Research on Public Satisfaction with Educational Infrastructure of Advanced Development Territories

K. Skobeltsina¹,ᵃ, and A. Kuznetsov¹,ᵇ*

¹ Institute of Education Management of the Russian Academy of Education, 16 Zhukovskogo str., 105062, Moscow, Russia

ᵃ kseniakazn@inbox.ru, ᵃ b kuznetsov@iuorao.ru

* Corresponding author

Keywords: educational infrastructure, advanced development territories, priority development territories, public satisfaction, availability of education, sociological research in education, Russian regions, research tools, monitoring research, education management

Abstract: The program of monitoring sociological research of the level of satisfaction of various categories of the population with the existing educational infrastructure in the constituent entities of the Russian Federation, which are assigned to priority territories and territories of priority development, is presented in the article. The relevance of such a study is justified by state guarantees of accessibility of education in Russia, as well as national objectives for the effective socio-economic development of the country’s territory. A review of existing domestic and foreign studies on this issue is given in the work, the degree of development of the problem is characterized, the object, subject and purpose of the study are determined, research questions are formulated, the methods used are described, the characteristics of a scientifically based sample of respondents are given in the article. Specially developed tools (two questionnaires) will be applied in the work. These tools can be further applied for similar monitoring studies.

1. Introduction

The main legal documents of the Russian Federation (Constitution of the Russian Federation, Federal Law “On Education in the Russian Federation”) [1; 2] guarantee the general accessibility of pre-school and basic general education in state or municipal educational institutions, as well as the provision of conditions for learning, taking into account the peculiarities of psycho-physical development and the state of health of students. In addition, effective socio-economic development of the country’s territory, provision of areas where specialists from various sectors of activity live, with a high-quality educational infrastructure is one of the most important national goals and strategic objectives of the development of the Russian Federation (Decree of the President of the Russian Federation “On the Strategy of the Scientific and Technological Development of the Russian Federation”; Decree of the President of the Russian Federation “On the National Objectives and Strategic Tasks of the Development of the Russian Federation for the Period up to 2024”, “The Main Activities of the Government of the Russian Federation for the Period up to 2024”) [3; 4; 5]. In recent years, special attention is paid to the territories of advanced socio-economic development in the Russian Federation (Federal Law “On the Territories of Advanced Socio-Economic Development in the Russian Federation”) [6]. The need to create in these territories favorable conditions for attracting investments, ensuring accelerated socio-economic development, and ensuring the vital activity of the population with the necessary socio-economic conditions is emphasized. In this regard, conducting a sociological study to determine the adequacy of the existing educational infrastructure in educational organizations in the constituent entities of the Russian Federation that are related to priority territories and territories of advanced development, as well as the satisfaction of the population with the existing educational infrastructure is highly relevant [7].

The purpose of the sociological research is to study and assess the security of regional education systems with educational infrastructure facilities and the volume of services rendered in the field of education to various categories of the population in the constituent entities of the Russian Federation, which are related to priority territories and territories of advanced development.
The object of the research is the opinions of parents/legal representatives of students of general educational organizations and students of general educational organizations at the stage of obtaining secondary (complete) general education about the existing educational infrastructure.

The subject of the research is the satisfaction of the population (the main participants in the educational process: parents/legal representatives and students) with the existing educational infrastructure in the constituent entities of the Russian Federation that are related to priority territories and territories of advanced development.

The analysis and synthesis of existing scientific works within the framework of the chosen problems allowed to formulate two main research questions of the sociological research.

1. Does population satisfaction with the educational infrastructure depend on several social stratification factors, including the level of parents' education and the financial situation of the family?
2. Is there a regional specificity of public satisfaction with the educational infrastructure?

2. Materials and Methods

The method of analyzing the Russian and foreign publications on the subject of work was actively used in the first part of the study, as well as such methods as induction (generalization), abstraction (search for the essence of social phenomena); hypothesis building research preceded everything.

The method of questionnaire survey is used in the framework of a sociological survey. It allows one to identify quantitative and qualitative indicators of public satisfaction with the existing educational infrastructure. Questionnaires include closed, open and questions using the response scale, which allows to characterize the main aspects of the satisfaction of participants in the educational process with the adequacy of the educational infrastructure.

In accordance with the subject and the main purpose of the study, the regions of the Russian Federation, that are related to priority territories and territories of advanced development, were selected for conducting a sociological survey. They are located in 23 constituent entities of the Russian Federation from all federal districts (with an emphasis on the Far Eastern and Siberian Federal Districts). At least 2,300 respondents (students in grades 10-11 and their parents/legal representatives) are scheduled to be interviewed. This will allow to create a sufficient experimental sample to ensure the reliability of the obtained results.

3. Results

The analysis of publications about the research allowed to establish that the problem of improving the educational infrastructure is widely considered in foreign studies conducted on the basis of materials collected in Mexico, the Czech Republic, the United States, Sweden, Japan, and other countries [8; 9; 10; 11; 12; 13; 14]. In scientific works, the educational infrastructure is considered as a basis for understanding the processes of change in education at different levels of the education system (regional, school, etc.). Scientists note that the level of infrastructure development can have a supportive effect as well as restrain changes in education [15; 16]. At the same time, the results of empirical research show that investments in the development and modernization of the educational infrastructure have a positive impact on the educational results [17]. In this regard, a study of the adequacy of the educational infrastructure in various regions of the Russian Federation seems appropriate.

In modern domestic sociological research, attention is paid to the study of public satisfaction with the quality of education, as well as various aspects of the educational infrastructure (research of Sobkin, V. S., Kalashnikova, E. A., Frolova, E. V., Limonova, M. Yu., etc.) [18; 19; 20; 21]. First of all, existing scientific research concerns such aspects of the functioning of educational organizations as material and technical equipment, sanitary and hygienic conditions and the use of health-saving technologies in education, the mode of operation of educational institutions, additional educational services, etc. in certain regions of the Russian Federation, municipalities or urban territories (Moscow, Moscow region, St. Petersburg, Leningrad region, Krasnoyarsk region, Tambov region, Kemerovo region, etc.) [20; 21]. The adequacy of the existing educational infrastructure in educational organizations of a number of constituent entities of the Russian Federation that are related to priority territories and territories of advanced development will be assessed in the course of the
planned sociological research [7]. The obtained results will allow a comprehensive assessment of population satisfaction with the existing educational infrastructure of these regions for such factors as: territorial (transport) accessibility, material and technical equipment of an educational organization, opportunity to choose and obtain additional educational services, financial affordability, support for gifted children, and children with disabilities, etc.

At this stage of the scientific work, a special toolkit has been developed for conducting a sociological research. Namely, there are two variants of questionnaires for identifying satisfaction with the existing educational infrastructure of the main participants in the educational process: (1) parents/legal representatives of students of educational institutions (students at all stages of general education: preschool, primary, basic and secondary), (2) students of educational institutions at the stage of receiving secondary (complete) general education (10-11 grades).

The questionnaires are made up taking into account the main goals and objectives of the study. The structure of questionnaires assumes the existence of groups of questions aimed at studying the satisfaction of respondents with various aspects of the organization of the educational process and the equipment of educational institutions.

The questionnaires used in the study include six informative blocks.

1. Satisfaction with the educational organization.

This block includes questions relating to the overall satisfaction of the respondents with the educational organization and their expectations from the education system. The focus here is to identify the degree of satisfaction with the educational organization (as much as the school/kindergarten likes), the factors that determine the choice of the educational institution (which influenced the choice of school/kindergarten), as well as respondents’ expectations from the education system (the possibility of continuing education in a preferred subject area, ideas about the necessary conditions for ensuring quality education, etc.).

2. Satisfaction with the infrastructure and equipment of the educational organization.

The questions of this block are aimed at identifying the degree of satisfaction of the main participants in the educational process with various aspects of the activities and equipment of the educational organization:

- Material and technical equipment (equipment of classrooms, sports halls, sports facilities in the surrounding area, etc.);
- Sanitary and hygienic conditions (condition of the building of the educational organization, lighting, air-thermal regime, etc.);
- Territorial accessibility (distance of the educational organization from home, transport accessibility);
- Food quality;
- Quality of medical care;
- Security measures in the organization (security, fire alarm, etc.);
- Use of information and communication technologies in the educational process (information and technical equipment of an educational organization, Internet connection and access to a Wi-Fi wireless network).

3. Financial access to education.

This block includes a number of issues related to the financial accessibility of education. Parents’ satisfaction with the level of payment for educational services and measures of financial support for families paying for educational services (regional benefits, material compensation, etc.) are discussed here.

4. Additional education.

The questions in this section concern the satisfaction of parents and students with additional educational services at school, as well as other educational organizations. At the same time, the focus is on conducting additional classes in schools in such subject areas as “Computer Science”, “Technology”, as well as on physical
culture. Special attention is paid to special events in educational organizations aimed at developing students' talents and abilities.

5. Education gifted children and children with disabilities.

In the questionnaires, a separate set of questions is highlighted concerning the education of various categories of students, including children with disabilities and gifted children. Such aspects as teachers’ readiness to work with various categories of students, the adequacy of the infrastructure that ensures accessibility of education for gifted children and children with disabilities, and the holding of special events for the development of talents and abilities of various categories of students are covered in this block.

6. Demographic and social stratification characteristics.

The influence of such factors as gender, age, level of education, employment, the number of children in the family, the financial situation of the family will be taken into account when interviewing parents/legal representatives of students. Characteristics such as gender, parental education, family material status will be included in the student questionnaire. In addition, an indication of the region of residence of the respondents, as well as the duration of their residence in this region is provided in both forms.

4. Conclusion

The analysis of regulatory documents and publications on research issues confirmed the relevance and importance of conducting a monitoring sociological research in assessing the security of regional education systems with educational infrastructure, as well as the volume of educational services provided to various categories of the population of the constituent entities of the Russian Federation that are related to priority territories and territories of advanced development. The developed research program will help assess the level of public satisfaction with the existing educational infrastructure, as well as the adequacy of the educational infrastructure in various regions of the Russian Federation. The application of the developed tools allows a comprehensive assessment of the population’s satisfaction with the existing educational infrastructure in the regions that are related to priority territories and territories of advanced development and prepare recommendations for the development of educational infrastructure in the regions.

In the course of further work, we will conduct a sociological study in accordance with the sample provided by this program, statistical processing of the data taking into account the main social stratification parameters and demographic characteristics of the respondents, as well as a sociological analysis and interpretation of the results. Specially developed tools (two questionnaires) will be applied in the work. This tool can be further applied to conduct similar monitoring studies. We will present the features of the sociological survey and its results in future publications.

5. Acknowledgments

The article was prepared with the financial support of the Ministry of Enlightenment of the Russian Federation in the framework of the implementation of the state task No. 073-00089-19-01 for 2019 on the topic “Theoretical and Methodological Substantiation and Development of a Model for the Placement of Educational Infrastructure Facilities and Mechanisms for the Provision of Educational Services in the Constituent Entities of the Russian Federation, including Priority Territories and Advanced Development Territories, to Take into Account the Need to Ensure State Guarantees of Access to Education in Territorial Planning”.

The authors thank the staff of the Institute of Education Management of the Russian Academy of Education for valuable comments on the program and research tools.

References

[1] Constitution of the Russian Federation. (1993). Moscow, Russia. Retrieved from http://www.consultant.ru/document/cons_doc_LAW_28399.

[2] State Duma of the Russian Federation. (2012). Federal Law “On Education in the Russian Federation” (No. 273-FZ). Moscow, Russia. Retrieved from http://www.consultant.ru/document/cons_doc_LAW_140174.
[3] Presidential Executive Office. (2016). Decree of the President of the Russian Federation “On the Strategy of the Scientific and Technological Development of the Russian Federation” (No. 642). Moscow, Russia. Retrieved from https://mvd.consultant.ru/documents/1056040?items=1.

[4] Presidential Executive Office. (2018). Decree of the President of the Russian Federation “On the national goals and strategic objectives of the development of the Russian Federation for the period up to 2024” (No. 204, as amended by Presidential Decree No. 444). Moscow, Russia. Retrieved from http://static.kremlin.ru/media/acts/files/0001201805070038.pdf.

[5] Government of the Russian Federation. (2018). The main activities of the Government of the Russian Federation for the period up to 2024. Moscow, Russia. Retrieved from http://static.government.ru/media/files/ne0vGNJUk9SQJlGNNsXIX2d2CpCho9qS.pdf.

[6] State Duma of the Russian Federation. (2014). Federal Law “On the territories of advanced socio-economic development in the Russian Federation” (No. 473-FZ). Moscow, Russia. Retrieved from http://www.consultant.ru/document/cons_doc_LAW_172962.

[7] Kuznetsov, A. (2019). Accessibility vs. availability of education as two key phenomena of education quality assurance and education management: infrastructural development perspective, INTED2019: Proceedings 13th International Technology, Education and Development Conference, Valencia, Spain.

[8] Nordholm, D., & Liljenberg, M. (2018). Educational infrastructures and organizational memory: Observations from a Swedish perspective. Improving Schools, 21(3), 255-268.

[9] Hopkins, M., & Woulfin, S. L. (2015). School system (re)design: Developing educational infrastructures to support school leadership and teaching practice. Journal of Educational Change, 16(4), 371-377.

[10] Mouri, K., Hasnine, M. N., Tanaka, T., Noriko, U., Yin, Ch., Shimada A., … Ogata H. (2018). Seamless learning infrastructure for finding relationships between lectures and practical training. In M. M. T. Rodrigo, J-Ch. Yang, L-H. Wong, & M. Chang (Eds.). Proceedings ICCE 2018 - of 26th International Conference on Computers in Education. Manila, Philippines: Asia-Pacific Society for Computers in Education, 530-532.

[11] Hong, K., & Zimmer, R. (2016). Does investing in school capital infrastructure improve student achievement? Economics of Education Review, 53, 143-158.

[12] Reyes-Gonzalez, A., Odetti, J., & Reyes-Gonzalez, E. A. (2017). Analysis of urban and educational infrastructure in disadvantaged areas of beach town with the implementation of photovoltaic energy; study case Puerto Vallarta, Mexico. Revista Ra Xinmai, 13(3), 179-198.

[13] Vasikova, J. (2017). Integration in kindergarten: yes or no? (teachers and parents' views). In Proceedings from 8th ICEEPSY 2017: International Conference on Education and Educational Psychology (pp. 795-801). Porto, Portugal: Faculty of Medicine of the University of Porto.

[14] Aksenova, S. S., & Arinushkina, A. A. (2017). Foreign experience in the use of information and communication technologies in the professional activities of a vocal teacher. Education Management: Theory and Practice, 4(28),73-78.

[15] Tanner, C. K. (2009). Effects of school design on student outcomes. Journal of Educational Administration, 47(3), 381-399.

[16] Barrett, P., Treves, A., Shmis, T., Ambasz, D., & Ustinova, M. (2019). The impact of school infrastructure on learning: a synthesis of the evidence. International development in focus. Washington, DC: World Bank.

[17] Zhang, Y., & Barrett, L. (2015). The impact of classroom design on pupils’ learning: final results of a holistic, multi-level analysis. Building and Environment, 89, 118–33.

[18] Sobkin, V. S., & Kalashnikova, E. A. (2013). The main school pupil: the attitude to additional education. Psychology Issues, 4, 16-26.
[19] Sobkin, V. S., Ivanova, A. I., & Skobeltsina, K. N. (2013). The attitudes of preschoolers’ parents toward school education. *Russian Education and Society, 55*(7), 79-89.

[20] Frolova, E. V. (2014). *Modernization of the social infrastructure of municipalities in the Russian Federation* (Dissertation of the Doctor of Sociological Sciences). Moscow, Russia: Institute for Social and Political Studies of the Russian Academy of Sciences.

[21] Limonova, M. Yu. (2015). *The results of a sociological study of satisfaction with the quality of general education*. Tambov, Russia: TOIPKRO.