

National Research University
Higher School of Economics

As a manuscript

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**Inequality and Schooling in Russia:
Social Selection in Local Educational Systems**

Thesis Summary for the purpose of obtaining PhD in Sociology

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Moscow, 2020

Statement of research problem

The liberalization of education takes place all over the world as well as in Russia in recent years. It means that parents gain the right to choose schools. Worldwide studies show that concurrently socioeconomic differentiation and residential segregation increase. In this context study of the school differentiation issue acquires a sociopolitical relevance.

The between-school differentiation has been already studied for more than half century. Basically the researchers focus on racial and ethnical school differentiation whereas the economic differentiation remains underexplored though this issue looms large (Reardon, Owens 2014). There is a rising wealth gap between the modern educational systems: some schools are attended by the students coming from the families with a higher socioeconomic status while other schools incorporate children from those with a lower income.

The socioeconomic school differentiation in the USA has sequentially increased since the '70s (Owens, Reardon, Jencks 2016). Much of this process is owed to the residential segregation. The district-based differentiation between the families with children enrolled in public schools increased by 15% from 1990 to 2010. The school differentiation within large districts increased by 40% from 1991 to 2012. According to the researchers a rising income inequality contributed to the rise of such differentiation. In big cities the school differentiation is influenced by the segregation both between districts and within them which will inevitably bear on the students' academic achievements (Owens, Reardon, Jencks 2016).

What is wrong about the uneven distribution of students with different socioeconomic status between schools? The social composition of the students in a school may affect their academic achievements through the following factors: the quality of teaching staff, the school setting characteristics, the family engagement in upbringing and education, the cooperation between teachers and students and the peer influence (Kahlenberg 2002; Rumberger, Palardy 2005).

The between-school differentiation contribution to the social reproduction depends on the peculiarities of the national educational system structure. First of all the moment of differentiation plays a great role: the earlier the students are sorted between different types of school, the higher is the potentiality gap in the country (Horn 2009; Pfeffer 2007; Hanushek, Woessmann 2010). Secondly the higher is the education standardization level (e.g. if a single national exam is applied), the lower is the reproduction level in education (Van de Werfhorst, Mijs 2010). It is hard to estimate the extent of the between-school differentiation problem in the Russian context, because the differentiation in our country still has not been measured.

In social reproduction an overriding concern may be the role of within-school differentiation, i.e. development of various tracks within one educational institution. The studies suggest that placing students in groups within a school is most times based on their skills and competency assessment. Students may be assigned to academic, common or professional track where the educational program is organized in such a way as to prepare them for the next academic grade of education or for a professional career. Normally the track programs differ in subject composition and level of education (Hallinan 1994).

As a rule the lower-track students have poor academic performance, are less held in respect and have a lower status in the academic hierarchy which determines their low motivation and sense of futility. The studies show that the academic and technical track students differ greatly in terms of their social and psychological characteristics. The academic culture is more developed in the schools of first type while the second type school students have a strong sense of futility (Van Houtte, Stevens 2015).

The researchers differ in their opinions on the grouping effectiveness. The sorting has positive effect on those who were assigned to a high track and negative effect on the lower-track students (Kao, Thompson 2003; Gamoran 1987). Generally sorting contributes to the within-school differentiation and discriminates for example

students of other races in all the three levels (elementary, middle and high school) (Oakes 1995).

The difference in academic results increases markedly between the elementary and the middle schools in those countries where tracking is applied. Moreover the earlier the sorting between various types of schools is applied the deeper is the influence of the socioeconomic status of parents on the children educational success. The equality of educational opportunities is much more guaranteed where there are less types of schools (Woessmann 2009).

The differentiation of any kind of level (both between schools and within them) is mainly based on the socioeconomic status of the student's family and consequently plays a key role in the social reproduction (Oakes, Wells, Jones 1997; Vanfossen, Jones, Spade 1987; Yonezawa, Wells, Serna 2002). The between-school differentiation based on SES exceeds all the other differences based on the status of the school (private or public), on the number of students (large or small) and other (Rumberger, Palardy 2005).

The school differentiation increase has been promoted by the market-type reforms of modern educational systems. Much of it happened due to special aspects of the educational institution selection made by the representatives of different social strata as was shown when examining the selection of school by parents in Germany, Great Britain, France (Broccolichi, van Zanten, 2000; Ball, 1993, 2002, 2006; Kristen, 2003). While the middle class parents have a strategic approach to the choice of school, the working class parents so far from that hardly get into these processes. In a number of situations it happens as a result of lack of resources (informational, cultural, social) essential for making an optimum choice. More often than not the representatives of less successful social segments (migrants, needy families) refuse to make a choice. It is widely accepted in such families that all the public schools are equal and therefore they commonly send a child to the nearest school (Broccolichi, van Zanten 2000; Kristen 2003). As a result in many countries the introduction of market-oriented rules and in particular the free choice of school led to the exclusion

of the working class from the competition for the quality education and to gaining benefits by the middle-class parents (Ball 2003; Broccolichi, van Zanten 2000; Lauder, Hughes 1999; Watson 1999).

The local contexts of different levels evolving against the backdrop of city segregation are essential to the school differentiation. The educational system analysis is with ever increasing frequency performed on local levels considering their spatial organization (Gorard, Taylor 2001; Radtke, Stošić 2009; Condrón, Roscigno 2003). However the students differentiation patterns in local educational systems remain beyond the researchers' attention though being accepted as essential structural conditions which influence, as well as the family characteristics, the further educational selection and social trajectory of a child (Gamoran, Mare 1989; Van Houtte 2004).

The conditions of school differentiation in Russia have changed a lot in recent years. Due to the reforms in 1992 and the social inequality increase in the post-Soviet Russia the school educational system has been transformed in many various types and versions. Consequently as many researchers assume the educational system not merely tightens but also intensifies the social differentiation (Konstantinovskiy et al. 2011; Cherednichenko 1999). The second wave of institutional reforms followed in 2000s. Amongst important political decisions related to the regulations of the school selection and aimed to guarantee more chances for needy families was an introduction of a priority right to be enrolled at the nearest school for the students living in a short distance from it (Federal Law FL-273, 2012). These changes alter the structural context of the school choice so that the student selection issue becomes particularly important.

Institutional reforms may affect social inequality in different ways depending on the characteristics of the territories and localities; for instance the results in a big city and in the rural area may differ greatly. It is hard to overestimate the importance the issues related to the rural education and educational trajectories of rural students in Russia. In spite of active educational network agglomeration and restructuring

processes, today more than half of Russian schools are rural. According to the data provided by the Federal State Statistics Service in the 2013-2014 academic year over 60% of schools were located within the rural settlement territory while the number of students from rural settlements amounted to 36% of the total number of students¹. Nevertheless the overwhelming majority of modern Russian studies is dedicated to the students living in big cities. Also there are some works comparing students in urban and non-urban contexts. It has been repeatedly demonstrated that rural students distinguish by low academic achievements due to the low socioeconomic status of their families and the peculiarities of rural schools (Konstantinovsky et al 2011; Yastrebov, Krasilova, Abankina 2012).

Research shows how, in general, at different levels, social reproduction is carried out through education in the Russian case. The social status of parents influences students' academic performance and educational aspirations, both with the help of vertical channels of differentiation, and horizontal ones. For example, students from low SES families are less likely to choose higher education, even if they have high educational achievements. Social status predicts the choice between selective and non-selective universities also (Havenson, Chirkina 2018).

Family educational resources have special significance, both for academic performance and for planned educational trajectories. Social reproduction is based on the transfer of family resources to children through educational success, aspirations and trajectories (Popov, Tyumeneva, Larina 2013).

Today in Russian studies practice there is no tradition of measuring school differentiation using generally accepted international instruments (differentiation indices), so it is difficult to include Russian case into the global context and compare with other countries. Contemporary studies also lacks a consistent analysis of between-school differentiation and its comparison with within-school differentiation. This thesis research aims to fill this gap.

¹According to the data provided by the Federal State Statistics Service *Rossysky statistichesky ezhegodnik – 2014*: http://www.gks.ru/bgd/regl/b14_13/IssWWW.exe/Stg/d01/07-12.htm.

Social inequality is growing in Russia. Measures in educational policy constitute the lever for the inequality governing. On the one hand, the education system must meet parental requirements to exercise the right to choose, on the other hand, ensure school availability for all social groups. Institutional changes in the education system, which began in 2012, were aimed at containing inequality. The issue of school differentiation and the right of parents to choose schools in the context of the diversity of educational institutions in the district has become actualized with state reforms, and remains an important topic, which is actively discussed in the media and social networks.

Literature review

Most of the modern educational differentiation studies are traditionally dedicated to the examination of the ethnic and socioeconomic school differentiation which constitutes stable patterns of student distribution between educational institutions depending on their characteristics (Hanushek, Woessmann 2006; Gorard, Taylor 2002; Kristen 2008 and others). The key reason for the school differentiation is considered to be the residential segregation or the peculiarities of the school neighborhoods, therefore a particular series of works in this sphere is dedicated to the study of the neighborhood impact on the educational achievements of the local school students (Garner, Raudenbush 1991; Kauppinen 2008; Rivkin, 1994). At the close of the 20th century the education policy in different countries was aimed at the extension of opportunities in the field of the educational selection. In this regard studies of school differentiation in big cities appeared: New York (Kucsera, Orfield 2014) and Chicago (Sirer et al 2015) in the USA, as well as in Netherlands (Cabus, Cornelisz 2017), Great Britain (Gorard 2015) and Sweden (Söderström, Uusitalo 2010). The researchers of education in different countries note the increase of school differentiation based on the family SES.

The studies of the school differentiation based on the Russian data are anecdotal. Clusters of *successful* and *failing* schools are distinguished, also the

analysis of educational, career and migration strategies of high school students in rural area deprived in comparison with that urban is performed through the example of several Russian regions (Yastrebov, Krasilova, Abankina 2012; Konstantinovskiy et al 2006; Frumin et al 2012). Some studies dedicated to the inequality in education considering the existing territorial differences come out (Yastrebov et al 2013). They show that the educational achievements of children depend on the educational level of their parents, on their socioeconomic status. The progress may also be related to certain characteristics of a school such as material support, number and level of the teaching staff, school status (lyceum, gymnasium or an advanced status school). However the territory effect could not be verified at the settlement level (Yastrebov et al 2013).

The selection and differentiation processes in Russian context are running under non typical conditions: high level of regional inequality and low level of residential segregation. Compared to other countries, the level of school differentiation is considered moderate. The example of such Russian metropolis as St. Petersburg shows that a noticeable share of differentiation is characteristic of schools with a standard curriculum, despite the fact that socioeconomic differentiation is formed between schools with a standard curriculum and advanced status (Ivaniushina et al. 2019).

International comparison shows that the inequality of academic performance, expressed in relation to the family socioeconomic status and the student's PISA results, is small in Russia, just like the level of between-school and within-school differentiation. For both dimensions, the country's results are below the average values calculated for the OECD countries (PISA, OECD. Insights and Interpretations 2018).

The studies in the recent 20 years show the effectiveness of the inequality and school differentiation analysis at local levels considering their spatial organization and the role of the social context. Earlier the social context was examined at the level of opposing the urban and non-urban areas, also the neighborhood effect was studied.

Recently the scientists increasingly appeal to the analysis of the educational systems located in small areas. They are called *educational landscapes*, *landscape of choice*, *micromarkets* (Radtke, Stošić 2009; Bowe, Gewirtz, Ball 1994; Taylor 2001). Despite the term differences the studies have one common idea: *families and schools, as distinct although often overlapping institutional spheres, are embedded within and shaped by places — places that vary significantly in opportunity and, consequently, resources* (Roscigno, Tomaskovic-Devey, Crowley, p.2124). There are *educational institution systems which are part of local social infrastructure and offer concrete selection and action variants* (Radtke, Stošić 2009, p. 46). The choice of education is framed by a specific locality according to economic and social conditions provided thereby (Bowe, Gewirtz, Ball 1994). Thus wise modern studies in social and educational inequality started to unite space and place as well as to consider the effects at several levels (Condrón, Roscigno 2003; Tickamyer 2000).

Such framework allows to detect latent limitations of educational and social mobility (Taylor 2001, p.198), to see that the social inequality system may have local peculiarities depending on local patterns of socioeconomic differentiation (Condrón, Roscigno 2003). Following on from the approach described a concept of *local educational system* (LES) shall be introduced into the thesis research.

Aims and objectives

Schools, students and parents in three localities on the territory of Russia (big urban center, small town and rural district) are the objective of this thesis research. The processes of school differentiation in local educational systems are the research scope. A local educational system (hereinafter the LES) in this research shall be understood to mean a relatively self-contained interaction system of various level educational institutions (from preschool to higher education), entrenched in social and geographical locality characteristics and presenting structural framework within which the students' educational trajectories are formed.

The **aim** of this study is to investigate social selection and school differentiation in the territories with various socioeconomic contexts.

The following tasks were set:

- (1) To perform the analysis of local educational systems in the areas with different levels of socioeconomic development (big city, small town and rural area).
- (2) To detect and describe school differentiation patterns using qualitative and quantitative data analysis.
- (3) To measure and compare level of between-school and within-school differentiation formed in the rural area, small town and big city.
- (4) To detect characteristics of settlements, potentially associated with selection and differentiation patterns.
- (5) To reveal factors related to academic performance in each locality, as well as to define the local characteristics of social reproduction in education with the help of regression analysis.
- (6) To describe the mechanism of social reproduction through education in different local contexts in comparison with international quantitative studies of social reproduction and school differentiation.

Author's personal contribution to the problem development and data collection

Thesis author has performed an incisive analysis of the modern studies in school differentiation and following the results thereof has formulated objectives and hypotheses of her research. She took part in each stage of collection and analysis of qualitative and quantitative data included in the thesis empirical database. Being a member of *Sociology of Education and Science Laboratory* research group (and in some cases being the head of certain Laboratory projects) the author elaborated the research design (sampling, informant selection), the research tools (questionnaires and interview guides), arranged the data input and interpretation control in the

projects of various years². Besides that the author participated in field studies in each case taking on the role of both interviewer and questioner.

The author has personally performed analysis of the issue stated, interpretation of the results obtained, integrated the conclusions into the context of recent international studies, formulated the similarities and differences between the school differentiation in Russia and in other countries.

Theoretical grounds

Theoretical grounds of the thesis research consist in classic and current frameworks explaining the role of educational system in the social inequality reproduction. The first theories in this field owing to P. Bourdieu and J.-C. Passeron, R. Boudon, S. Bowles and H. Gintis (Burdye, Passron 2007; Boudon 1974; Bowles, Gintis 1977), as well as the conceptions of the second wave scientists such as J. Goldthorpe and R. Breen, R. Lucas, S. Ball (Ball 2003; Breen, Goldthorpe 1997; Lucas 2001) concur in a basic opinion: the school differentiation is aligned with the fact that the upper social strata tend to guarantee their own social reproduction. The modern analysis of social reproduction in educational system requires both studying the educational level achieved by children from the families with a certain socioeconomic status and considering a horizontal differentiation – a place or a track occupied by a student at this educational level (Lucas 2001).

Theoretical grounds of the research are also congruent with the analysis of spatial segregation within which the formation and reproduction of social inequality in physical space is studied. The studies show that such differentiation is mainly based on the socioeconomic status which nowadays becomes the source of social inequality.

Residential segregation and school differentiation are closely related and interfering phenomena (Lareau, Goyette 2014; Owens 2016). As time progressed the

² The projects were organized as part of the NRU HSE Fundamental Research Program in 2008-2014 and gained support of the NRU HSE Center of Professional Advancement, RHSF (project No. 14-03-18029 *Social Order in the Context of Deindustrialization*). The author expresses gratitude to the Laboratory collaborators and the NRU HSE students in Saint-Petersburg who took part in the empiric data retrieval and analysis.

analytical instruments of segregation analysis were adopted by education researchers. They started a consecutive measurement of school differentiation comparing students with certain characteristics in educational institutions. It is considered that school differentiation increases already existing potentiality gap between the rich and the poor, troubling an equal access to social benefits.

Data collection and analytical techniques

The research methodology is based on two principles which favor a more complete and deep study of the object considering the context. First of all multiple case study is applied, as it is a method which is the most compliant with the task of careful and sequential object study and suggests using different data sources. Secondly not merely quantitative but also qualitative data is analyzed (Yin 2003).

The empiric foundation consists in the data collected within the framework of joint projects held by the *Sociology of Education and Science Laboratory* (SESL) of the NRU HSE, Saint-Petersburg, 2007-2014. The research is based on the analysis of three cases mainly: a big urban center (Saint-Petersburg), a small town and a rural district within the Leningrad Region.

The questionnaires were completed by ninth-graders and their parents in 2009 within the Priozerskiy District. Consequently 493 students' questionnaires from 18 schools were collected. At the same place interviews with students, their parents and school officials were held (80 interviews).

The questionnaires were completed by ninth-graders and their parents in Kirishi, small town, in 2011. 368 questionnaires from all 8 schools in town were included in the database. Besides the questionnaire survey 12 interviews with local school officials were held.

The analysis of local educational systems in a big urban center consisted in sequential comparison and combination of different data obtained from different sources. In order to make a general description of the metropolitan educational system data on the number of schools in the city, their status, location and the number

of students there (600 schools) were used. The Laboratory was provided with this information by the Regional Center for the Educational Quality Assessment. The data was expanded by the results of the single national exam (SNE) available on the website <http://www.shkola-spb.ru/>. This data group allowed the description of the metropolitan educational system and the comparison of general characteristics specific to the district LES': variations in size, composition (correlation of different status schools) and density of educational institutions. The institution addresses were converted in geo-tags and mapped allowing in such a way to detect disconnectedness of some districts and high density of institutions in others.

In order to make a comparison to other localities (rural area and small town) the data on two surveys of ninth-graders in Saint-Petersburg was put forth (SESL, 2010 and 2014) that is 8104 returns retrieved in 211 schools in Saint-Petersburg and selected under the stratified sample norms.

The data collected in other localities within the Laboratory projects acted as a contrast for the main three LES cases and contributed to a more complete system peculiarities description. The involvement of the PISA-2015 international project data in the analysis helped to compare the differentiation measurement results in Russia and in other countries.

The application of mixed data analysis led to a number of advantages. The employment of a qualitative methodology allows detecting the details of the locality social context at large and of the school differentiation context in particular, detecting the reasons for the differences discovered following the quantitative data, as well as finding latent reasons for differentiation at the school or school grade levels. At this stage thematic segmentation and interview transcript coding of NVivo program was carried out. CartoDB (GIS) software helped to take the school location into consideration: schools were mapped. The interview data allowed not only describing meaningfully the differentiation and the attitude of different participants towards it, but also detecting latent mechanisms of selection.

The statistical analysis of the student questionnaire survey showed the differences between differentiation patterns at the levels of local educational systems, schools and grades. In order to measure and compare the school differentiation basing on various characteristics at different levels segregation indexes for quantitative data were calculated (Theil index³) (Roberto 2015; Reardon, Firebaugh 2002). This instrument gave the opportunity to compare the results of differentiation measurement in each locality at the school and grade levels as well as to introduce them into the international context.

The modeling using linear regressions was used to compare the association of different factors with the student's average performance basing on the quantitative data. The factors were as follows: gender, mother's education, family SES, family cultural capital as well as school. Basing on these results the universal and the unique for each locality peculiarities of the inequality reproduction were described.

Key findings

(1) The results show that school choice and academic performance are structured differently in different territories. There are significant differences in social reproduction through education in local educational systems. This shows the insufficient studying of the problem on national samples. The thesis proposes an approach to the analysis of social reproduction through the exploring of local educational systems.

LES concept provided the empirical content to the general metaphor of the educational landscape, dividing the territory into elementary subsystems, where micro markets of educational services function. The application of mixed methodology allowed describing the LES in details at several levels, the school differentiation mechanisms as well as the attitudes of two groups (parents and teachers) towards this process. Such comparison of local educational systems showed

³ The index takes on values from 0 to 1. The closer the index value to 1, the more differentiated are the studied cases (the students are more likely sorted under the examined parameter in a non-random manner).

the role of socioeconomic and spatial context in the school differentiation and academic performance.

(2) Selection and differentiation are inherent in all local educational systems, but they are implemented in different ways, depending on the local context: territorial inequality within the locality, spatial organization, as well as the characteristics of micro-segregation at the place of residence.

Each type of differentiation is influenced by certain factors. Between-school differentiation is influenced by the prestige and school status, the social context in which the school is located, while within-school differentiation is influenced by the teacher's status and the educational/methodological complex adopted in the class. The school differentiation may evolve in localities with different level of socioeconomic development. Both in rural and city cases the following differentiation pattern is observed: some schools perform a social service (the control, detecting and prevention of poverty and deviation). Such school functioning is especially important in the localities with a socioeconomic decline.

The level and combination of differentiation between and within school are also connected with social and geographical characteristics of a locality. For example, schools isolated by territorial barriers are characterized by differentiation within school.

(3) The measurement of differentiation between and within schools was carried out, as well as their comparison across locality. First time the segregation index (Theil index) was applied to the Russian data (Roberto 2015; Reardon, Firebaugh 2002). Various parameters of school differentiation were examined: family socioeconomic status, mother's educational level and student's academic performance. The results show that neither schools nor classes are differentiated in academic performance.

Socioeconomic school segregation in small town is absent. Neither schools nor classes differ significantly from each other in terms of SES or mother's educational level in the locality of this type. Diverse differentiation patterns evolve in rural area

and in Saint-Petersburg. In rural area family SES differentiation arises between schools. This nature of differentiation reflects territorial inequality within the district between the settlements. Differentiation between classes is based on another parameter – mother's educational level. The metropolitan schools are characterized by higher values of segregation index. Family SES and mother's education are important at both levels.

The school differentiation analysis procedures were applied for the international data (PISA 2015). Countries with contrasting levels of standardization and selection were chosen (Van de Werfhorst, Mijs 2010): those with a high degree of differentiation in the educational system – Austria, Belgium, Germany, and those with the low degree thereof – Sweden, Denmark, Finland (11 countries selected in total). Between-school segregation index calculation according to this sample showed that school differentiation on mother's education in Russia is higher than that in Finland and in Sweden but lower than in Germany, USA, Great Britain, Hungary, Denmark. The differentiation level on family SES is the lowest of all the mentioned countries in Russia. Averagely in Russia the between-school segregation is not as high as in other countries. In fact a higher value may be expected because the sampling in Saint-Petersburg did not comprise all the schools in each specific area. In addition, between-school and within-school differentiation in the complex give a high level of differentiation.

School differentiation patterns differ from one country to another (Marks, Cresswell, Ainley 2006). The selection in Finland takes place within the public comprehensive school system whereas in Sweden it arises between private and public schools (Varjo, Kalalahti, Lundahl 2016). Socioeconomic segregation in Pakistan is higher in private schools than in those public, while in public schools an academic performance differentiation between districts predominates (Siddiqui 2017). In Russia private school sector is not large, the differentiation arises within the public school system. Previous studies showed that between-school differentiation is associated with the school status: the students attending advanced status schools

(gymnasia, lyceums, schools with an advanced study of subjects) have higher SES and academic progress (Pinskaya, Kosaretsky, Frumin 2011; Roshchina 2012; Yastrebov et al 2013). The present research justifies this conclusion relating to a metropolitan city and describes how exactly the differentiation in the school status proceeds.

(4) Parents with high socioeconomic status are interested in school differentiation and perceive it positively. As a result of school differentiation, they gain an advantage, while parents with low SES may perceive school differentiation as social inequity.

The research carried out in Great Britain brilliantly showed how the middle class realize of social advantage throw school market owing to differences between the practices of choosing schools. Working-class parents frequently manifest fatalism and apathy denying choosing school (Reay, Ball 1997). These families believe that all the public schools are equal, respect for the teachers' opinion and advice is accepted by them. As a result they exclude themselves from the competitive race for the resources (Reay, Lucey 2004), and the academic and social differentiation increases (Ball 1997; Van Zanten 2005).

According to the analysis of Russian data this process may be accompanied by social tension. Parents with a low SES may perceive school differentiation as social inequity. It is reasonable to assume that such perception unfolds primarily under the circumstances of within-school differentiation (in the conditions for regular social comparisons).

(5) This study allows dividing the factors of academic performance into general and specific ones. The general factors that have shown their significance in each case include the student gender, mothers' education, and family's cultural capital. The following local features of social reproduction were identified: 1 - family SES in rural areas is not associated with academic performance; 2 - in rural areas, only mother's higher education matters, while in urban areas - each of the levels has significance; 3 - in a megalopolis, the school status gets an independent meaning.

Current studies have already shown that social reproduction in Russia is based on the transfer of family resources to children through academic performance, aspirations and trajectories, and demonstrated that school differentiation is primarily associated with the socioeconomic status and parental educational level (Goshin, Mertsalova 2018; Konstantinovsky et al. 2006; Pinskaya, Kosaretsky, Frumin 2011; Popov, Tyumeneva, Larina 2013; Roshchina, 2012; Havenson, Chirkina 2019 et al; Yastrebov et al. 2013). This study proves that the nature of social reproduction is territorially differentiated. In rural areas and small town the mechanisms of social reproduction are based on families and students characteristics, and the family socioeconomic status does not directly affect the academic performance in rural case. In large cities schools make the independent contribution to social reproduction: select capable students and accumulate their resources. Thus, if in rural areas the role of teachers and the school organizational culture increase, in the megalopolis schools become agents of social reproduction.

General Conclusions

Generally in respect of the inequality theory all the researchers from P. Bourdieu, J.-C. Passeron and their followers to J. Goldthorpe and R. Breen (Burdye, Passron 2007; Breen, Goldthorpe 1997) concur in an opinion that there are a lot of mechanisms which guarantee a certain isomorphism between the stratified society structure and the organization of educational systems. The school differentiation is associated with the fact that the upper social strata tend to guarantee their social reproduction. The authors disagree only about the exact mechanisms which provide for the reproduction process. The modern liberalization of school choice increasing nowadays becomes an important contemporary differentiation context. This includes the *game rules* for new educational markets which allow the middle class taking its advantage (Ball 2003). Choice liberalization processes taking place all over the world are global in themselves, but the choice of school, of social reproduction and school

differentiation systems as well as the relationship between the school stratification and segregation are deeply local.

School differentiation depends on the local context: the systems of social reproduction and school differentiation are local, the relations between academic success and its predictors (the main characteristics of the student and their family) are territorially differentiated. This conclusion can be explained as follows.

Selection and school differentiation are formed in accordance with the characteristics of locality (territorial inequality, spatial organization, micro-segregation at the place of residence), and are inherent in all LESs. Even in cases where quantitative analyzes show no differences in the socioeconomic status of parents at either the school or class levels, the data show that parents are picking up on the differentiation. In each case study, schools were found that have specific functions such as detecting and preventing poverty and deviation. They have been shown to take on such functions as a result of selection processes in LESs.

Between-school differentiation is associated with the prestige and school status, as well as its context. Within-school differentiation is primarily associated with the teacher's status and educational/methodological complex adopted in the class. School admission is currently state-regulated, but the school has relative freedom in sorting students between classes. The school can use it to give privilege to the parents with higher SES, but in conditions of hidden selection, parents whose children get into weak classes may feel disadvantaged.

The level and patterns of selection and school differentiation differ in the territories of the studied cases. The index of differentiation, calculated on international PISA data, revealed a relatively low level of between-school differentiation in Russia, which is consistent with the results of other studies. However, if to consider between-school differentiation together with within-school differentiation, then in a metropolis the overall level of differentiation turns out to be high. This confirms the hypothesis that between-school differentiation is higher in

LESs with high density of educational institutions. Schools isolated by territorial barriers within megacities have remarkably higher within-school differentiation.

The following characteristics of the social reproduction are identified: (1) in rural areas, family SES is not associated with the academic success of schoolchildren; (2) in rural areas, only the level of high education is important, while in urban areas - each of the levels; (3) in a megalopolis, the school status becomes significant. Thus, social reproduction is locally differentiated. While in the rural areas, the role of teachers and school organizational climate are increasing. In the megalopolis schools become the agents of social reproduction.

As demonstrated, the social reproduction systems, as well as the school differentiation patterns differ in different territories. This result has **theoretical and methodological meaning**. Processes in the education system, including social reproduction, must be studied taking into account the territorial and social context at the level of local educational systems. In studies with national samples, local differences are smoothed out and some effects disappear. At the same time, the management of educational systems, including the reduction of inequality between schools and students, is organized geographically.

Findings have practical significance for the management of educational systems, which is currently based on a simple administrative-territorial division. According to this new approach, local educational systems must be considered as independent units of management.

This study presents the technics that allow to measure and monitor between-school and within-school differentiation. These results will introduce more reasonable measures in **educational policy** and will help to ensure equal access to education, taking into account the social context and the characteristics of student body composition.

The conducted research allows proposing the additional financial mechanism as policy instrument. HSE scholars have already developed the important concept of resilient schools and suggested to support them at the regional and municipal levels

(Pinskaya, Kosaretsky, Frumin 2011). This study demonstrated how some schools carry out the social function not because of the difficult socioeconomic context, but as a result of selection in the local educational system. They deserve special funding and support that will help to solve the problem of students leaving and generally to decrease the level of school differentiation in the territory.

List of publications

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