Success and Failure of School Students: Parental Expectations and Teachers' Perceptions

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Received in June 2019

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Abstract. The article presents the results of RANEPA Center for Lifelong Learning Economics' Monitoring of Efficiency of School Education concerning teachers' and parents' perceptions of student achievement. The study involved analysis of official statistics and data from sociological surveys of parents, teachers, and school administra-

tors across different types of communities structured by the level of socioeconomic development.

The fact that student achievement is largely contingent on teacher quality is beyond dispute. It turns out, however, that teachers also attribute poor student performance to low parental involvement, socioeconomic disadvantage, health issues, and irresponsible student behavior. According to teachers, the proportion of students unable to cope with the curriculum increases consistently from grade to grade, peaking in Grades 8 and 9. Better student performance in Grades 10–11 (high school) may be explained by withdrawal of some students after completing the middle school level.

Most parents perceive their children's academic performance to be above average. At the same time, along with teachers, parents report a decline in student achievement in middle school. Families attribute this downswing in performance to various factors, including lack of subject-specific abilities, flawed curricula, and decline in student engagement. Only 9.3% of parents consider teaching quality to be a factor of low student performance. Lower average family income is associated with higher frequency of reporting low child performance at school. The influence of family income on student achievement may be explained, in particular, by differences in the opportunity to buy extra tuition, including private tutoring.

Keywords: monitoring, efficiency in

Translated from Russian by I. Zhuchkova. school education, professional teaching, learning outcomes of school students.

DOI: 10.17323/1814-9545-2019-4-71-92

Education is assigned a key role in the implementation of Russia' national goals and strategic objectives stipulated by Presidential Decree No.204 of May 7, 2018. Education National Priority Project aims to make Russian education globally competitive, boost Russia into the top ten in global school education rankings, and nurture well-balanced, socially responsible individuals based on the moral and ethical values shared by Russia's ethnic groups, as well as its historical, national and cultural traditions¹.

The Education Development state program calls for maintaining Russia's leading positions in the Progress in International Reading Literacy Study (PIRLS) and Trends in International Mathematics and Science Study (TIMSS) as well as improving its ranking in the Programme for International Student Assessment (PISA)².

International evidence indicates that learning outcomes of school students are largely contingent on their family, socioeconomic and ethnic backgrounds [Walton, Cohen 2011; Skiba et al. 2014; Morgan et al. 2016]. Academic performance at school correlates strongly with future income and employment, resulting in the reproduction of social class differences throughout generations. Reducing the achievement gap induced by socioeconomic factors has been a paramount theme in global education policy [OECD 2018a; Berkowitz et al. 2017; Cohen et al. 2009]. Achieving a high level of student performance and minimizing the differences in school students' learning outcomes are the two main objectives in secondary education that nearly every country pursues today.

Russian fourth- and eighth-graders have been showing good performance on the mathematical and science scales of TIMSS and PIRLS, and elementary school graduates have the highest scores in reading literacy [Kovaleva 2018].

At the same time, middle school graduates in Russia perform way below their international counterparts in meta-subject and real-world skills. Over 50% acquire only the baseline level of proficiency in international assessments, and about 20% perform below that level. Test results indicate that less than 30% of middle school graduates expect to complete university education (as compared to approximately 40%

Decree of the President of the Russian Federation No.204 On National Goals and Strategic Objectives of the Development of the Russian Federation for the Period up to 2024 of May 7, 2018. http://kremlin.ru/acts/bank/43027

² Resolution of the Government of the Russian Federation No.1642 On Approving State Programme: Education Development, 2013-2020 of December 26, 2017. http://government.ru/programs/202/events/

in the top ten countries) and only 5% demonstrate the highest level of problem-solving skills (as compared to at least 11% in the top ten countries)³ [Kovaleva 2018; Centre of Evaluating the Quality of Education, Institute for Strategy of Education Development, Russian Academy of Education; OECD 2018b].

Ways to improve learning outcomes are investigated in the context of refocusing the education system to developmental education, which requires upgrading the teaching methods and learning packages, ensuring consistent professional development of teachers, and introducing an integrated education monitoring system based on PI-SA-like tools [Kovaleva 2018].

Researchers emphasize that learning outcomes cannot be improved through initiatives in only one of the key directions. This problem requires a systemic approach, which includes creating a positive learning environment, enhancing the leadership competencies of school principals, and providing utmost support to disadvantaged students, families and schools [Kovaleva, Loginova 2017; Pinskaya et al. 2018; OECD 2018a; Barber, Mourshed 2009].

Learning outcomes should be improved by introducing a unified education assessment system in Russia that will involve national assessments of education quality, federal-level tests, surveys of professional competencies of teachers, state final examinations (Basic State Examination (BSE) and Unified State Exam (USE)), and international comparative studies. By providing objective data on learning outcomes, such a system will allow solving the identified problems in time and making necessary managerial decisions. However, it should be taken into account that every type of assessment procedure has limited implications [Kravtsov 2017].

Despite the progress made in the development of secondary education in Russia in the recent years, low academic performance of a large percentage of students remains one of the problems in Russian school education. The Education National Priority Project⁴ includes

The top 10 countries in PISA 2015 were Singapore, Japan, Estonia, Taiwan, Finland, Macao, Canada, Vietnam, Hong Kong, and China (4 provinces) in science (the focus of PISA 2015); Singapore, Hong Kong, Macao, Taiwan, Japan, China (4 provinces), South Korea, Switzerland, Estonia, and Canada in mathematics; Singapore, Hong Kong, Canada, Finland, Ireland, Estonia, South Korea, Japan, Norway, and New Zealand in reading. The best performance (Levels 5 and 6) in at least one domain was attained by Singapore, Taiwan, Hong Kong, China (4 provinces), Japan, South Korea, Macao, Canada, Switzerland, and Finland.

⁴ Decree of the President of the Russian Federation No.204 On National Goals and Strategic Objectives of the Development of the Russian Federation for the Period up to 2024 of May 7, 2018 (http://kremlin.ru/acts/bank/43027). Passport of National Priority Project "Education", approved by the Presidium of the Presidential Council for Strategic Development and National Priority Projects (Protocol No.16 of December 24, 2018).

federal initiatives that are supposed to play an important role in enhancing school students' learning outcomes: Success of Every Child, Contemporary School, and others. However, the objectives that must be reached to achieve the federal project goals, such as "provide the opportunity to learn technology", "modernize school infrastructure and facilities", or "develop methodology and criteria for school education assessment, drawing form international student assessment practices" can hardly improve academic achievement or make it easier for school students to attain the curriculum goals.

Information on how teachers and parents perceive the current state of school education, what they consider to be the reasons of low student performance, and how they assess the prospects for the development of school education is a critical resource in the elaboration of effective means to improve student achievement.

The Monitoring of Efficiency of School Education conducted by the Center for Lifelong Learning Economics under the Russian Presidential Academy of National Economy and Public Administration (RANEPA) on a yearly basis involves analysis of official statistics and data from sociological surveys⁵ of parents, teachers, and school administrators across different types of communities structured by the level of socioeconomic development. This article presents the results of the 2018 round of the survey⁶ in which teachers and parents assessed academic performance of school students and expressed their opinions on the reasons of student failure [Avraamova et al. 2019].

Student Performance as Perceived by School Teachers

The teachers who participated in the sociological survey were asked to assess the effectiveness of key education stakeholders including themselves.

Teaching quality and teacher's ability to solve complex problems, such as integrate new methods and technology, keep the curriculum relevant, and support failing students, are decisive factors for improving the quality of school education as such [Kosaretskiy, Froumin 2019].

In the survey, teachers evaluated the effectiveness of educational authorities, school administrators, students and their parents, and themselves. They rated their own work and that of school administrators as highly effective (90 and 89.2% of positive evaluations, respectively). About two thirds of teachers (61.5%) believe that students take

⁵ The sociological survey was managed by Prof. Elena Avraamova, Doctor of Sciences in Economics, Head of the Laboratory for the Studies of Social Development, Institute of Social Analysis and Forecasting, RANEPA, and Dmitry Loginov, Candidate of Sciences in Economics, Senior Researcher at the Laboratory for the Studies of Social Development, Institute of Social Analysis and Forecasting, RANEPA.

⁶ The 2018 round of the survey was carried out in Altai Krai, Stavropol Krai, Chelyabinsk Oblast, and St. Petersburg (limited sample).

Table 1. Teacher perceptions of key education stakeholders' effectiveness (% of row)

	How would you rate effectiveness of the education stakeholders?				
Education stakeholders	High	Fairly high	Satisfactory	Low	
Educational authorities	14.6	45.6	35.2	4.6	
Administrators in your school	33.9	55.3	10.1	0.7	
Teachers in your school	20.9	69.1	9.4	0.6	
Parents, in raising their children	1.7	27.9	62.7	7.7	
Students, in learning	2.1	36.4	58.0	3.5	

Source: RANEPA IAER CLLE Monitoring

Table 2. Teacher perceptions of changes in key education stakeholders' performance (% by row)

	How much would you say has performance of the education stakeholders changed in the recent years?				
Education stakeholders	Improved signifi- cantly	Improved some- what	Remained the same	Declined some- what	Declined signifi- cantly
Educational authorities	11.5	26.8	53.4	7.0	1.3
Administrators in your school	25.3	39.9	32.3	2.3	0.2
Teachers in your school	19.1	44.8	32.5	3.2	0.4
Parents, in raising their children	2.4	20.2	46.9	24.7	5.8
Students, in learning	3.9	29.0	45.1	19.2	2.8

little responsibility for their learning, and parents for raising their children (70.4%) (Table 1).

Among teachers, 22% report a decrease in student performance in the recent years, while 45.1% do not see any changes. Similar evaluations were obtained concerning parental involvement in raising their children, with 30.5% reporting a decline and 46.9% observing no change. Unfortunately, such evaluations may conceal low levels of professional competencies that teachers need to ensure effective parent-school communication (Table 2).

The survey asked teachers to assess the percentage of students who find it difficult to cope with the curriculum. According to 45.9% of the respondents, students who are unable to master the curriculum completely account for less than 5% in Grades 1 to 4. Slightly over a quarter of the teacher sample (26.1%) believe that the percentage of low performers in elementary school ranges from 5 to 10%. The share

Рис. 1. **Использование книжек с картинками в детском саду**, численность респондентов (доля выборки, %)



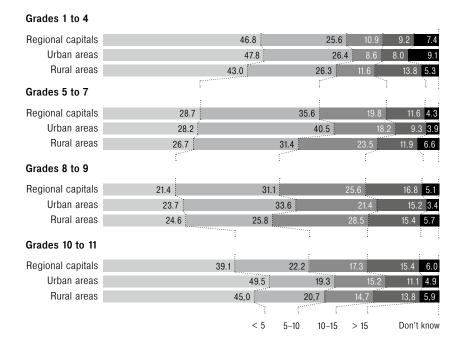
of difficult learners increases with age, peaking in Grades 8 to 9, where 10 to 15% of students are unable to complete the curriculum, according to 26% of the teachers, while 15.7% of the respondents report the percent to be over 15%. At the same time, an improvement in Grades 10 and 11 is reported, which may be explained by withdrawal of some students after completing the middle school level (Figure 1).

Curriculum attainment rates in Grades 1 to 4 are lower in rural schools than in urban ones. In Grades 5 to 7, a decline in student achievement is observed in both rural and urban areas, being more significant in the latter case. A number of international studies also confirm that rural students perform lower than their urban peers [Roscigno, Crowle 2001; AASA 2017; Showalter et al. 2017]. In Grades 8 to 9, a greater decline in curriculum attainment is observed in regional capitals, where 25.6% of teachers report a 10 to 15% student failure rate and 16.8% of the respondents believe that over 15% of students are unable to cope with the curriculum. Even in high school, where academic performance gets better overall, schools in regional capitals show a much smaller improvement than those in rural areas (Figure 2). This is probably because the percentage of middle school graduates who proceed to high school is much lower in rural schools than in urban ones, so the proportion of higher-motivated, capable learners may be higher in rural areas.

Reasons for Low Student Performance: Teachers' Perspective Student performance is largely contingent on teacher quality, which 63.5% of teachers agree with. This data is in line with the international findings indicating that teacher quality and cognitive skills play a key role in improving student achievement [Wenglinsky 2009; Hanushek, Piopiunik, Wiederhold 2019]. At the same time, teachers also attribute poor student performance to low parental involvement (86.7%), socioeconomic disadvantage (72.8%), and health issues (67.5%). Low parental involvement can be found even in seemingly functional, economically advantaged families. Only 14.3% of teachers consider low

Figure 2. Teacher perceptions of the percentage of school students unable to cope with the curriculum, by type of locality (%)

(How many students would you say are unable to cope with the school curriculum?)



Source: RANEPA IAER CLLE Monitoring

family income to be a strong predictor of student failure (Table 3). These results are consistent with the international finding that, "on the one hand, in all countries that participate in PISA, learning outcomes are associated with the social background of students and schools <...>. But on the other hand, the strength of the relationship between social background and the quality of learning outcomes varies substantially across education systems—proof that poor results are not inevitable for disadvantaged students." [Schleicher 2018]

According to 67.5% of teachers, low student performance may be caused by health issues, and 72.8% consider being raised in a disadvantaged family to be a significant factor.

About 60% of the teachers report student motivation for learning to be decreasing year after year (Table 4). It was already in the late 20th century that researchers pointed out that "motivated students are easy to recognize; they are difficult to find" [Scinner, Belmont 1993] and that intrinsic motivation of school students decreases from grade to grade [Harter 1981].

Improvements in education quality depend directly on improvements in student motivation. Teachers need to upgrade their educa-

Table 3. **Teacher perceptions of the reasons for student failure** (% of row)

To what extent do you think difficulties that some students have in learning can be explained by the following?

	To a great extent	To a limited extent	Not at all
Health issues	67.5	28.0	4.5
Being raised in a disadvantaged family	72.8	22.6	4.6
Coming from a migrant family	30.6	48.1	21.3
Low family income	14.3	49.5	36.2
Low parents' education levels	42.9	45.5	11.6
Low parental involvement	86.7	10.6	2.7
Overly complicated curriculum	44.4	44.6	11.0
Low teacher quality	63.5	24.2	12.3

Source: RANEPA IAER CLLE Monitoring

Table 4. **Teacher perceptions of changes in school (%)** How would you say the following has changed in the recent years?

	Decreased	Remained the same	Increased
Student motivation for learning	56.7	29.5	13.8
Drive to achieve career success among students	24.1	44.6	31.2
Parenting quality	73.1	23.6	3.3
Student misbehavior	20.8	46.7	32.5
Respect to adults, including teachers, from students	61.2	32.6	6.2
Mutual respect among students	48.1	46.6	5.3

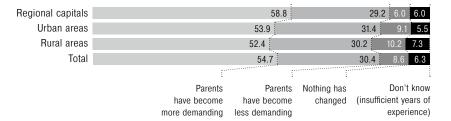
tional technology and teaching methods in order to prevent loss of motivation with age, get students engaged, and promote effort in the classroom—formation of such professional competencies should be the focus of the system of professional development and training for teachers [Kosaretskiy, Froumin 2019].

Although teachers report low parental involvement in education, 54.7% (58.8% in regional capitals) believe that families have become more demanding of education quality in the recent years (Figure 3).

Being dissatisfied with the learning outcomes, teachers are unable to offer classroom management techniques to improve them, 37.1%

Figure 3. Teacher perceptions of parents' demands of schooling quality (%)

(How would you say parents' demands of schooling quality have changed in the past year or two?)



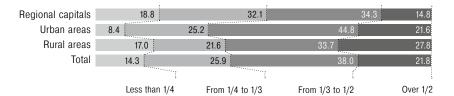
Source: RANEPA IAER CLLE Monitoring

considering it necessary to separate students by ability, 44.5% being convinced about the effectiveness of inclusive education, and 18.4% being unable to answer the question. There is considerable variation in how countries track and stream students, as there is no right way to design school systems. On the one hand, non-selective systems offer equitable opportunities to learn to all of their students; on the other hand, selection of high-performing students allows improving education quality and, hence, the learning outcomes of some students. Nevertheless, evidence from PISA shows that top-performing education systems do not separate students by ability. Researchers explain this fact, in particular, by assuming that societies and economies needed a relatively small cohort of well-educated people, the demand for which is ever growing today [Schleicher 2018].

Withdrawal from school after the completion of middle school level (Grade 9) is thought to be the optimal strategy for low-performing students by 64.9% of teachers, and only 2.5% consider it advisable for such students to proceed to high school. On the one hand, this may be indicative of teachers having unbiased perceptions of the high school curriculum and the challenges it may present for low performers. On the other hand, seeking to achieve a specific final outcome, teachers may be unwilling to retain low-performing students in high school as they will downgrade school performance indicators.

Over half of the teachers report that at least one third of students leave school after the completion of Grade 9. The highest percentage of teachers reporting withdrawal of over 50% of middle school graduates is observed in rural schools (27.8%). According to most urban teachers (44.8%), the share of middle school graduates leaving school ranges between 1/3 and 1/2. The opinion that students withdrawing from school after Grade 9 account for less than 1/4 is shared by nearly equal percentages of teachers in regional capitals and rural areas (18.8% and 17%, respectively) (Figure).

Figure 4. Teacher perceptions of the percentage of students leaving school after the completion of Grade 9, by type of locality (%) (How many students would you say leave school after the completion of Grade 9?)



Source: RANEPA IAER CLLE Monitoring

Source: Unified Information System of the Ministry of Education and Science of the Russian Federation. Form No. 00-1 "Information about an Institution Offering Academic Programs in Elementary, Middle and High School Education". Unified Information System of the Ministry of Education and Science of the Russian Federation. http://eis.mon. gov.ru

Table 6. Percentage of middle school graduates proceeding to high school, Russian Federation (%)

	2016	2017
Urban areas	62.0	60.9
Rural areas	47.3	45.9

Over half of the teachers surveyed (52.6%) claim that the percentage of middle school graduates withdrawing from school has grown in the recent years, which is in line with the statistics. In 2016, 62.0% of urban middle school graduates and 47.3% of rural ones proceeded to Grade 10, as compared to 60.9 and 45.9% in 2017, respectively (Table 6).

It cannot be asserted unequivocally that students unable to cope with the curriculum are more likely to withdraw from school. The percentage of A and B students among those transitioning to vocational schools has been increasing in the recent years. According to RIA Novosti⁷, students applying for a number of vocational schools in Russia have a mean grade of B and higher. Vocational instruction provides an opportunity to acquire a trade, enter the labor market earlier than college students, and achieve financial independence—which probably makes this track attractive for young people and their parents.

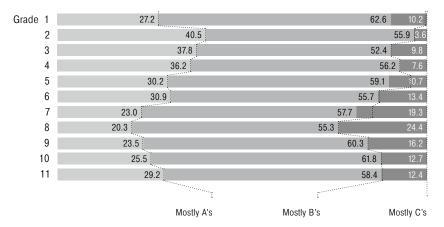
Learning Outcomes as Perceived by Parents

A lot of education system researchers hold that satisfaction with the quality of education does not depend on real-life outcomes or learning environment characteristics. However, they consider parents' opin-

Guide for Entrants: Vocational Schools of Russia 2018. RIA Novosti. https://sn.ria.ru/20180425/1518278906.html

Figure 5. Parental perceptions of children's academic performance, by grade of school (%)

(How would you rate your child's overall academic performance?)



Source: RANEPA IAER CLLE Monitoring

Table 7. Parental perceptions of students' academic performance, by type of locality (%) (How would you rate your child's overall academic performance?)

	Mostly A's	Mostly B's	Mostly C's
Regional capitals	31.6	57.2	11.2
Urban areas	27.4	60.2	12.4
Rural areas	30.4	55.0	14.6
Total	29.6	57.6	12.8

Source: RANEPA IAER CLLE Monitoring

ions to be an important criterion in education quality assessment [Kosaretskiy, Froumin 2019; Ragoznikova 2012; Churilina, Egorova, Chuklina 2017].

Indeed, the monitoring data indicates that most parents perceive their children's academic performance to be above average. Only 12.8% of families reported their children getting mostly C's (14.6% in rural areas) (Table 7).

At the same time, along with teachers, parents report a decline in student achievement in middle school. At the level of elementary school, mostly C's performance is reported most often by parents of first-graders (where formal scores are not awarded) and third-graders. Other than that, the percentage of parents reporting mostly C's performance more than doubles from 10.7% in Grade 5 to 24.4% in Grade 8 (Figure 5).

Table 8. Parental perceptions of student performance, by family income (%)

(How would you rate your child's overall academic performance?)

	Mostly A's	Mostly B's	Mostly C's
High	35.7	53.2	11.1
Middle	30.1	58.6	11.3
Low	22.5	56.9	20.6

Source: RANEPA IAER CLLE Monitoring

Table 9. Enrollment of students in extracurricular education, by family income (as reported by parents, %) (Is your child enrolled in any extracurricular classes?)

	Yes	Not anymore	No
Upper-middle	66.8	15.7	17.4
High	73.3	15.6	11.1
Middle	65.1	16.3	18.6
Lower-middle	62.9	17.1	20.1
Low	52.5	18.0	29.5
Total	64.8	16.4	18.9

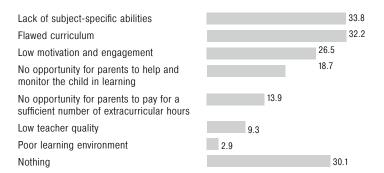
Table 10. **Enrollment of students in extracurricular education, by academic performance** (as reported by parents, %) (Enrollment in extracurricular education)

	Yes	Not anymore	No
Mostly A's	71.6	10.5	17.9
Mostly B's	65.1	17.3	17.6
Mostly C's	47.7	25.6	26.7
Total	64.8	16.4	18.9

Source: RANEPA IAER CLLE Monitoring.

The percentage of parents reporting low student performance correlates negatively with family income, being the lowest (11.1%) among families that perceive themselves as economically advantaged. The same socioeconomic group features the highest incidence of reporting mostly A's performance (35.7%). A reverse trend is observed with low-income families, which are more likely to report mostly C's than

Figure 6. Parental perceptions of the reasons for low student performance (%, more than one answer was possible) (In your opinion, what is preventing your child from doing better at school?)



Source: RANEPA IAER CLLE Monitoring

mostly A's performance (Table 8). This is where the opinions differ between parents and teachers, as the latter do not assign a substantial role in academic achievement to family income.

Children from economically advantaged families may be more successful at school, in particular, because their parents have the opportunity to buy extra tuition. More than half of the families with high self-reported income enroll their children in extracurricular education, including private tutoring (Table 9).

Indeed, better-performing students are more likely to be enrolled in extracurricular education. Such enrollment was reported by 71.6% of A students' parents and only 47.7% of C students' families (Table 10).

Most often, parents attributed low academic performance of their children to lack of subject-specific abilities (33.8%), flawed curriculum (32.2%), and low student engagement (26.5%). They also mentioned inability to pay for sufficient extracurricular hours as one of the barriers to student performance improvement (13.9%). Only 9.3% of the parents referred to low teacher quality as a reason for student failure, and 30.1% observed no barriers at all in the existing education system (Figure 6).

Parent-reported reasons for low student performance can be grouped into three main categories: (i) student abilities and motivation, (ii) school effectiveness, and (iii) family resources. The factors that families associate with children's individual qualities and aspirations and with the process of schooling are rated by them to be the most powerful predictors of learning outcomes.

International studies of parental involvement in education mostly focus on the factors affecting learning outcomes, such as sociocultural capital, assistance with homework, emotional support for children, and interaction with teachers. There are few publications that investigate into the reasons for student success or failure as perceived

by parents. Mothers and fathers usually attribute their children's academic success to ability and their failure to effort [Rytkönen, Aunola, Nurmi 2005]. Middle-class families tend to think that students' ability and effort are the primary drivers of their success, whereas parents from other socioeconomic backgrounds look more towards the importance of the student-teacher relationship. In student failure studies that involved students, parents, and teachers, the majority of participants pointed their finger away from themselves with the students and parents tending to blame the teacher; and the teachers being more likely to look to students and parents [Peterson et al. 2011].

International practices designed to improve learning outcomes of school students do not provide the exact answers as to what has to be done to enhance the school system. Yet, analysis of international experience allows identifying some common features typical of the world's top-performing education systems. First, such systems are concerned about encouraging the skills and abilities of every child instead of segregating students and supporting only the most capable of them. For this reason, the top-performing systems attract the most talented teachers to the most challenging classrooms and the strongest school leaders to the most disadvantaged schools. Second, teacher education is assigned a key role, as the quality of a school system will never exceed the quality of its teachers. The top-performing countries encourage their teachers to be innovative and engage in professional development, and they also build horizontal, not vertical relationships between school administrators and teachers [Schleicher 2018].

Take, for instance, Canada's school improvement reform of 2003-2007 (Toronto, Ontario), which led to a substantial enhancement in education quality. First of all, the reformers proceeded from the assertion that all children can learn, so educators should seek to provide a high level of achievement, while rendering individualized support to every learner. Second, the reform set clear priorities, focusing on the key areas of development, as the authors believed that frequent priority modifications result in fragmented solutions. Third, special emphasis was placed upon leader development at all levels of the education system and active communication with all reform participants, including those being sceptic about the outcomes. The success of the reform was largely provided by consistently building capacity within schools, promoting school collaboration, and improving access to effective practices. Particular attention was paid to the precision in using the elaborated strategies and effective practices. The authors insisted on ensuring school accountability and performance feedback, so that data on the outcomes attained locally could be used for identifying effective practices and making necessary managerial solutions. Finally, the "all means all" principle implied changes for every school, support for every single student, and shared responsibility for the progress of the reform and timely achievement of its goals. Researchers

believe that the Canadian initiative largely owned its success to the understanding of its mission shared by all education stakeholders, which resulted in funds being allocated to exactly where they were needed most at every stage. Of course, Canada's education system still has issues that need to be solved, but it has been improving dynamically, breaking Canada into the ten top-performing school systems in the world [Fullan 2010; 2011; Hargreaves, Fullan 2015; Levin 2008].

Therefore, the vital mechanisms of education quality improvement include timely and individualized support for students, enhancement of the curriculum, integration of innovative teaching methods and educational technology, improvements in professional development for teachers, and an integrated education monitoring system. The most important, however, is that all education stakeholders should recognize the significance and sharedness of the strategic objectives faced by the education system, attainment of which will determine the achievement of Russia's national development goals.

References

- AASA, The School Superintendents Association (2017) Leveling The Playing Field For Rural Students. Available at: https://aasa.org/uploadedFiles/Policy_and_Advocacy/Resources/AASA_Rural_Equity_Report_FINAL.pdf (accessed 20 October 2019).
- Avraamova Y., Klyachko T., Loginov D., Semionova Y., Tokareva G. (2019) Monitoring obshchego obrazovaniya: sotsiologicheskie aspekty [Sociological Aspects of Monitoring General Education], Moscow: Delo, Russian Presidential Academy of National Economy and Public Administration.
- Barber M., Mourshed M. (2009) Shaping the Future: How Good Education Systems Can Become Great in the Decade Ahead. Paper presented at the International Education Roundtable (Singapore, 7 July 2009). Available at: https://docplayer.net/28547570-Shaping-the-future-how-good-education-systems-can-become-great-in-the-decade-ahead.html (accessed 20 October 2019).
- Berkowitz R., Moore H., Astor RA., Benbenishty R. (2017) A Research Synthesis of the Associations between Socioeconomic Background, Inequality, School Climate, and Academic Achievement. Rewiew of Educational Research, vol. 87, no 2, pp. 425–469. DOI: 10.3102/0034654316669821.
- Center for Strategic Development, National Research University Higher School of Economics (2018) Dvenadtsat resheniy dlya novogo obrazovaniya. Doklad [Twelve Solutions for the New Education: Report]. Available at: https://www.csr.ru/wp-content/uploads/2018/04/Doklad_obrazovanie_Web.pdf (accessed 20 October 2019).
- Centre of Evaluating the Quality of Education, Institute for Strategy of Education Development, Russian Academy of Education. Osnovnye rezultaty mezhdunarodnogo issledovaniya PISA–2015 [The Main PISA 2015 Results]. Available at: http://centeroko.ru/public.html#pisa_pub (accessed 20 October 2019).
- Churilina I., Egorova E., Chuklina N. (2017) Monitoring kak sposob upravleniya konkurentosposobnostyu obrazovatelnogo uchrezhdeniya [Monitoring as Way of Management of Competitiveness of Educational Institution]. Management of Education: Theory and Practice, no 2 (26), pp. 43–53.
- Cohen J., McCabe EM., Michelli NM., Pickeral T. (2009) School Climate: Research, Policy, Practice, and Teacher Education. Teachers College Record, vol.111, no 1, pp.180–213.

- Fullan M. (2010) All Systems Go. Thousand Oaks: Corwin Press; Toronto: Principals Council.
- Fullan M. (2011) Change Leader. San-Francisco, CA: Jossey-Bass.
- Hanushek E., Piopiunik M., Wiederhold S. (2019) Do Smarter Teachers Make Smarter Students? International Evidence on Teacher Cognitive Skills and Student Performance. Education Next, vol. 19, no 2, pp. 57–64.
- Hargreaves A., Fullan M. (2015) Professional Capital: Transforming Teaching in Every School Teachers. New York: Teachers College.
- Harter S. (1981) A Model of Mastery Motivation in Children: Individual Differences and Developmental Change. The Minnesota Symposium on Child Psychology (ed. W.W. Collins), vol. 14, pp.215–255.
- Kosaretskiy S., Froumin I. (2019) Rossiyskaya shkola: nachalo XXI veka [Russian School in the Early 21st Century], Moscow: Higher School of Economics.
- Kovaleva G. (2018) Vozmozhnye napravleniya sovershenstvovaniya obshchego obrazovaniya dlya obespecheniya innovatsionnogo razvitiya strany (po rezultatam mezhdunarodnykh issledovaniy kachestva obshchego obrazovaniya). Tezisy, obsuzhdavshiesya na zasedanii Prezidiuma RAO 27 iyunya 2018 g. [Possible Areas for General Education Improvement to Ensure Innovative Development of Russia (Based on International Assessments of School Education Quality). Talking Points Discussed at the Russian Academy of Education's Presidium Meeting on June 27, 2018]. Available at: http://centeroko.ru/public.html (accessed 20 October 2019).
- Kovaleva G., Loginova O. (2017) Uspeshnaya shkola i effektivnaya sistema obrazovaniya: kakie factory pomogayut priblizitsya k idealu? Po dannym issledovaniya PISA-2015 [Successful School and Effective System of Education: Which Factors Help to Approach the Ideal? (Based On PISA-2015)]. Pedagogicheskie izmereniya, no 2, pp. 69–80.
- Kravtsov S. (2017) Uchastie Rossiyskoy Federatsii v mezhdunarodnykh sravnitelnykh issledovaniyakh kachestva obrazovaniya [Participation of the Russian Federation in International Education Quality Assessments]. Pedagogicheskie izmereniya, no 2, pp. 8–13.
- Levin B. (2008) How to Change 5000 Schools. Cambridge, MA: Harvard Education.
- Morgan PL., Farkas G., Hillemeier MM., Maczuga S. (2016) Science Achievement Gaps Begin Very Early, Persist, and Are Largely Explained by Modifiable Factors. Educational Researcher, vol. 45, no 1, pp. 18–35. DOI: 10.3102/0013189X16633182.
- OECD (2018a) Education Policy Outlook 2018: Putting Student Learning at the Centre. Paris: OECD. https://doi.org/10.1787/9789264301528-en
- OECD (2018b) PISA 2015 Results in Focus. Available at: www.oecd.org/pisa/pisa-2015-results-in-focus.pdf (accessed 20 October 2019).
- Peterson E.R., Rubie-Davies C.M, Elley-Brown M., Widdowson D.A., Dixon, R.S., Irving E. (2011) Who Is to Blame? Students, Teachers and Parents Views on Who is Responsible for Student Achievement. Research in Education, vol. 86, no 12, pp. 1–12.
- Pinskaya M., Khavenson T., Kosaretsky S., Zvyagintsev R., Mikhailova A., Chirkina T. (2018) Poverkh barerov: issleduem rezilentnye shkoly [Above Barriers: A Survey of Resilient Schools]. Voprosy obrazovaniya / Educational Studies Moscow, no 2, pp. 198–227. DOI: 10.17323/1814-9545-2018-2-198-227
- Ragozinnikova L. (2012) Otsenka kachestva obrazovaniya glazami obuchayush-chikhsya, roditeley i pedagogov [Quality Assessment of Education through the Eyes of the Studying, Parents and Teachers]. Innovative Projects and Programs in Education, no 1, pp. 69–75.
- Roscigno V., Crowle M. (2001) Rurality, Institutional Disadvantage, and Achievement/Attainment. Rural Sociology, vol. 66, iss. 2, pp. 268–292.

- Rytkönen K., Aunola K., Nurmi J. (2005) Parents' Causal Attributions Concerning Their Children's School Achievement: A Longitudinal Study. Merrill-Palmer Quarterly, vol. 51, no 4, pp. 494–522.
- Schleicher A. (2018) Obrazovanie mirovogo urovnya. Kak vystroit shkolnuyu sistemu XXI veka? [World Class: How to Build a 21st-Century School System], Moscow: Natsionalnoe obrazovanie.
- Scinner E., Belmont M. (1993) Motivation in the Classroom: Reciprocal Effects of Teacher Behavior and Student Engagement across the School Year. Journal of Educational Psychology, vol. 85, no 4, pp. 571–581.
- Showalter D., Klein R., Johnson J., Hartman S. (2017) Why Rural Matters 2015–2016. Understanding the Changing Landscape. Washington, DC: Rural School and Community Trust.
- Skiba R.J., Chung C.G., Trachok M., Baker T.L., Sheya A., Hughes R.L. (2014) Parsing Disciplinary Disproportionality: Contributions of Infraction, Student, and School Characteristics to Out-of-School Suspension and Expulsion. American Educational Research Journal, vol. 51, no 4, pp. 640–670.
- Walton G.M., Cohen G.L. (2011) A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students. Science, vol. 331, no 6023, pp. 1447–1451.
- Wenglinsky H. (2000) How Teaching Matters: Bringing the Classroom Back into Discussions of Teacher Quality. Princeton, NJ: Educational Testing Service.