

# Above Barriers: A Survey of Resilient Schools

**M. Pinskaya, T. Khavenson, S. Kosaretsky,  
R. Zvyaginцев, A. Mikhailova, T. Chirkina**

Received in  
February 2018

---

**Marina Pinskaya**

Candidate of Sciences of Pedagogy, Leading Research Fellow, Center of Social and Economic School Development, Institute of Education, National Research University Higher School of Economics. E-mail: mpinskaya@hse.ru

**Tatiana Khavenson**

Research Fellow, International Laboratory for Education Policy Analysis, Institute of Education, National Research University Higher School of Economics. E-mail: tkhavenson@hse.ru

**Sergey Kosaretsky**

Candidate of Sciences in Psychology, Director, Center of Social and Economic School Development, Institute of Education, National Research University Higher School of Economics. E-mail: skosaretski@hse.ru

**Roman Zvyagintsev**

Intern Researcher, Center of Social and Economic School Development, Institute of Education, National Research University Higher School of Economics. E-mail: rzvyaginцев@hse.ru

**Aleksandra Mikhaylova**

Intern Researcher, Center of Social and Economic School Development, Institute of Education, National Research University Higher School of Economics. E-mail: s.mikhaylova211@gmail.com

**Tatiana Chirkina**

Intern Researcher, International Laboratory for Education Policy Analysis, Institute of Education, National Research University Higher School of Economics. E-mail: tchirkina@hse.ru

**Abstract.** A field study was performed by experts from the Institute of Education, National Research University Higher School of Economics, as part of the Monitoring of Education Markets and Organizations conducted by HSE in cooperation with the Levada Center. Interviews and focus groups were organized with school principals, teachers, students and their parents in three schools teaching the most challenging type of students from low socioeconomic and cultural backgrounds, who nevertheless achieve high learning outcomes. This is a follow-up of the 2015 study of environment characteristics, management and education strategies of schools operating in unfavorable social contexts. Such schools are defined as resilient, meaning that they successfully resist the disadvantaged context beyond their control. The schools surveyed differ in the number of students, education programs, and the level of regional deprivation, yet all of them pursue similar strategies that are well-targeted and recognized by all educational process participants. Such strategies include: introducing limited selection and levelling off the student body, imposing high expectations and transparent requirements to learning outcomes, providing individual support and encouragement to students, and developing the skills boosting graduates' chances of successful socialization. Consistent implementation of these strategies will create conditions to promote academic resilience among students. Studying the experience of such schools appears to be crucial for solving the problem of inequality in education.

*Translated from  
Russian by A. Gurariy.*

Address: 20 Myasnitskaya St, 101000  
Moscow, Russian Federation.

**Keywords:** academic resilience, school effectiveness, educational strategies, educational trajectories, physically challenged school students, socioeconomic status.  
**DOI:** 10.17323/1814-9545-2018-2-198-227

---

## 1. Academic resilience and the school factors creating conditions for it

The issue of school's ability to overcome the disadvantaged family context influence and to fulfill the social elevator function is critically important: its positive solution opens the way towards equality in access to education and a higher quality of education. Today it is the priority of the state educational policy.

Studies have shown that schools are able to achieve high educational results working in difficult social conditions. To what extent they succeed depends largely on the educational policy—it allows school to be effective in adverse circumstances [Pinskaya, Kosaretsky, Froumin, 2011; Lupton, 2004; Reynolds et al. 2011; Siraj, Taggart 2014; Teddlie, Reynolds 2001]. According to foreign studies, such educational organizations are called *a school that functions well in a context of adversity* [Masten et al. 2008]; *schools performing beyond expectations* [Hargreaves, Harris 2011]. Recently, it has been common practice to talk about resilient schools or about school resilience<sup>1</sup> with a broad understanding of the term and the various contexts of its use [Day, Gu 2013].

The term “resilient” has been used in the international comparative study of education -the PISA<sup>2</sup>- since 2009: students from families of low economic, educational and cultural resources, achieving the highest results in tests [Agasisti et al. 2018; OECD 2010]. The phenomenon of resilience is also investigated in relation to teachers and principals [Day, Gu 2013; Henderson, Milstein 2003; Patterson, Collins, Abbott 2004; Steward 2014]. We use the term “resilient” in a broader sense: relying on series of studies, we transfer it from the individual level to the school level taken as a whole [Masten et al. 2008; Richardson 2002].

Factors promoting students' chances of academic resilience have already been studied for several decades [Henderson, Milstein 2003; Luthar 2003; Ross et al. 2001; Wang, Gordon 1994]. A number of researchers distinguish such school factors of resilience as the teacher and teaching methods effect [Rockoff 2004; Siraj, Taggart 2014], a family-school partnership [Masten et al. 2008]. We can also assume that teachers and principals implement special management and pedagogical strategies at those Russian schools, where children from families of low social status and limited resources achieve high educational results.

---

<sup>1</sup> <https://theresilienceproject.com.au/schools/>; <https://www.bensonhenryinstitute.org/services-resilient-schools/>

<sup>2</sup> <http://www.oecd.org/pisa/>

The phenomenon of resilience should be considered within the educational effectiveness research and school effectiveness research field regarding the school level [Chapman et al. 2012; Mortimore et al. 1988; Reynolds et al. 2014]. The purpose of these researches is to find out the school processes specific to schools working in the most challenging social conditions, with the most disadvantaged student body [Chapman et al. 2012; Hargreaves, Harris 2011; Harris 2010; Hopkins, Reynolds 2001; Mortimore et al. 1988; Othman, Muijs 2013].

The researches on school effectiveness aim in particular at identifying factors acting at the educational organization level, the community level and the teacher level, and interacting to provide the school with the opportunity to exert a positive influence on students and increase the life chances of children with a disadvantaged family background. It has been proven that there is a set of school characteristics positively associated with the students' academic achievements [Chapman et al. 2012], which was also confirmed for Russia [Pinskaya, Kosaretsky, Froumin 2011]. Such characteristics include, for example, the safe and well-organized learning environment, the students' positive expectation of the school and their involvement in academic and non-academic activities [Rivkin, Hanushek, Kain 2005; Rockoff 2004]. The connection of these school factors with high academic achievements among socially disadvantaged students was verified in our study.

There is also the school promoting power as another school characteristic, which can be seen as evidence of its ability to improve the life chances of students from disadvantaged families. This indicator is taken into account when assessing the quality of school work in the United States. It is based on a comparison of the proportion of students enrolled in high school and educated in secondary school [Borman et al. 2003]. This characteristic was also taken into account within our study. We considered the promoting power applying to the national school as the school ability to provide the longest academic trajectory for its students, i. e. transition to the senior school and to the university. We were interested, to be precise, in the nature of this promoting power, in the schooling strategies that ensure students go through the longest academic trajectory.

The school climate was at the center of our research—a factor closely related to the resilience [Longobardi, Agasisti 2014], the key concept of the school efficiency model [MacNeil, Prater, Busch 2009]. The most important elements of the school climate within our study are the nature of the relationship between teachers, students, parents and administration; expectations regarding the students' achievements from the school representatives, parents and students themselves; and features of the assessment system.

The teacher's expectations are another focus of the study. The teacher-students interaction and relations are largely determined by

teacher's expectations about the abilities and capabilities of children [Brooks 1994; Wang et al. 2016].

There are ongoing discussions about the results, which may indicate a positive school impact on the student. Non-cognitive skills acquired in school, motivation, and student expectations can be also regarded as sizable achievements in addition to the cognitive skills [Lenkeit 2013; van Landeghem et al. 2002]. The international comparative studies' results, that have significantly deepened the understanding of the reasons for academic resilience, also indicate that self-reliance and motivation are positively related to the ability to achieve academic success among students from families of low socioeconomic status [OECD 2011]. While conducting the field study, therefore, we tried to find various manifestations of the positive school impact on students going beyond the limits of high academic results.

Each school factor that promotes academic resilience found in international studies was verified in this study. At the same time, we relied not only on foreign experience while formulating research issues, but also on the previously conducted analysis of the MEMO, which confirms this experience [Pinskaya et al. 2017a; Pinskaya et al. 2017b]. This analysis has revealed a number of characteristic features of Russian schools working in disadvantaged social conditions, teaching the most challenging student body but achieving high academic results. Primarily, it is the policy of involving the most prepared and promising students when recruiting both in the elementary school and the next educational levels. Such a strategy does not have a selective nature, since it does not involve targeted selection of students, and can be considered to be measures necessary to form a balanced student body. The next key difference of such schools is the high expectations of students and the stimulation of their educational activity. These expectations being the part of the school culture probably do not only extend to the most successful students. Another feature that characterizes the educational policy of such schools is the specific principal's management—the emphasis on providing a diverse educational environment, which creates conditions for the high achievements of students and, possibly, the policy encourages families of students to form expectations of educational process.

The conclusions and assumptions made under the framework of quantitative research were the basis for focus groups' guides and interviews used to collect the field study data. The field study was to answer the question as to whether the schools and educators implement the strategies found during the MEMO and described in the international experience while forming the student body at different educational levels, working with parents, creating a culture of high expectations and how exactly they do it. The received information allowed us to supplement and to deepen the results of earlier conducted quantitative research within the MEMO and to draw firm conclusions about the nature of school processes that create academic resilience conditions.

While conducting the field study, the following was investigated:

- the student recruitment and enrollment processes at different educational levels (elementary school, transition from middle to senior school); whether formal selection procedures are applied; how the 10th grades are formed; the criteria of students' grouping by class, how these procedures are perceived by all educational process participants;
- how and by whom the decision to continue education at school after the 9th grade is made;
- what the academic expectations of all the educational process participants and their claims for higher levels of education are; how actors explain the reasons for students' high achievements or the termination of their journey along the educational trajectory;
- how educational process participants assess the degree of their involvement into the educational process; what strategies schools use to involve parents in the educational process;
- what the reasons are for student's academic success or failure at school as seen by the educational process participants; how responsibility for students' academic achievements and their further educational trajectory is shared between them; how work is organized with groups of students, differing in their levels of academic achievement; what educational strategies are implemented by schools: individual or universal; how educational process participants assess the importance of developing cognitive and non-cognitive skills;
- the attitudes of all the educational process participants regarding the development of cognitive and non-cognitive skills.

## **2. Methodology**

In undertaking the field study, in-depth analysis of the educational strategies' features typical for resilient schools was carried out based on interviews and focus groups with principals, teachers, students and parents to discover those features, which enable schools to take their students to a high educational level.

When selecting schools for the field study, we relied on the data of the MEMO<sup>3</sup> [Derbyshire, Pinskaya 2016] on the characteristics of student body, school resources and the Unified State Exam (USE) results, collected during a survey of more than 1,000 principals of those schools, which made up the nationally representative data. Another selection reason was the results of the Trajectories in Education and Careers Monitoring<sup>4</sup> conducted by the Institute of Education of the

---

<sup>3</sup> <https://memo.hse.ru/>

<sup>4</sup> <https://trec.hse.ru/>

Higher School of Economics, which provided the information on the achievements of the allocated cohort of students in the TIMSS and, later, PISA studies.

Three schools were selected for the field study. Two of these participated in both monitorings and were classified as schools working in a challenging social context, but showing academic resilience. The third school participated in the MEMO and has an average level of well-being, but there are mostly students from families of low socio-economic status among its student body. These students show higher than expected educational achievements; i. e. demonstrate academic resilience at the individual level. In the framework of the study the first two schools were classified as resilient and the third was considered as a *nest of resilience*. We cannot call it actually resilient, because according to the student body characteristics it does not belong to the most disadvantaged group of schools. The schools are located in two different regions and differ in the number of students, the specifics of the educational programs, the territory deprivation nature and level.

The social welfare index was used to assess the schools' social well-being level—an indicator used in studies on the results of the MEMO [Derbyshire, Pinskaya, 2016] and based on the characteristics of the social and economic student's family status [Yastrebov, Pinskaya, Kosaretsky 2014]. The index makes it possible to differentiate schools on the social composition of the student body. The schools selected for the study refer to 25% of schools with the lowest social welfare index in the sample of the MEMO.

The level of schools' academic achievements was determined on the basis of the single school's average USE results in Russian and mathematics for all three schools, and also based on the school average and individual students' outcomes in the international comparative study TIMSS and PISA (in mathematics) presented in the Trajectories in Education and Careers Monitoring for the two least socially-advantaged schools. Groups of students with high academic achievements were singled out—the top 25% according to the USE results and the top 30% according to the TIMSS results.

Three school principals, 30 teachers, 12 parents and 17 students participated in the study. Parents of two middle or senior students with high educational achievements as well as parents of two middle or senior students with low academic results were invited for interviews at each school. The focus groups included teachers who have worked for at least five years at the school and have experience of being a head teacher or who are head teachers in those classes where the significant proportion of students are children from families of the low social welfare index. Students of middle school (8th and 9th grades) and senior school (10th and 11th grades) both successful and not achieving high educational results were interviewed.

The qualitative content analysis of the data obtained during interviews and focus groups was conducted in the next stage of the study.

Table 1. The study subject description by groups of participants

Object	Subject	Technique
Parents	Academic expectations and aspirations; attitudes towards involvement in the educational process and individualization of the learning process; an opinion on the school recruitment and enrollment process and on the reasons for the student's academic success or failure	Individual interviews
Students	Academic expectations and aspirations; attitudes towards the parents' involvement in the educational process and individualization of the learning process as well as their vision of the reasons for academic success or failure in school	Individual interviews
Teachers	Understanding of the student's academic expectations and aspirations; the attitudes towards parent involvement in the educational process, the individualization of the learning process, the work with groups of students differing in their level of academic achievements as well as their vision of the school recruitment and enrollment process, group or class allocation process; an opinion about the reasons for students' academic success or failure; the degree of self-burnout and enthusiasm	Focus groups
Principal	Understanding of student's academic expectations and aspirations; the attitudes towards parent involvement in the educational process, the individualization of the learning process, the work with groups of students differing in their level of academic achievements as well as their vision of the school recruitment and enrollment process, group or class allocation process; an opinion about the reasons for students' academic success or failure	Individual interviews

The *Atlas.ti* program was used for its implementation. The classical techniques of thematic analysis were used at the first stage [Braun, Clarke 2006]:

- Becoming familiar with the text;
- Generating initial codes;
- Searching for themes and coding;
- Critical analysis of results;
- Producing the interim report on the themes.

At the second stage, we referred to the methodology of qualitative content analysis (with the transition to quantitative). In this case, the framework is directional content analysis (i. e., the theory is initial), but additional codes can be added during the encoding process (but in so doing they should be relevant to the original research goals) [Hsieh, Shannon 2005].

The quantitative analysis was carried out after all the data was coded and classified within the named themes according to the following criteria: the frequency of themes in different schools (identified during

focus groups and interviews with the principals); themes, which are common for the interviews; themes, which are common for principals and teachers, and vice versa, themes, which are specific among principals and among teachers only, etc.

This part of the analysis is important for two reasons: 1) the frequency of occurrence relevant to the research objectives specific themes in interviews and focus groups indirectly, but very clearly characterizes the significance of various issues at different schools; 2) the cautious conclusions about the consolidation or, conversely, the gaps between family and school attitude towards the educational process goals and characteristics at different schools can be made based on the analysis of the data.

Table 1 represents the study subject description by groups of participants. The aim of the study was to identify and to describe those aspects of school activities that can be considered as school factors of resilience. Individual factors (intellectual, psychological and any other) remain outside the framework of our study and require further study.

### **3. Results**

#### **3.1. Students' recruitment and enrollment process**

Strategies for the student body formation are similar for the three schools. First of all, there is no recruitment by the formation of 1st grades. All children living in the nearby territories are assigned to 1st grade. As the parents say, "the choice of the school is based on the place of residence: we have moved because we are registered here, and that is why we have come here" (mother of the 4th grade student, General Education School № 1).

As for the teachers, they say the following: "We do not choose families. On the contrary, we welcome everybody. We enroll all the children who were ousted from other schools in the neighborhood. And we do not refuse anyone" (General Education School № 1).

The specificity of the territory causes additional problems that complicate the educational process. The school located in the city's industrial area enrolls a significant number of children from families living in dormitories. The social environment of dormitories is always considered as disadvantaged and families that do not have their own place often change their place of residence and, as a result, the school. The school located on the outskirts of the city is surrounded by run-down housing and private houses, which are mostly inhabited by migrants from the countries of Central Asia. Many 1st grade and other elementary school students do not speak Russian well or do not know Russian at all.

Two schools which took part in the study have the reputation of educational organizations teaching children with problems. As the principals as well as the teachers of both schools say, they often face the challenge of students not being able to cope with the general education program because of health problems—usually due to mental and



**Table 2. The recruitment and enrollment process**

Education level	The recruitment and enrollment process
Elementary school	Enrollment of children from the school district Preparing for pre-school education The allocation of groups of students with educational and psychological problems that require psychologist and speech therapist support The allocation of groups of students with disabilities for education on intervention programs based at the school or in special educational organizations
Senior school	Selection of prospective students of the school Enrollment of 9th graders from other schools

speech development disorders. All three schools are compelled to enroll first-graders, who have not studied at the early childhood learning centers.

What do schools do to make it easier for primary school teachers to train “difficult children” with a number of psychological problems and lack of family help? A common strategy for each school is the focused training of future first-graders and their parents. The practice of organizing supplementary education classes for preschool children is common in these schools. These children form the student body of the first grades later. The purpose of the supplementary education classes is not always learning, but rather an adaptation to the upcoming work in the classroom, which makes subsequent education more effective.

Even without conducting any rigid selection in elementary and middle school, the schools, nevertheless, do not transfer each student to the senior school. Schools tend to enroll the most successful and motivated students in the 10th grade, who cope with the program and have the prospect of passing the USE. The rest of the students are recommended to continue education in institutions of vocational education. The most unfavorable scenario at the nine-year program completion stage is related to those students who entered the 10th grade but left school failing the program. If the school groups the student body of 10th grade with the 9th grade graduates of other schools, it usually tries to enroll only relatively bright students. Thus, schools pursue a policy of balanced student body formation and seek to form classes that can achieve an acceptable level of educational outcomes.

The described practice fully confirms the data of the MEMO, received in 2015 and 2016. Table 2 presents the main strategies for the balanced student body formation.

**3.2. Reasons for Students' Success or Failure**

All the participants of the study admitted that the opportunity to succeed increases drastically if the student receives support from parents and is educated by teachers who can awaken his interest to the

subject. However, representatives of different respondents' categories put the emphasis differently.

Every student considers himself the main source of academic success or failure. According to students' opinions, teachers are the second most important source. Students single out those teachers, who evoke interest in learning, submit material skillfully and attractively and who are ready to help. Even so, students take the primary responsibility for their achievements: "I think it's my doing that I basically study" (9th grade student, General Education School № 1); "I have got a good brain by nature" (9th grade student, General Education School № 3); "My memory is bad, I am not even supposed to be good at physics, biology and history. The *troika* is also OK for me" (9th grade student, General Education School № 2). All of the interviewed students consider themselves responsible for their own academic successes and failures, regardless of family background—full or single parent families—and academic results.

Parents, especially at those schools where families with low material and educational resources are in the minority, emphasize that a student can only succeed in the situation when his or hers efforts are being supported at both home and school. However, parents view family influence as the most crucial part of the education. "The child's success is not only at kindergarten or only by the parents, but in their entirety, this also applies to school. So, it is only by doing jointly. If only a child is very capable and catches on quick and if he has such innate abilities to catch on fly, to analyze clearly and to apply it in practice, it can be just school. But, you know, there are a few children like that". The following statement can be considered as a vivid example of such a "co-education" strategy: "I drop those household chores that can wait, and even if I do not know something and I cannot help her, we will study together" (mother of 9th grade student, General Education School № 1).

Parents are attentive to schooling issues, and not only in families where students are highly motivated and successful. Families also support children who cannot be called successful students, who find it difficult to learn and to cope with difficult subjects. There were parents among those interviewed who directly participate in the education process of the child: they do not only control the assignment, but also help to understand the complex material. Many parents described their participation in solving crucial issues for the education process of the child, for example, they helped with choosing an educational trajectory after the 9th grade and in the school selection process.

In each of the three schools there were no parents—both of bright students and of children who struggle to cope with the school curriculum—blaming the school, the teachers' improper performance or prejudice for a child's failure. "If he has any problems there, let's say history, it means that he does something wrong himself ... The teach-

**Table 3. Reasons for academic success and failure in terms of all of the educational process participants**

Reasons for academic success	Reasons for academic failure
<b>STUDENTS</b>	
Desire to learn and effort	Insufficient ability
Parents' support and control	Insufficient effort, lack of self-organization
High quality education	Priority of other activities, for example sports
<b>PARENTS</b>	
Family support, interest in schooling process and in the education of the child	Insufficient diligence of the student
Assistance on homework and on the study of difficult subjects	
Contribution of the student himself	
<b>TEACHERS AND PRINCIPAL</b>	
Family support, interest in schooling process and in the education of the child	Insufficient ability of the student
Assistance on homework and on the study of difficult subjects	The lack of motivation of the student
Contribution and motivation of the student	Lack of family support and help
High quality education	

er has nothing to do with” (mother of 9th grade student, General Education School № 2).

We would like to see in such coherence of judgments the result of the school cooperation, openness and a parents' full awareness policy. According to teachers' comments during the focus groups held in all three schools, they attach great importance to the family influence. Teachers consider the students' motivation and their willingness to invest in schooling as a very important factor of academic success. “He must himself, not us teachers, not parents, but the child himself must understand what he needs. What the outcome he should get. And we honestly tell them about it: before you realize, none of us will prove it to you and will not be able to explain it for you” (teacher, General Education School № 2).

School principals, more than the other panelists, assign responsibility for the students' achievement to teachers. “First of all, it is effort of the teacher, who can give him the material, explain it in such a way, that he understands” (principal, General Education School № 1).

Therefore, students, parents and teachers were unanimous in assessing the reasons for students' academic successes and failures. Students consider themselves fully responsible for their results, but,

of course, recognize the importance of parental support and the quality of teaching. Thus, there is good reason for teacher-parent cooperation in the interests of students in the surveyed schools. However, the teachers and the principal dissatisfaction stands out because of the parents contribution to the educational process and the lack of family efforts, seen by them to be the reason for the students' poor academic performance. The views of all of the educational process participants are presented in Table 3.

### **3.3. Parent Involvement in the Educational Process**

All of the interviewed students, regardless of age, school they enrolled in, and academic success, pointed out the importance of parents' participation in their educational process and in the non-academic school issues. Most commonly, students expressed an interest in their parents' "moral support", in the expression of their interest and attention. Some students admitted that their parents do not pay attention for some reason, however, these numbered only three. As students say, parents should "be interested in how things are going in school after you've come back home, should try to help, if there are some difficulties with homework ..." (9th grade student, General Education School № 3).

While being focused on self-reliance and responsibility for their actions, students nevertheless admit the importance of parents' participation in taking decisions about their education and parent motivation for success. "They, you might say, push me toward a better life: the better you learn, the better you live. If the motivation is lost, if they stop controlling, the student gets lost" (9th grade student, General Education School № 2).

The parental attitude in general is agreed upon with students' expectations. First of all, they consider it necessary to take care and pay attention to the student's daily routine. "A parent should be interested in everything. First of all, has got up, has he eaten, has he come? Not a control, but in general being informed" (mother of 2nd grade student, General Education School № 3).

Some parents are involved in their children's school life to such an extent that they consider themselves full participants of the educational process, although they understand that their main task is to maintain the student's self-confidence and to be his support. "A child asks me for help. For example: here, Mom, I do not understand this task. But I do not remember, it's already hard for me. So, we start with the textbook, start scrolling through the pages together. Sometimes it even turns out this way: we take this book, open the paragraph—and look! She is already beginning to understand. She says: Mom, I have already understood. Sometimes even this or just presence is enough, get it?" (mother of 9th grade student, General Education School № 1).

The answers and comments of all the parents who participated in the interview showed their cooperation with the school, the absence of conflicts, the understanding of their responsibility and the desire to

Table 4. **Assessment of parent involvement in the educational process**

Forms of involvement	Assessment of students	Assessment of parents	Assessment of teachers
Moral support	Sufficient	Sufficient	Insufficient
Assistance on homework	Sufficient	Sufficient	-
Motivation	Sufficient	Sufficient	Insufficient
Control	Sufficient or excess	Sufficient	Insufficient
Understanding child's trouble	-	-	Insufficient

coordinate their actions with educational goals. There was only one exception—the father who left the family and who was not involved in the life of his son who was in the 9th grade. It should be, however, taken into account that we interviewed parents who were ready to comply with the school's research assistance request, i. e. quite actively. We can assume that they do not form a majority.

Both teachers and school principals consider parent involvement in the educational process as one of the main strategies for success. Parental involvement is a very difficult task, requiring ongoing efforts and new approaches. It is common for all schools, regardless of its surroundings, territory, the student body complexity degree and the proportion of disadvantaged families. Here is a typical situation for the school as described by the principal: "Parents very often do not have time. It's much easier to come to the principal's office and say: yes, I surrender my child, take him off my hands, and do whatever you want with him. Well, why should I convince him to study well, if he does not cope, he cannot pass the exams. Take him off our hands, and do whatever you want with him ... It happens that the child is forced by a social teacher or head teacher even to the exam, because he sleeps at home and there is nobody to wake him up. And sometimes his mother sleeps, she just does not have time for this" (principal, General Education School № 3). Another principal has pursued parental involvement in the educational process policy for four years of his management and he believes that it is already bearing fruit: "Our teachers have already seen that the parents cooperate, they communicate on an online forum. We have launched the website, if you have seen it, with a good content. Parents watch all the activities at the online forum, teachers give information about all the activities, homework, there are photos named by kids. We motivate, encourage the best ones ..." (principal, General Education School № 1).

It is most difficult to engage the parents of disadvantaged students who make a significant part of the student body at the surveyed

schools. "In this class, when we hold parent-teacher meetings, I come in hoping to see the parents of those children who have problems. I never see them" (teacher, General Education School № 2).

So, according to teachers, a significant amount of parents are little involved in their children's educational process or completely shift responsibility for it onto the school. Involvement of parents does not depend on the student's achievements and his stage of education. It affects only the forms of assistance that parents give the student, and the degree of independence granted to him. Data on parent involvement in the educational process are presented in Table 4.

#### **3.4. Working with a mixed ability students**

Considering that a significant number of students experience serious difficulties with the educational process, have health problems, or come to school in a state of educational neglect, it is extremely important for the school and teachers to organize work with different groups of students differently.

Based on data gathered from the interviews with the principals, students and focus groups with teachers, teachers do not possess methods and pedagogical tools of differentiated teaching in a heterogeneous class. The main form of differentiated teaching in all three schools was the individual work of teachers with slow students: additional help in learning the material students do not cope with during the lessons, and help in preparing for the examinations for graduating class students.

The additional (not only educational) work with slow students, both pedagogically and socially neglected, is seen as a very important part of the mission, not only in schools with the most disadvantaged social composition of students, but also in the most socially advantaged schools. This is one principal's comment on the subject: "We work with weak children in such a way that we give individual hours to approaching these children... If they skip classes it is absolutely catastrophically, and if they do not attend and parents are not included, here, of course, we have to take exceptional measures, we work with the commission, with the Juvenile Division... These are extremely disadvantaged situations when there are lice at home and so on... Then there are situations of inadequate parenting due to drug addiction, alcoholism, there are two or three moms. Terrible alcoholism in general, beating of children, and children hanging out in garage blocks, there are also one-two children, but we help by our own efforts, we involve grandmothers. We feel the great potential in this child, if he is left unattended during 1st or 2nd grade, he will be lost completely, and no boarding school will help him" (principal, General Education School № 1).

The adaptation to the conditions of teaching children for whom the Russian language is not native was a challenge for teachers at one of the schools. To enable such children to get involved in the development of the general education program, teachers have to work with them additionally, including teaching Russian.

Individual work is also held with students who claim high academic results and are motivated to learn. Preparation for participation in academic competitions is the most common form of additional individual work with bright and motivated students. There is a wide range of electives and an opportunity to study additionally, including preparing for examinations for students with a high education request at the General Education School № 1. “Our teachers are quite strong, they offer both tests and some help after classes, and after school we have electives and so on. Therefore, if you want to work, you do not need private tutors” (11th grade student, General Education School № 1). The school principals consider it necessary to motivate strong students to achieve high educational results and find different forms to do it: “And our retreats—we have retreats in St. Petersburg and in Sochi, we send kids with our colleagues and vocational programs...” (principal, General Education School № 3). Such work goes beyond the usual students’ grouping by abilities and the corresponding differentiation of educational programs. In this case, the variety of forms of extracurricular educational activities does not only create the opportunity for choice, but also it is a developmental and motivating environment for all groups of children. It is important that all three school principals have a clear understanding of the difference in educational tasks facing different groups of students and the need to save the school asset—capable students.

All of the schools that took part in the study are united by the desire to build an individual educational program for each student and to fill it with extracurricular activities. “We work according to individual plans, we try to organize additional classes as far as possible. Then, at the middle school, from 5th to 6th grade, we try to involve children in a scientific society, and guys, if possible, attend these classes” (principal, General Education School № 3).

Teachers emphasize the individual approach to the students: “I think, both at classes, and in the real life, the main thing is *to each according to his abilities*. If you are capable of it—go for it, please, achieve the milestone, then there are some more ones opened up for you” (teacher, General Education School № 1).

The field-specific education at senior school and the in-depth study of separate subjects at earlier educational levels are considered as the most effective forms of differentiation of education, taking into account the students’ interests and opportunities. But not all schools can afford this kind of education. In our case, two of the three schools were capable of putting it into practice with more than 500 students at each school.

Under regular lesson within the general education program teachers tend to work with a whole class, without differentiating tasks and teaching strategies for different groups and some students. According to parents’ opinions, schools are not able to fully satisfy the demand of strong students and their families for education, so they have

**Table 5. Work methods with low- and high- achieving students in terms of all educational process participants**

Low-achieving students	High-achieving students
<b>STUDENTS</b>	
Re-explain the lesson material after or before the beginning of the lesson	Individual consultations on selected topics
Rewriting test works	Performing additional, more complex tests
Less challenging, at the basic level, tasks during the lesson	Preparation for participation in academic competitions
<b>PARENTS</b>	
Additional attention in the lesson	Additional extracurricular activities
	Lack of their interests oriented work in the classroom
<b>TEACHERS AND PRINCIPAL</b>	
Additional classes after lessons explaining the complex material	Preparation for participation in academic competitions and contests
Additional classes with students who miss classes	Individual classes on request
Additional hours teaching Russian tonon native-speakers	Studying at field-specific class
	Extracurricular activities, including project work
	Participation in school scientific societies
	Motivating activities: journeys to partner schools

to look for additional educational opportunities at a higher level outside the school.

The work methods with low- and high- achieving students are presented in Table 5.

### 3.5. Academic expectations and claims

Judgments made by principals and teachers of all the schools surveyed during the interviews and focus groups indicate high expectations for students, despite the fact that a significant proportion of the children have disabilities and have difficulties in coping with the general education program. Principals and teachers formulate these expectations as academic or give them a broader understanding depending on the student body complexity and the social environment of the children: they do not connect expectations with the further education in senior school and enrollment in university, but with a conscious choice of occupation and the acquisi-



tion of skills, providing independence and the ability to make vital decisions.

Students also see the meaning of education not only in the successful passing of the exam required for another level of education, they consider their goal as knowledge acquisition necessary for life. "To start I'll just try to do everything I can to pass the exams and, first of all, not to get any grades, but knowledge that will help me in future life. Because... even if a person fails a university exam, skills will be useful anyway. And even if you do not enter the university, you should not give up on yourself and get used to being a cashier at McDonald's" (11th grade student, General Education School № 1). It is pleasing that schools manage to reach the goal and prepare students for independent living, self-determination and understanding of their own tasks.

Students believe that the school is reasonably demanding of them, teachers are objective in assessing their knowledge, and the knowledge is quite reliable: "There is no grade inflation, it is difficult in this regard. If you know this much, they will assess according to your level of knowledge. Personal sympathy, namely, is taken into account, but these are rare exceptions" (11th grade student, General Education School № 3). Both students and parents consider the school's requirements to be quite high and the assessment of students' knowledge to be objective. The achievement level being high and one single set of requirements for all students are important for principals: "The assessment approach is usually quite strict, that is, even *troika* must be earned, and you must work to get it. Cheating is strictly forbidden, this is the most terrible sin that can only be" (principal, General Education School № 3).

Families educating children see the children's educational trajectory differently and plan further education in different ways at the three schools surveyed. Regarding the strongest students, based on their parents' requests, the school are highly ambitious: the principals and teachers believe that their graduates receive a good education and are competitive in the struggle for places in the most prestigious universities: "There are, of course, individual cases when students go to study to the Czech Republic and get full-funding there. Sometimes they enter Moscow universities, literally one or two graduates, and Siberian Federal University, which is quite prestigious. As a rule, if there are such expectations and requests to focus upon from the very beginning of educational process, then it is quite real" (principal, General Education School № 3).

For another category of students, schools consider the early transition to a professional trajectory as the most rational scenario and get them ready for institutions of secondary vocational education, making every possible effort to provide vocational guidance to middle school students.

The expectations may vary depending on the families' requests and the students' levels of competence and educational achieve-

ments, but it does not, however, mean a reduction in the school's requirements for students and teachers. The school № 2 principal accurately depicts what the school considers as the necessary result of education and what it prepares its students for: "To be able to reflect and evaluate the situation—this is the task in any situation. Before you commit to some act or action, there must still be some reasoning... So that they understand where they can earn money—this is very important...". The quotes above show that the school sees its mission as teaching students to navigate themselves in the real world, including understanding how they can make a living.

The school takes responsibility not just for entering a particular vocational institution, but for the right life choices. In a broad interpretation of the school's goals including primarily the formation of the students' ability to think independently, the two schools—General Education School № 1 and General Education School № 2—are however very similar, although they differ in terms of student body and resources. This quote is from the General Education School № 1 principal regarding the school's priorities: "The first is to form social skills, the second is to form independent thinking and some cognitive spheres, and the third is the formal confirmation we can see: the Unified State Exam, the Basic State Exam and all kinds of control... I see socialization as the maximum success factor both in class and in life".

This approach is closer to the world trend on the formation of competences and subtle, including non-cognitive, skills than traditional orientation toward knowledge and objective results. Both principals say that the results of the USE are not the main, but the mandatory goal. Both principals show a clear understanding that the ability to think within the subject is the same as the ability to think in life situations.

The educational expectations of the study participants are presented in Table 6.

The diagrams were constructed based on the quantitative analysis of the main themes discussed in the interviews and focus groups, i. e. assessing the differences and similarities of these themes among different categories of respondents and educational process participants at different schools, as well as the frequency and evidence of a theme. They show theme frequencies in interviews and focus groups held with teachers and principals (schools), with students and parents (family), i. e. the frequency analysis. The teacher and principal positions on the one hand and parent and student positions on the other hand were found to be coordinated on most issues, with the exception of two: the parent involvement in the educational process and the results-oriented learning process orientation. Schools are significantly more critical in assessing the parent participation in the education of children and believe that they are not sufficiently or very little involved in the school life. This is most clearly seen in the case of General Education School № 3 (Figure 1).

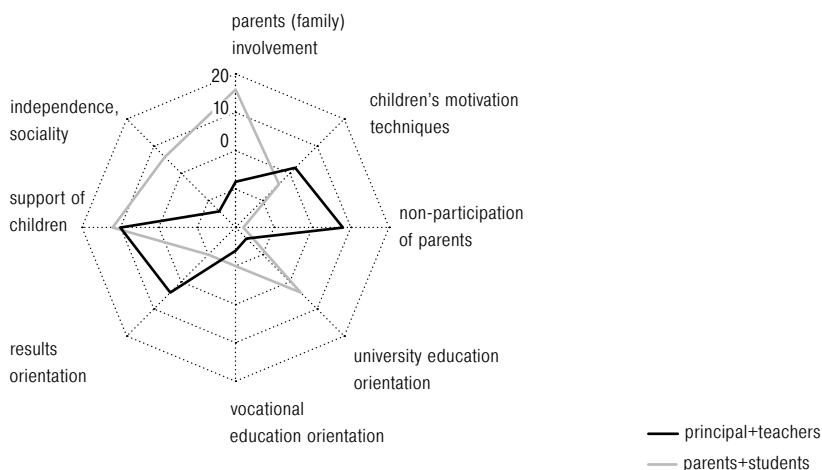
**Table 6. Expectations of the educational process participants—the students and the school**

For students	For school
<b>STUDENTS</b>	
Learn the school subjects	Provide good training in school subjects
To acquire knowledge, important and useful for life	Provide proficient and interesting teaching
Complete 11 grades and enter the university	Make standard requirements and assess achievements objectively
Complete 9 grades and enter a vocational school	
<b>PARENTS</b>	
Enter senior school, graduate and enter university	Provide good training in school subjects
Complete 9 grades and enter a vocational school	Make standard requirements and assess achievements objectively
Make own choice of profession	
<b>TEACHERS AND PRINCIPAL</b>	
Enter senior school, graduate and enter university	Provide good training in school subjects
Complete 9 grades and enter a vocational school	Make standard requirements and assess achievements objectively
Make informed choice of profession	Make the right orientation for choosing a further educational and / or professional trajectory
Learn how to think and how to define yourself	Teach to think independently both in class and in life situations
To acquire socialization skills	Create a motivating environment for maximizing the full realization of interests and abilities

There are the differences of opinion on results-oriented learning process orientation because the teachers are much more focused on achieving higher educational outcomes than families. Schools pursue a policy of high expectations and demands on students, despite their problems and despite the absence of a request for education from some of the parents. The most dramatic mismatch between parents and teachers can be seen in the case of the most disadvantaged school—General Education School № 2 (Figure 2).

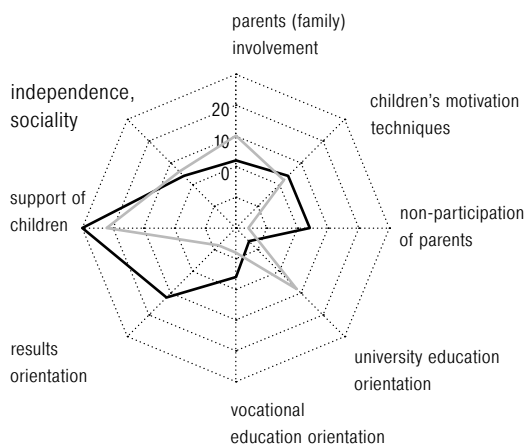
The diagrams show that all the educational process participants are as close as possible in assessing how the school motivates and

**Fig. 1. The radar diagram of the frequency code distribution at the General Education School № 3.**

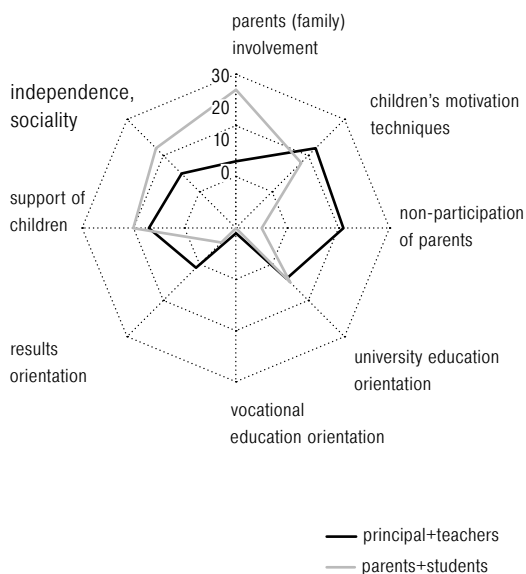


*Note.* The diagram shows the theme frequency in the interviews held with family (parents and students) and with school (principal and teachers).

**Fig. 2. The radar diagram of the frequency code distribution at the General Education School № 2**



**Fig. 3. The radar diagram of the frequency code distribution at the General Education School № 1**



supports students in educational process. This applies to all schools, and is clearly visible in the case of the General Education School № 1 (Figure 3).

**4. Conclusions** The study conducted at three socially disadvantaged but successful schools allowed us to describe the main educational strategies associated with resilience. The key feature of the students' recruitment and enrollment process, which allows schools working in disadvantaged social conditions to provide high educational achievements, is the limited senior school selection. Considering schools do not conduct selection to form primary school classes and teach therefore the most complex student body, including pedagogically and socially neglected children, students with disabilities, and migrants who do not speak Russian, such a strategy of balanced student body formation is imperative in ensuring high educational achievements at senior school. The fact that resilient students are more often taught at schools conducting selection is also noted by foreign researchers [Longobardi, Agasisti 2014].

Schools take into account the students' different starting position when entering school, different educational requests and different levels of their abilities. They create broad educational opportunities for different students and a basis for choosing their further educational trajectory. The teachers and the school administration consider individual support and the motivation of students to be their priority. The results are in line with the conclusions of PISA data analysis in the OECD report [Agasisti et al. 2018].

Schools are focused on forming high expectations about the academic achievements of students and the development of their skills and competencies, providing an informed choice of educational trajectory. Such approaches as the creation of a transparent requirements and learning outcomes system common for all students and teachers; objectivity of assessment, support and stimulation of the students' educational activity, and the formation of educational trajectories, taking into account the student's educational achievements and the request for education are common to all schools.

The formation of students' independent thinking, the ability to assess their capabilities, build personal career plan and bear responsibility for it is also the common goal considered by schools to be their mission. These cognitive and non-cognitive skills, or competencies, are among the key skills needed for successful socialization and to respond to the 21st century skills framework<sup>5</sup> accepted by the World Economic Forum [World Economic Forum 2015] as a guide for modern education.

The schools' values and orientations divide students' families. Students take responsibility for their achievements or failures and trust teachers. Parents see the lack of students' efforts as the main reason for poor academic performance and educational problems, they appreciate teachers' attention and help and do not make claims against the school. However, the lack of parent involvement in the educa-

<sup>5</sup> <https://www.oecd.org/site/educeri21st/40756908.pdf>

tional process and the need to increase their contribution to education is recognized by schools as an urgent and the most difficult issue. Although students clearly state the need for the parents' support, schools have to fill in for the lack of not only the cultural resources of the family, but also the attention of the parents.

The study showed that school educational policy is well understood and supported by the teaching staff who accept its mission and responsibility for improving the students' life chances. Such a coherent, targeted policy implemented in a complex of managerial and pedagogical decisions can be considered as a condition for the school resilience as a whole and the resilience factor of individual students.

The field study confirmed the results of the quantitative data analysis of the large-scale survey of school principals conducted in the framework of the MEMO. However, we cannot judge to what extent the high achievements of students from disadvantaged families are due to the school influence, and to what extent they can be determined by their individual characteristics. This issue remains open also to foreign authors studying academic resilience [Agasisti, Longobardi 2017]. To see the school contribution more clearly, the next step in research would be to compare the conditions resilient students are taught under in schools overcoming the negative impact of social disadvantages and in those schools, which do not cope with social disadvantages and show the lowest results.

It is also important to evaluate the degree of sustainability of individual academic resilience revealed at the school educational level. This requires tracing the educational trajectories of graduates and determining whether a high level of educational outcomes is the basis for success in higher education and/or career.

## References

- Agasisti T., Avisati F., Borgonovi F., Longobardi S. (2018) *Academic Resilience. OECD Education Working Papers No 167*. Paris: OECD. <http://dx.doi.org/10.1787/e22490ac-en>.
- Agasisti T., Longobardi S. (2017) Equality of Educational Opportunities, Schools' Characteristics and Resilient Students: An Empirical Study of EU-15 Countries Using OECD-PISA 2009 Data. *Social Indicators Research*, vol. 134, no 3, pp. 917–953. <https://doi.org/10.1007/s11205-016-1464-5>
- Borman G. D., Hewes G. M., Overman L. T., Brown S. (2003) Comprehensive School Reform and Achievement: A Meta-Analysis. *Review of Educational Research*, vol. 73, no 2, pp. 125–230. <https://doi.org/10.3102/00346543073002125>
- Braun V., Clarke V. (2006) Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, vol. 3, no 2, pp. 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brooks R. B. (1994) Children at Risk: Fostering Resilience and Hope. *American Journal of Orthopsychiatry*, vol. 64, no 4, pp. 545–553. <https://doi.org/10.1037/h0079565>
- Chapman C., Armstrong P., Harris A., Muijs D., Reynolds D., Sammons P. (2012) *School Effectiveness and Improvement Research, Policy, and Practice: Challenging the Orthodoxy?* London: Routledge.

- Day C., Gu Q. (2013) *Resilient Teachers, Resilient Schools: Building and Sustaining Quality in Testing Times*. London: Routledge.
- Derbyshire N., Pinskaya M. (2016) Upravlencheskie strategii direktorov effektivnykh shkol [Principals' Management Strategies in High-Performing Schools]. *Voprosy obrazovaniya / Educational Studies*. Moscow, no 3, pp. 110–129. DOI: 10.17323/1814–9545–2016–3–110–129
- Hargreaves A., Harris A. (2011) *Performance beyond Expectations*. Nottingham: National College for School Leadership. Available at: <http://www.ai.sri.com/~quam/Public/papers/ILC2005/20050529-Lisp-performance.pdf> (<http://dera.ioe.ac.uk/10022/1/download?id=151888&filename=performance-beyond-expectations-full-report.pdf> (accessed 20 April 2018)).
- Harris A. (2010) *Effective Leadership in Challenging Schools*. DOI: 10.1016/B978-0-08-044894-7.00448-6
- Henderson N., Milstein M. (2003) *Resiliency in Schools: Making It Happen for Students and Educators*. Thousand Oaks: Corwin Press.
- Hopkins D., Reynolds D. (2001) The Past, Present and Future of School Improvement: Towards the Third Age. *British Educational Research Journal*, vol. 27, no 4, pp. 459–475. <https://doi.org/10.1080/01411920120071461>
- Hsieh H.-F., Shannon S. (2005) Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, vol. 15, no 9, pp. 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Lenkeit J. (2013) Effectiveness Measures for Cross-Sectional Studies: A Comparison of Value-Added Models and Contextualised Attainment Models. *School Effectiveness and School Improvement*, vol. 24, no 1, pp. 1–25. <https://doi.org/10.1080/09243453.2012.680892>
- Longobardi S., Agasisti T. (2014) Educational Institutions, Resources, and Students' Resiliency: An Empirical Study about OECD Countries. *Economics Bulletin*, vol. 34, no 2, pp. 1055–1067.
- Lupton R. (2004) *Schools in Disadvantaged Areas: Recognising Context and Raising Quality*. LSE STICERD Research Paper No CASE076. Available at: <https://ssrn.com/abstract=1158967> (accessed 20 April 2018).
- Luthar S. (2003) *Resilience and Vulnerability: Adaptation in the Context of Childhood Adversities*. Cambridge: Cambridge University. <https://doi.org/DOI:10.1017/CBO9780511615788>
- MacNeil A.J., Prater D. L., Busch S. (2009) The Effects of School Culture and Climate on Student Achievement. *International Journal of Leadership in Education*, vol. 12, no 1, pp. 73–84. <https://doi.org/10.1080/13603120701576241>
- Masten A., Herbers J., Cutuli J., Lafavor T. (2008) Promoting Competence and Resilience in the School Context. *Professional School Counseling*, vol. 12, no 2, pp. 76–84. <https://doi.org/10.5330/PSC.n.2010-12.76>
- Mortimore P., Sammons P., Stoll L., Lewis D., Ecob R. (1988) *School Matters: The Junior Years*. London: Paul Chapman Publishing.
- OECD (2010) *PISA 2009 Results: Overcoming Social Background—Equity in Learning Opportunities and Outcomes*, vol. II. Paris: OECD. <https://doi.org/10.1787/9789264091504-en>
- OECD (2011) How Do Some Students Overcome their Socio-Economic Background? *PISA in Focus*, no 5. <http://dx.doi.org/10.1787/5k9h362p77tf-en>
- Othman M., Muijs D. (2013) Educational Quality Differences in a Middle-Income Country: The Urban-Rural Gap in Malaysian Primary Schools. *School Effectiveness and School Improvement*, vol. 24, no 1, pp. 1–18. <https://doi.org/10.1080/09243453.2012.691425>
- Patterson J., Collins L., Abbott G. (2004) A Study of Teacher Resilience in Urban Schools. *Journal of Instructional Psychology*, vol. 31, no 1, pp. 3–11.
- Pinskaya M., Derbyshire N., Bysik N., Kosaretsky S. (2017a) "Effektivnye" shkoly: resursy, kontingent i upravlencheskie strategii direktorov ["Effective"]

- Schools: Resources, Student Body, and Management Strategies of School Principals]. Monitoring of Education Markets and Organizations, no 7 (106), Moscow: HSE.
- Pinskaya M., Khavenson T., Chirkina T., Mikhaylova A. (2017b) *Rezilyentnye shkoly: vysokie dostizheniya v sotsial'no neblagopoluchnom okruzenii* [Resilient Schools: High Performance in Socially Deprived Environments]. Monitoring of Education Markets and Organizations, no 21 (120), Moscow: HSE.
- Pinskaya M., Kosaretsky S., Froumin I. (2011) Shkoly, effektivno rabotayushchie v slozhnykh sotsialnykh kontekstakh [Effective Schools in Complex Social Contexts]. *Voprosy obrazovaniya / Educational Studies*. Moscow, no 4, pp. 148–177. DOI: 10.17323/1814-9545-2011-4-148-177
- Reynolds D., Chapman C., Kelly A., Muijs D., Sammons P. (2011) Educational Effectiveness: The Development of the Discipline, the Critiques, the Defence, and the Present Debate. *Effective Education*, vol. 3, no 2, pp. 109–127. <https://doi.org/10.1080/19415532.2011.686168>
- Reynolds D., Sammons P., De Fraine B., Van Damme J., Townsend T., Teddlie C., Stringfield S. (2014) Educational Effectiveness Research (EER): A State-of-the-Art Review. *School Effectiveness and School Improvement*, vol. 25, no 2, pp. 197–230. <https://doi.org/10.1080/09243453.2014.885450>
- Richardson G. E. (2002) The Metatheory of Resilience and Resiliency. *Journal of Clinical Psychology*, vol. 58, no 3, pp. 307–321. <https://doi.org/10.1002/jclp.10020>
- Rivkin S. G., Hanushek E. A., Kain J. F. (2005) Teachers, Schools, and Academic Achievement. *Econometrica*, vol. 73, no 2, pp. 417–458. <https://doi.org/10.1111/j.1468-0262.2005.00584.x>
- Rockoff J. E. (2004) The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data. *The American Economic Review*, vol. 94, no 2, pp. 247–252. Available at: <http://www.jstor.org/stable/3592891> (accessed 20 April 2018).
- Ross S. M., Sanders W. L., Wright S. P., Stringfield S. (2001) Two- and Three-Year Achievement Results From the Memphis Restructuring Initiative. *School Effectiveness and School Improvement*, vol. 12, no 3, pp. 323–346. <https://doi.org/10.1076/sesi.12.3.323.3451>
- Siraj I., Taggart B. (2014) *Exploring Effective Pedagogy in Primary Schools: Evidence from Research*. London: Pearson.
- Steward J. (2014) Sustaining Emotional Resilience for School Leadership. *School Leadership & Management*, vol. 34, no 1, pp. 52–68. <https://doi.org/10.1080/13632434.2013.849686>
- Teddlie C., Reynolds D. (2001) *The International Handbook of School Effectiveness Research*. London: Falmer [https://doi.org/10.1016/S0272-7757\(01\)00009-7](https://doi.org/10.1016/S0272-7757(01)00009-7)
- Van Landeghem G., van Damme J., Opdenakker M.-C., De Frairie D. F., Ongheena P. (2002) The Effect of Schools and Classes on Noncognitive Outcomes. *School Effectiveness and School Improvement*, vol. 13, no 4, pp. 429–451. <https://doi.org/10.1076/sesi.13.4.429.10284>
- Wang C., Hatzigianni M., Shahaeian A., Murray E., Harrison L. J. (2016) The Combined Effects of Teacher-Child and Peer Relationships on Children's Social-Emotional Adjustment. *Journal of School Psychology*, vol. 59, pp. 1–11. <https://doi.org/10.1016/j.jsp.2016.09.003>
- Wang M. C., Gordon E. W. (eds) (1994) *Educational Resilience in Inner-City America: Challenges and Prospects*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- World Economic Forum (2015) *New Vision for Education Unlocking the Potential of Technology*. Available at: <http://widgets.weforum.org/nve-2015/> (accessed 20 April 2018).



Yastrebov G., Pinskaya M., Kosaretsky S. (2014) Ispolzovanie kontekstnykh dannykh v sisteme otsenki kachestva obrazovaniya: opyt razrabotki i aprobatsiya instrumentariya [Using Contextual Data for Education Quality Assessment: The Experience of Tools Development and Testing]. *Voprosy obrazovaniya / Educational Studies. Moscow*, no 4, pp. 58–95. DOI: 10.17323/1814-9545-2014-4-58-95