for mid-level					
specialists	160.7	132.5	133.3	133.0	133.7
of which pedagogical	140.8	122.0	123.8	124.3	125.4



female	930.6	953.3	955.6	956.8	960.0
individuals under 30*		244.3	246.1	247.5	251.7
individuals aged 55 and over*	210.0**	261.6	271.1	278.2	283.0

\* Completed years as of January, 1.

\*\* Individuals of retirement age.

At the beginning of the 2020/21 academic year, the number of students per teacher – 19 (at the beginning of the 2019/20 academic year – 18).

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

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

	2017/18	2018/19	2019/20	2020/21
Teachers (excluding part-timers and independent contractors)	137.0	139.0	140.7	142.2
Of whom:				
within educational programmes:				
for skilled workers and employees	21.0	22.0	21.8	21.5
for mid-level specialists	102.4	104.5	106.0	108.5
have attained higher education	132.5	134.0	135.2	136.4
female	106.6	107.9	108.7	109.6
individuals under 35*	30.9	30.9	31.2	31.5
individuals aged 60 and over*	28.9	29.5	30.2	30.7
Part-timers	31.0	30.1	30.4	30.2
Of whom within educational programmes:				
for skilled workers and employees	1.9	1.8	1.9	1.9
for mid-level specialists	23.7	23.5	24.2	24.0

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\* Completed years as of January, 1.

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

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

	2017/18	2018/19	2019/20	2020/21
Industrial training instructors (excluding part-timers and independent contractors)	25.0	24.0	23.1	22.8
Of whom:				
within educational programmes:				
for skilled workers and employees	17.4	16.9	15.9	15.6
for mid-level specialists	4.9	5.0	5.0	5.1
having attained higher education	12.2	11.9	11.6	11.5
female	12.7	11.8	11.1	10.9
individuals under 35*	5.1	5.0	4.8	4.7
individuals aged 60 and over*	4.3	4.4	4.6	4.7

#### (continued)

	2017/18	2018/19	2019/20	2020/21
Part-timers	0.4	0.4	0.5	0.5
Of whom within educational programmes:				
for skilled workers and employees	0.2	0.2	0.2	0.3
for mid-level specialists	0.2	0.1	0.2	0.2

\* Completed years as of January, 1.

At the beginning of the 2020/2021 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 – 17 (at the beginning of the 2019/20 academic year, 13 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	2018/19	2019/20	2020/21
Teaching staff (excluding part-timers), thousand persons	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
with a scientific degree:				
Doctor of Sciences	37.8	36.6	35.8	34.6
Candidate of Sciences	140.5	135.6	131.8	128.5
PhD	0.6	0.7	0.9	0.8
with academic status:				
Professor	25.9	24.6	23.7	23.4
Associate Professor	90.3	88.0	86.8	84.3
female	139.9	134.8	131.4	128.5
individuals under 30*	14.8	13.1	11.7	10.7
individuals aged 60 and over*	69.5	67.8	66.4	64.6

#### (continued)

	2017/18	2018/19	2019/20	2020/21
Part-timers, thousand persons	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
Number of students per member of teaching staff, <i>persons</i>	11	12	12	12

\* Completed years as of January, 1.



### 5.8. Teachers and industrial training instructors in institutions implementing vocational training programmes

(at the end of the year; thousand persons)

	Teachers			Industrial training instructors		
	2018	2019	2020	2018	2019	2020
Total	15.5	15.2	19.1	12.4	12.2	14.1
Of whom:						
have educational attainment:						
higher	14.0	13.7	17.1	5.2	5.4	6.1
secondary vocational – programmes for mid-level specialists	0.8	0.8	1.1	4.4	4.1	4.8
secondary vocational – programmes for skilled workers and employees	0.1	0.1	0.1	1.2	1.1	1.8

#### (continued)

	Teachers			Industrial training instructors		
	2018	2019	2020	2018	2019	2020
female	7.3	7.0	8.6	2.5	2.5	3.2
individuals under 30*	1.3	1.2	1.7	0.9	0.9	1.0
individuals aged 60 and over*	2.7	2.9	3.2	2.1	2.2	2.3
Part-timers	4.6	4.4	4.6	1.2	1.0	1.2

\* Completed years as of January, 1.



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

(at the end of the year; thousand persons)

	2017	2018	2019	2020
Teaching staff (excluding part-timers)	280.7	267.7	252.6	247.5
Of whom:				
have attained higher education	199.3	189.8	179.6	176.2
of whom pedagogical	164.4	157.3	150.2	147.9
have attained secondary vocational education – programmes for mid-level specialists	74.1	72.3	68.5	67.4
of whom pedagogical	58.0	57.6	55.1	55.1
have attained secondary vocational education – programmes for skilled workers and employees	1.9	1.5	1.2	1.0
female	192.5	189.1	182.8	181.4
individuals under 35**	82.2	77.2	71.4	69.5
Part-timers	88.7	82.7	81.0	77.8

\* The data include information on additional education institutions providing reports to the Ministry of Education of the Russian Federation.

\*\* Completed years as of January, 1.

## 5.10. Teaching staff in institutions implementing additional general education programmes for children\*

(at the end of the year; thousand persons)

	2017	2018	2019	2020
Teaching staff (excluding part-timers)	874.9	799.0	765.2	687.5
Of whom:				
have attained higher education	680.2	617.6	592.6	530.6
of whom pedagogical	620.6	563.3	541.4	482.8
have attained secondary vocational education – programmes for mid-level specialists	183.5	171.5	162.5	147.2
of whom pedagogical	157.1	148.2	142.1	127.9
female	722.5	656.6	630.0	560.3
individuals under 30**	127.4	114.4	107.6	96.1
individuals aged 60 and over**	104.5	101.7	101.2	94.0
Part-timers	128.2	122.0	119.8	109.4

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\* According to Rosstat data.

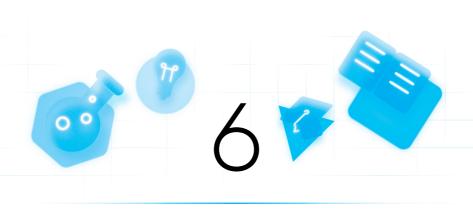
\*\* Completed years as of January, 1.

### 5.11. Teaching staff in institutions implementing additional professional (vocational) programmes

(at the end of the year; thousand persons)

	2017	2018	2019	2020
Teaching staff (excluding part-timers)	47.9	30.3	30.6	25.2
Of whom:				
with a scientific degree:				
Doctor of Sciences	6.5	3.8	4.6	3.2
Candidate of Sciences	21.0	12.0	12.2	9.7
PhD	0.1	0.0	0.0	0.0
with academic status:				
Professor	4.3	2.6	3.0	2.2
Associate Professor	13.0	7.5	7.5	6.2
female	26.9	17.5	18.5	15.6
individuals under 30*	3.3	1.6	1.6	1.3
individuals aged 60 and over*	12.0	7.2	8.3	8.9
Part-timers	21.0	14.9	14.9	13.6

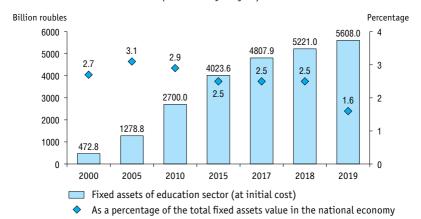
\* Completed years as of January, 1.



### **Fixed** assets

#### 6.1. Fixed assets of the education sector\* (at the end of the year)

100



 \* The 2000 data are presented according to Russian Classification of Economy Branches; for 2005–2016 – according to 0KVED, an ISIC/NACE-compatible Russian Classification of Economic Activities; for 2017– 2019 – according to 0KVED2, an ISIC/NACE-compatible Russian Classification of Economic Activities (rev. 2).

### 6.2. New premises of educational institutions

	2000	2005	2010	2018	2019	2020
Preschool education institutions, thousand places	6.8	5.0	22.9	49.9	105.4	97.1
Of which preschool education institutions in rural areas, <i>thousand places</i>	3.0	0.9	3.5	9.9	23.6	17.4
General education institutions, thousand study places	133.8	73.0	67.8	102.1	152.5	138.7
Of which general education institutions in rural areas, <i>thousand study places</i>	53.5	27.9	20.2	18.6	28.6	18.4
Vocational education institutions, thousand square metres of the total floor area of education and laboratory spaces (buildings)*				4.0	13.3	17.7
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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#### (continued)

	2000	2005	2010	2018	2019	2020
Vocational education institutions implementing secondary vocational education programmes for mid-level specialists, thousand square metres of the total fbor area of education and laboratory spaces (buildings)	18.2	11.5	60.4	_	_	_
Higher education institutions, thousand square metres of the total fbor area of education and laboratory spaces (buildings)	105.6	161.3	219.7	147.6	101.3	54.1

 \* 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.

### 6.3. Technical state and amenities of preschool education institutions

(at the end of the year)

	2013	2014	2017*	2018	2019	2020
Buildings which:						
require capital repair, thousand	5.6	4.2	3.3	3.1	2.9	2.9
as a percentage of the total number of buildings	10.6	8.2	6.9	6.6	6.2	6.3
are in emergency state (in disrepair), thousand	0.5	0.3	0.1	0.1	0.1	0.2
as a percentage of the total number of buildings	0.9	0.5	0.3	0.3	0.3	0.4
Institutions, which facilities have all kinds of amenities (water supply and plumbing, central heating, sewerage), <i>thousand</i>	40.8	40.1	34.3	33.7	33.1	33.0
as a percentage of the total number of institutions	90.3	91.1	92.1	92.2	93.1	93.8

\* In 2017 and further, including separate subdivisions (branches).

### 6.4. Technical state, amenities, and accessibility of institutions implementing primary general, basic general, and secondary general education programmes\* (at the end of the year)

		Total		U	rban area	as	R	Rural areas		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	
Buildings which: require capital repair, thousand	8.1	7.9	7.3	3.1	3.1	2.8	5.0	4.8	4.5	
as a percentage of the total number of buildings	11.7	11.6	10.8	10.6	10.7	9.7	12.5	12.3	11.7	
are in emergency state (in disrepair), <i>thousand</i>	0.6	0.6	0.5	0.1	0.1	0.1	0.5	0.5	0.3	
as a percentage of the total number of buildings	0.8	0.8	0.7	0.4	0.4	0.4	1.2	1.2	0.9	
are equipped with:										
water supply and plumbing, thousand	61.3	61.8	60.5	28.3	28.2	27.3	33.0	33.6	33.1	
as a percentage of the total number of buildings	88.7	90.6	90.3	96.5	96.9	95.5	83.0	85.9	86.4	

#### (continued)

		Total		U	rban area	as	R	Rural areas	
	2017	2018	2019	2017	2018	2019	2017	2018	2019
sewerage, thousand	60.6	61.1	59.9	28.2	28.0	27.2	32.4	33.0	32.6
as a percentage of the total number of buildings	87.6	89.6	89.4	96.1	96.4	95.1	81.4	84.5	85.2
central heating, thousand	62.7	62.8	60.7	28.3	28.2	27.3	34.3	34.6	33.4
as a percentage of the total number of buildings	90.6	92.1	90.7	96.6	97.1	95.4	86.2	88.4	87.1
are fully accessible to the disabled, <i>thousand</i>	28.5	30.3	31.9	15.1	15.9	16.4	13.4	14.4	15.5
as a percentage of the total number of buildings	41.2	44.4	47.6	51.4	54.7	57.1	33.7	36.8	40.5

\* Including separate subdivisions (branches).

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

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

	2017	2018	2019
Institutions which have the following facilities:			
assembly hall	58.2	59.0	59.6
gym	89.0	89.6	90.1
canteen or a dining room	97.2	97.5	97.6
library	94.6	95.0	95.1
equipped classrooms for:			
basics of computer engineering	91.0	91.4	91.7
physics	73.7	74.8	75.8
chemistry	72.8	73.4	74.4
biology	73.5	74.1	74.3
geography	67.5	68.0	68.2
foreign language	57.6	59.1	60.9
life and safety	52.8	54.1	55.6
extracurricular activities	37.8	38.7	39.9
workshops for handicraft lessons	69.4	69.4	68.9
home economics	56.7	57.3	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)

	2017	2018	2019
Institutions implementing secondary vocational education programmes	13.9	13.2	12.6
State and municipal institutions	14.0	13.4	12.9
Private institutions	10.4	9.4	7.9
Higher education institutions	14.2	14.0	13.9
State and municipal institutions	14.2	14.0	14.0
Private institutions	13.7	14.1	13.3

\* Excluding floor areas that are leased, subleased, or under capital repair.



# 108

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

	2015	2017	2018	2019
Number of students enrolled in secondary vocational education programmes for skilled workers and employees, who need a place in a dormitory, thousand persons	103.6	102.2	98.0	98.2
Of whom living in dormitories, percentage	92.8	94.1	94.0	94.2
Number of students enrolled in secondary vocational education programmes for mid-level specialists, who need a place in a dormitory, <i>thousand persons</i>	311.4	349.3	353.7	364.3
Of whom living in dormitories, percentage	90.8	90.9	91.7	91.9
Number of students enrolled in bachelor's, specialist's, and master's programmes, who need a place in a dormitory, <i>thousand persons</i>	897.4	874.4	876.9	894.6
Of whom living in dormitories, percentage	86.7	89.1	88.5	85.5



# Information and communications technologies in education

# 110

### 7.1. Digitisation of preschool education institutions\*

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

	2019	2020
Preschool education institutions with:		
personal computers	98.7	98.0
personal computers for children	30.9	31.8
personal computers with Internet access	95.3	94.9
e-mail address	98.9	98.3
website	98.9	98.3

\* Excluding institutions under capital repair.

# 7.2. Avaliability of personal computers used for educational purposes to students in educational institutions

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

		2018		2019			
	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	14.3	7.9	10.6	14.7	8.1	11.1	
Educational institutions implementing secondary vocational education programmes	16.1	12.3	13.1	16.9	13.2	14.3	
Higher education institutions	23.0	20.5	21.1	23.1	21.3	21.5	

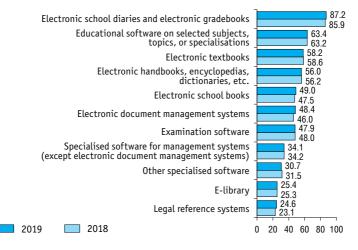
# 7.3. Distribution of educational institutions by top Internet access speed: 2019

(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	2.0-29.9 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	5.4	4.8	4.9	8.9	34.4	9.5	17.4	14.6
Educational institutions implementing secondary vocational education programmes	0.9	1.7	3.1	4.8	39.2	20.1	15.4	14.7
Higher education institutions	0.2	0.2	0.4	0.8	22.0	23.8	22.9	29.6

# 7.4. Use 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 using the Internet)

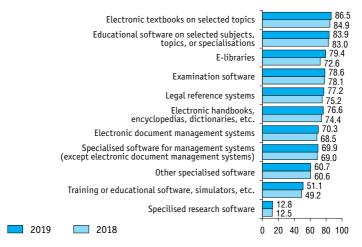


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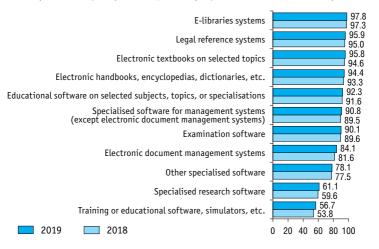
# 7.5. Use of specialised software in educational institutions implementing secondary vocational education programmes

114

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



# **7.6. Use of specialised software in higher education institutions** (at the end of the year; as a percentage of all educational institutions)





### 116

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

E-learning Distance learning 2018/2019 2019/2020 2020/2021 2018/2019 2019/2020 2020/2021 Primary general, basic general, and secondary general education programmes: thousand persons 2481.9 2694.8 3095 4 6142 797 2 26211 as a percentage of the total enrolment 154 16.3 18.3 3.8 4.8 15.5 Secondary vocational education programmes: thousand persons 553.8 650.4 1075.8 179.8 215.5 1428.8 as a percentage of the total enrolment 18.4 20.8 32.2 6.0 6.9 42.8 Higher education programmes: thousand persons 1530.9 534 4 676.9 839.9 469.6 1936.9 as a percentage of the total enrolment 16.2 20.5 37.5 11.2 13.0 474

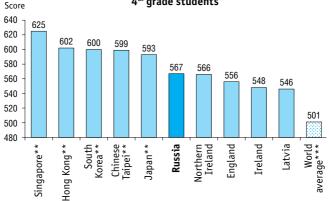


# Key TIMSS International Results in Mathematics and Science

# 118

# 8.1. Mathematics achievement by country: 2019\*

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



4<sup>th</sup> grade students

- \* Source (here and below in this section): TIMSS (http://www.timss.org/).
- \*\* Southeast Asian countries represented here (and used below in this section) traditionally hold the leading positions in the TIMSS rating.
- \*\*\* Here and below in this section, the world average is an average indicator for countries that participated in the study.

#### Score 640 616 620 612 607 594 600 578 580 560 543 540 524 520 519 517 520 500 489 ..... 480 Singapore Japan Ireland Lithuania Chinese Taipei Russia Israel World average South Korea Hong Kong Australia

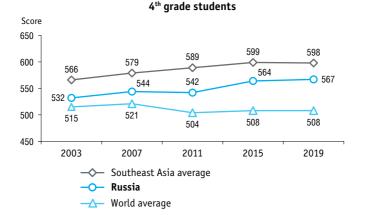
8<sup>th</sup> grade students

(continued)

## 120

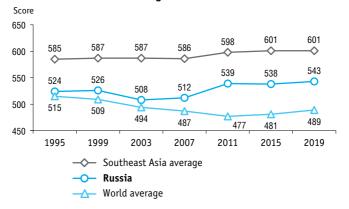
#### 8.2. Trends in mathematics achievement\*

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



\* The represented results refer only to the years in which Russia had participated in the corresponding study.

#### (continued)



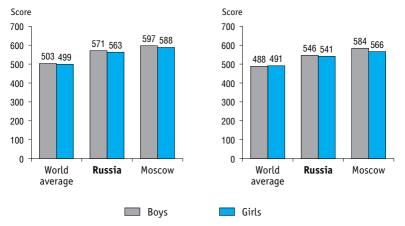
8<sup>th</sup> grade students



#### **8.3. Mathematics achievement by gender: 2019** (average scale score according to the international 1000-score scale)

4<sup>th</sup> grade students

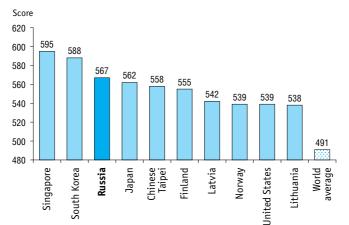
8<sup>th</sup> grade students



### 122

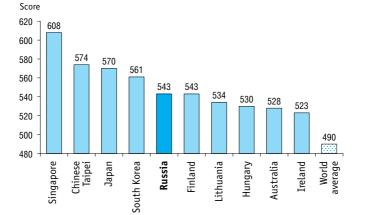
### 8.4. Science achievement by country: 2019

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



4<sup>th</sup> grade students

#### (continued)

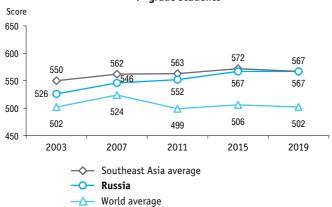


8<sup>th</sup> grade students

### 124

#### 8.5. Trends in science achievement\*

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

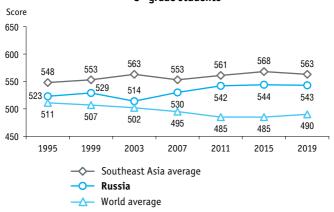


4<sup>th</sup> grade students

\* The represented results refer only to the years in which Russia had participated in the corresponding study.

125

#### (continued)



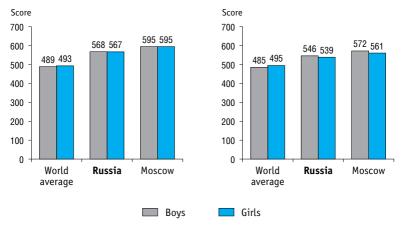
#### 8<sup>th</sup> grade students

#### 8.6. Science achievement by gender: 2019

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

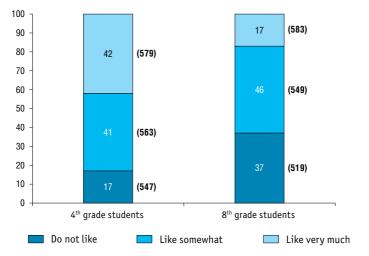
4<sup>th</sup> grade students

8<sup>th</sup> grade students



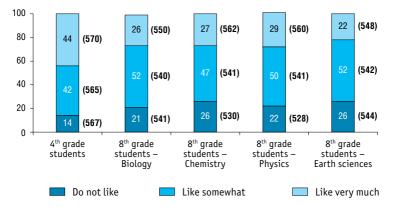
#### 8.7. Russian students' attitudes towards mathematics: 2019\* (as a percentage of all respondents)

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\* Mathematics achievement is given in parenthesis – an average scale score according to the international 1000-score scale for each share of respondents.

#### 8.8. Russian students' attitudes towards science: 2019\* (as a percentage of all respondents)



\* Science achievement is given in parenthesis – an average scale score according to the international 1000-score scale for each share of respondents.

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# 130 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 extra-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 2016, since there is no statistical information on the expenses from non-budgetary funds, the data for preschool education include only public expenditure.

**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 training provided by educational institutions of all forms of ownership, paid courses, workshops, study (hobby) groups, studios under general education institutions, services of private tutors, and other services in the education system. This indicator is calculated using the data of federal statistical surveys and non-observed activities assessment – according to the procedure approved by Order no. 643 of the Federal State Statistics Service (Rosstat) of September 29, 2017.

Average consumer prices for the Russian Federation are calculated as the weighted average of prices 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 set of classes (a student group from two or more classes instructed by one teacher at a small school) is considered as one class.

The data on institutions implementing secondary vocational education programmes are given excluding vocational education institutions of the Russian Federal Penitentiary Service; since 2000, including students enrolled in programmes for skilled workers and employees, since the 2018/2019 academic year, in programmes for mid-level specialists.

**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 4<sup>th</sup> and 8<sup>th</sup> grade students in mathematics and science. Over 500 thousand students from 64 countries participated in TIMSS Study in 2019.

To represent Russia in TIMSS-2019, 294 educational institutions were selected for 4<sup>th</sup> grade sample, and 296 educational institutions for 8<sup>th</sup> grade sample, from nine Russian regions. The evaluation was performed on the basis of the achievement results by 4.0 thousand 4<sup>th</sup> graders and 3.9 thousand 8<sup>th</sup> graders.



Sources of statistical data for foreign countries: OECD (2020), Education at a Glance 2020: OECD Indicators. OECD Publishing, Paris (https://doi. org/10.1787/69096873-en); OECD Online Education Database (Organisation for Economic Co- operation and Development; http://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.

#### **EDUCATION IN FIGURES**

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