

COGNITION AND LEARNING WITH A MOTHER TONGUE APPROACH

COGNIÇÃO E APRENDIZAGEM COM UMA ABORDAGEM DE LÍNGUA MÃE

COGNICIÓN Y APRENDIZAJE CON UN ENFOQUE DE LENGUA MADRE

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ABSTRACT: The primary objective of the study is to inspect cognition and learning with a mother-tongue approach. A language is a tool rather than a plan that sometimes replaces education is a fundamental task. Four communities to the history of civilization are the history of native language content, age of housing, metal era, the era of science and technology, and is now divided into the information age. In all periods, the mother tongue has a crucial role and is fundamental for people. Mother tongue constantly evolves the character of people, and cognition is constructive. This research is based on a descriptive way and library. This study indicates that there is a language of communication in the process; and learning to express their environment and surroundings plays an essential role in its development.

Keywords: Cognition. Learning. Mother-tongue. Language.

RESUMO: *A O objetivo principal do estudo é inspecionar a cognição e a aprendizagem com uma abordagem na língua materna. A linguagem é uma ferramenta ao invés de um plano que às vezes substitui a educação é uma tarefa fundamental. Quatro comunidades para a história da civilização são a história do conteúdo da língua nativa, a era da habitação, a era do metal, a era da ciência e tecnologia e agora está dividida na era da informação. Em todos os períodos, a língua materna tem um papel crucial e é fundamental para as pessoas. A língua materna desenvolve constantemente o caráter das pessoas, e a cognição é construtiva. Esta pesquisa é baseada na forma descritiva e bibliotecária. Este estudo indica que existe uma*

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linguagem de comunicação no processo; e aprender a expressar seu ambiente e arredores desempenha um papel essencial em seu desenvolvimento.

Palavras-chave: *Cognição. Aprendizagem. Língua materna. Linguagem.*

RESUMEN: *El objetivo principal del estudio es inspeccionar la cognición y el aprendizaje con un enfoque de lengua materna. Un idioma es una herramienta más que un plan que a veces sustituye a la educación, es una tarea fundamental. Cuatro comunidades de la historia de la civilización son la historia del contenido del idioma nativo, la era de la vivienda, la era del metal, la era de la ciencia y la tecnología, y ahora se divide en la era de la información. En todos los períodos, la lengua materna tiene un papel crucial y es fundamental para las personas. La lengua materna evoluciona constantemente el carácter de las personas y la cognición es constructiva. Esta investigación se basa en una forma descriptiva y bibliotecaria. Este estudio indica que hay un lenguaje de comunicación en el proceso; y aprender a expresar su entorno y entorno juega un papel fundamental en su desarrollo.*

Palabras clave: *Cognición. Aprendizaje. Lengua materna. Lenguaje.*

Introduction

Social infrastructure has an important impact on the socio-economic development of the territory it is located. According to Eireiner A., spatial infrastructure dictates and controls behaviour, and thus becomes a means of public administration (Eireiner, 2021).

In many respects it is the level of development of social infrastructure facilities that determines the quality of life of the population in a municipal entity. This dependence is especially observed in small towns with a population of up to 50 thousand people, which make up more than half of the total number of cities in Russia.

It should be noted that small towns lag behind larger cities in the development of various spheres, including the development of social infrastructure. Small towns are characterized by lower rates of economic development, which in turn leads to inequality in relation to larger cities in the use of financial and other resources for infrastructure development.

One of the main limitations to the development of social infrastructure in small towns is the imbalance in the placement of infrastructure facilities, as a result of which social infrastructure facilities do not provide the full range of services to the population.

In 2019, the social infrastructure development index decreased. At the same time, a similar situation is observed in all regions of the Russian Federation [INFRAONE Analytical Review]. According to the All-Russian Public Opinion Research Centre, it was revealed that the population of urban settlements is not satisfied with the state of social infrastructure [wciom].

The scientific development of the research topic is reflected in the works of the authors on the issues under consideration. The issues of social infrastructure development in the regions are presented in the works of Ishmurzina R., Zakirov I. (2021), Eremeeva E.A., Volkova N.V., Khalilova T.V. (2019), Dagbaeva S.D.-N. (2019). Features and barriers to the development of social infrastructure at the municipal level are the subject of the study by Popov E., Katz I., Veretennikova A. (2015), Frolova E. (2014), Serohina-Berestovska O. (2018). Works by V.S. Antonyuk, A.J. Bulikeeva, I.V. Danilova, S.A. Mitelman (2015), Zhukova, T.I. & Strashnova, Yu.G. & Strashnova, L.F. (2020) consider the effectiveness of the functioning of social infrastructure in the interests of improving the quality of life of the population. Theoretical foundations for the development of social infrastructure are outlined in the works by A.E. Lantsova (2013), I.V. Sycheva, N.A. Sycheva (2012), Yu.S. Kholopova. (2010), Toshchenko J.T. (2001), Yarkova (2020), Kalinnikova M. & Golovina A.(2020). J.A. Nalesnaya (2006), Huang, Weihe & Lu, Chunfang & Fang, Dongping (2021) consider in their works the improvement of management and development of social infrastructure.

The issues of studying the different structures of social infrastructure are considered by various authors. In particular, Layton Jack and Latham Alan have developed a six-pronged typology to examine the various registers of sociality provided by social infrastructure: co-presence, sociability and friendship, caring and kinship, kinesthetic practices, and civic participation (Layton Jack & Latham Alan, 2021). Yashima Atsushi, Huang Yu (Yashima Atsushi & Huang Yu, 2021) draw attention to the influence of the general public, which can participate in the inspection work of social infrastructure. A comprehensive approach to assessing the effectiveness of municipal infrastructure is presented in the work developed by Shahata Khaled, El-Zahab Samer, Zayed Tarek, Alfalah Ghasan (Shahata Khaled, El-Zahab Samer, Zayed Tarek, Alfalah Ghasan, 2021).

Special attention in the works of Vanier D & Danylo N., Felio Guy, DeAngelis M & Tomlinson R, Boudreau S, Kozłowski W. are devoted to the problems of attracting investment in urban infrastructure (Vanier, Dana & Danylo, N., 2021; Felio Guy, 2021; DeAngelis Michael & Tomlinson Richard, 2021)

Despite the fact that the problems of functioning and development of social infrastructure are sufficiently considered in the presented works, the issues of municipal management in the sphere of development of social infrastructure of small towns in modern conditions are insufficiently studied. All this necessitates the development of directions to improve the conditions for the functioning of social infrastructure facilities at the municipal level. The aim of the paper is to identify the limitations of small town social infrastructure development in

modern Russian conditions on the basis of the analysis of infrastructure development in the town of Balabanovo of Kaluga Oblast.

Research methods.

The study used both general theoretical methods (analysis and synthesis, comparison, generalization) and empirical methods (document analysis, content analysis, questionnaire survey). The questionnaire survey was conducted by random sampling. Residents of the town of Balabanovo, Kaluga Oblast, were the respondents. The total number of respondents who participated in the survey was 118 people, of whom 75.5% were women and 24.5% were men. The vast majority of respondents have higher education - 62.7%, secondary vocational education - 30.5%, and 3.4% each have secondary and incomplete higher education. 89% of the respondents work, while the rest are studying, temporarily unemployed, on maternity leave, or retired. The survey included 22.9% of 18-24 year olds, 41.5% of 25-34 year olds, 22% of 35-45 year olds, and 13.6% of 45 and older. The participation in the survey of people with different sex and age structure, different levels of education and employment, ensured the representativeness of the survey, as well as the reflection of the opinions expressed by different segments of the population.

The sources of information for the content analysis were reviews of the residents of Balabanovo posted in groups of the city in the social network Vkontakte for the period of 2018-2020.

The information basis of the study were regional and municipal legal acts, statistical data and information and analytical materials of the Administration of Balabanovo, Kaluga region, articles of leading periodicals, materials of scientific conferences and seminars.

Results

Currently, there are two approaches to the consideration of social and cultural infrastructure - sectoral and activity-based. Representatives of the branch approach understand the social infrastructure as a complex of sub-branches, organizations, institutions of the socio-cultural sphere. It is the scientists who adhere to the branch approach emphasized the fact that the infrastructure is a set of sub-sectors, rather than individual elements [Toshchenko, 2001; Kholopova, 2010].

The approach to the consideration of the social infrastructure elements according to the branch criterion is defined by branches: education, culture, health care, physical culture and sports. All of these sectors have a common goal, i.e. the satisfaction of socio-cultural,

intellectual, spiritual, physical needs, and have a major role in maintaining the normal functioning of the population. In terms of organization, social infrastructure is a complex of institutions and enterprises that ensure the effective functioning of institutions of the social sphere.

The social infrastructure of the territory is a complex of sectors (health care, education, physical education and sports, culture and art), the functioning of which contributes to the sustainable socio-economic development of the territory, improving the quality of life and rational organization of the population's activities.

The study of the development of social infrastructure was carried out on the example of the small town of Balabanovo, Kaluga Region, with a population of 25,775 people.

There is one clinic in the town; there are also 7 kindergartens, 4 secondary schools, the Children's School of Arts, the House of Children's Creativity, a branch of the Moscow Pedagogical State University, an educational college, the House of Culture, the Balabanov History Museum, a library with a children's department, the Centre for Physical Education and Sports (which runs the stadium) [Chapter Report, 2019].

To identify problems in the social infrastructure development in the town of Balabanovo, a content analysis and a questionnaire survey were carried out.

The conducted content analysis of the residents' reviews in the Vkontakte social network for the period 2018-2020 revealed the key problems in the main sectors of social infrastructure:

Branches of social infrastructure	Problems
Education	There are two shifts in schools; there is a shortage of specialized classes; the number of classes with a speech therapist in preschool institutions are not enough
Physical culture and sports	Reconstruction of physical culture and sports facilities is not carried out
Culture	Lack of a cinema; poor condition and equipment of the House of Culture

To obtain more complete information about the problematic background in the field of social infrastructure, a questionnaire survey of the population in the town of Balabanovo was conducted.

After analysing the question regarding satisfaction with social infrastructure facilities in the town of Balabanovo, it was revealed that the majority of respondents (52%) are rather dissatisfied, almost a third of respondents - 35% - are more likely satisfied than not (Fig. 1).

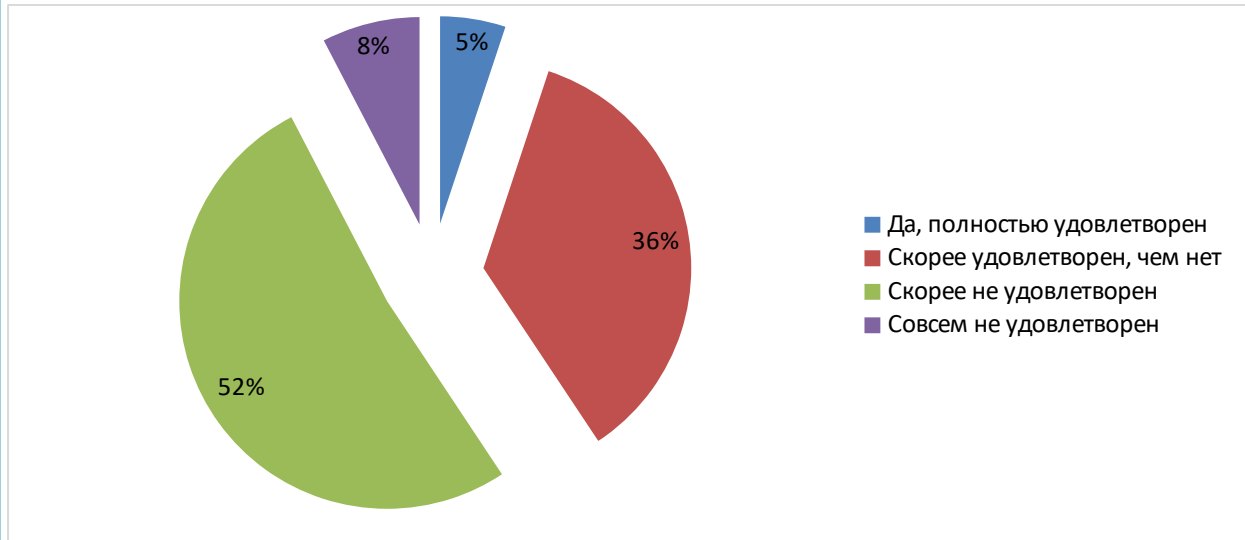


Fig. 1. Answers to the question: "Are you satisfied with the objects of social infrastructure in Balabanovo? (in %)

Да, полностью удовлетворен	Yes, completely satisfied
Скорее удовлетворен, чем нет	Rather satisfied than not satisfied
Скорее не удовлетворен	Rather not satisfied
Совсем не удовлетворен	Not satisfied at all

After considering the results on satisfaction with each of the spheres of social infrastructure, a rating of problems in the city was made (Fig. 2).

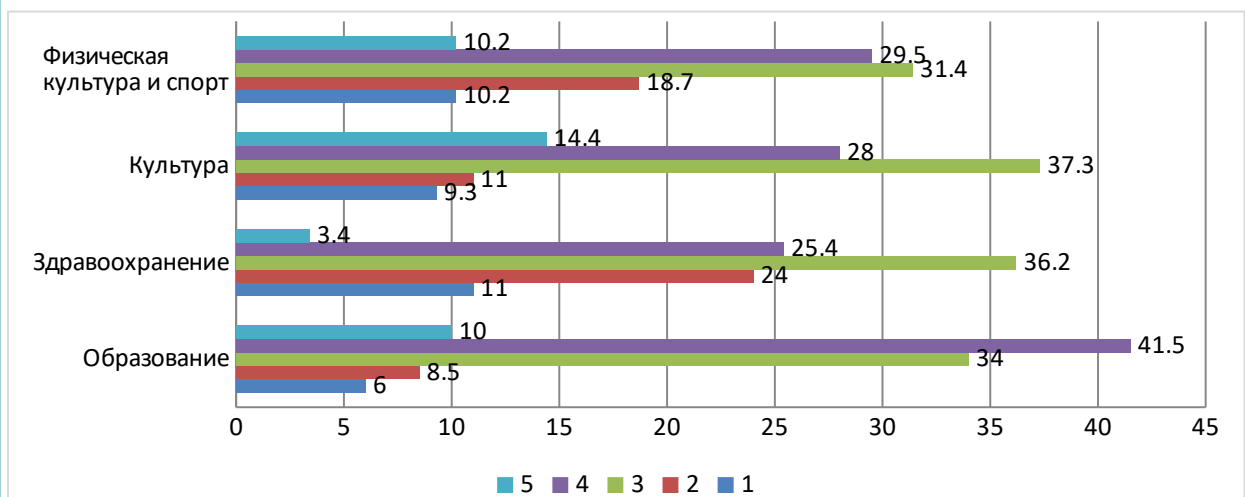


Fig. 2. Respondents' evaluation of satisfaction with each sphere of city infrastructure according to a 5-point scale (5 - very good, 4 - good, 3 - satisfactory, 2 - bad, 1 - very bad)

Физическая культура и спорт	Physical Culture and Sports
Культура	Culture
Здравоохранение	Health
Образование	Education

The survey data showed that the highest level of satisfaction is observed when assessing the sphere of education (51.5% for answers "very good" and "good") and culture (42.2% for answers "very good" and "good"). The lowest level of satisfaction of the population is in the health sector (35% for answers "bad" and "very bad").

Among main problems in the public health sphere, respondents marked absence of necessary specialists (67%), absence of necessary equipment (48%), and inconvenient system of reception of patients by doctors (47%).

Assessing the results of answers about assessment of school education quality, the majority of respondents evaluated the criteria - material condition of educational institution (appearance, condition of classrooms), the level of education provided, conducting of additional hobby groups, coteries and sections - as "good" and "medium". The main difficulties in this sphere, according to the respondents, are related to the level of provision of in-depth knowledge (availability of specialized classes) and teaching in two shifts.

Singling out the problems of cultural sphere functioning, the citizens of Balabanovo mainly determined two main problems: these are monotonous events (35,6%), "events do not involve the interests of all ages" (34,7%), lack of interesting hobby groups for children (25,4%).

Assessing the infrastructure in the sphere of physical culture and sport, the vast majority of respondents identified the main problem as insufficient number of sports grounds (67.8%), second place was lack of repair of sports facilities (45%), in third place - lack of a variety of equipment in the sports institution (42.4%). In addition, according to the residents, there are problems of insufficient information on the activities, sections and clubs (38.1%).

Respondents were also asked to identify areas that are necessary for the development of social infrastructure. The data of the survey showed that the most priority activities, according to the population, are the attraction of specialists in health care, education, culture and sports (64,3%), activities for the development of spheres of culture and physical culture and sports

(62,4%), reconstruction and repair of social infrastructure (52,5%), construction and placement of new social infrastructure facilities (52%).

Discussion

During the content analysis and sociological survey, problems were identified in the field of social infrastructure in the town of Balabanovo. In the health sector, the main problem is the lack of the right specialists; in the field of education - training in two shifts, an insufficient number of specialized classes in educational institutions; in the field of physical culture - insufficient number of sports grounds, poor condition of sports facilities; in the sphere of culture - the lack of a cinema, the holding of monotonous events that do not affect the preferences of the population of all ages, an insufficient number of hobby groups, coteries and sections of various types, poor material equipment and the appearance of cultural objects.

To solve many of the listed social infrastructure problems, it is necessary to attract qualified specialists in each area. It is necessary to develop a mechanism to attract specialists to jobs in healthcare, education, physical culture and sports, and culture. The mechanism for attracting specialists includes social and economic support: this is assistance in solving housing problems, the provision of housing for employees, compensation for housing and communal services, the allocation of official housing with the possibility of further registration in social rent.

The effectiveness of information with the activation of information technology will improve the performance of social infrastructure also in sports activities, providing participation, interest in sports, improving physical health, increasing the life expectancy of the population; in the sphere of culture and education, this will provide involvement in activities, initiative of the population, cultural and educational development, interest and involvement in activities. In addition, local authorities should regularly monitor and survey the population of the city in order to identify public opinion, wishes about the construction of new facilities, improving the quality of services, activities, additional clubs, sections, and other issues to improve and develop the areas of social infrastructure.

To strengthen feedback from the population and identify public needs in the field of social infrastructure, it is necessary to conduct regular surveys and monitoring of public opinion using the Internet. This will ensure effective communication with the population on the development and improvement of the social infrastructure of the town.

It is possible to increase the number of infrastructure facilities in the sphere of culture and sports through the use of investments and the mechanism of public-private partnership. The Kaluga Region ranks 6th in the rating of regions by the level of development of public-private partnership in the Central Federal District, and the Kaluga Centre for Public-Private Partnership is one of the best in the preparation of public-private partnership projects.

Conclusions

The study revealed limitations in the key sectors of social infrastructure of a small town. The greatest number of problems is observed in the sphere of health care. Despite the modernization reform in this sector, the population of a small town still experiences difficulties connected with the lack of necessary specialists or equipment when receiving services in the field of health care. Social infrastructure in the sphere of education and culture received more positive assessments; however, in these spheres there are also difficulties related with teaching in two shifts, absence of specialized classes in educational organizations, and absence of interesting cultural events. The insufficient number of sports grounds as well as the poor level of material and technical support of sports facilities are the key problems in the development of physical culture and sports infrastructure.

The results indicate that, in order to form a feedback loop with the population, local governments need to conduct various monitoring exercises on a regular basis, aimed at identifying key problems in the development of the social infrastructure of the municipal entity. This will not only ensure the modernization of social infrastructure, but also ease the social tension caused by public problems, ensuring effective communication with the local community.

References

- Antonyuk V.S., Danilova I.V., Mitelman S.A., Bulikeeva A.J. (2015) Management of social infrastructure of regions in the system of tools to improve the quality of life of the population in regions // *Regional Economy*. №3. P.53-66.
- Dagbaeva, S.D.-N. (2019). TERRITORIAL PROBLEMS OF SOCIAL INFRASTRUCTURE DEVELOPMENT. *Fundamental research*. 38-42. 10.17513/fr.42435.
- DeAngelis, Michael & Tomlinson, Richard. (2021). *Municipal Infrastructure Investment Unit MidTerm Review*.
- Eireiner, A. (2021). Promises of Urbanism: New Songdo City and the Power of Infrastructure. *Space and Culture*. 120633122110387. 10.1177/12063312211038716.
- Eremeeva, E.A. & Volkova, N.V. & Khalilova, T.V. (2019). Development of social infrastructure in the Russian regions. *International Review*. 113-119. 10.5937/intrev1903113E.
- Felio, Guy. (2021). *New developments for Canada's municipal infrastructure guide*.

Frolova, E.V. (2014). Social infrastructure of contemporary Russian municipal bodies: Issues and prospects for modernization. *Sotsiologicheskie issledovaniia*.

Huang, Weihe & Lu, Chunfang & Fang, Dongping. (2021). Special issue: City and infrastructure engineering and management. *Frontiers of Engineering Management*. 8. 10.1007/s42524-020-0150-0.

INFRAONE analytical review. Russia's Infrastructure Development Index 2019.

Ishmurzina, R. & Zakirov, I. (2021). Development of social infrastructure in the cities of the Republic of Bashkortostan. *Reports of Bashkir University*. 79. 10.33184/dokbsu-2021.2.3.

Kalinnikova, Marina & Golovina, Anna. (2020). The City Social Infrastructure as a Reflection of Physical Space Quality. *Izvestia of Saratov University. New Series. Series: Sociology. Politology*. 20. 128-132. 10.18500/1818-9601-2020-20-2-128-132.

Kholopova, Y.S. (2010) Scientific approaches to the study of social infrastructure / Y.S. Kholopova // *Youth and Science of the XXI Century*. Ulyanovsk: UGCA, Vol. P. 163-166.

Lantsov A.E. (2013) Infrastructure: the concept, types and significance // *Statistics and Economics*. no. 3. P.49-51.

Layton, Jack & Latham, Alan. (2021). Social infrastructure and public life – notes on Finsbury Park, London. *Urban Geography*. 1-22. 10.1080/02723638.2021.1934631.

Medvedeva N.V. Business participation in social development of the territory: Limitations and potential opportunities. *Voprosy Ekonomiki*. 2018;(6):126-132. <https://doi.org/10.32609/0042-8736-2018-6-126-132>

Nalesnaya Y.A.(2006) Improving the management of social infrastructure of the city in conditions of reforming the system of local self-government // *Proceedings of SFU. Technical Sciences*. №17. P.131-133.

Popov, Evgeny & Katz, Irina & Veretennikova, Anna. (2015). Evaluating the Social Infrastructure of Municipalities. *MONTENEGRIN JOURNAL OF ECONOMICS*. 11. 31-48. 10.14254/1800-5845.2015/11-2/2.

Report of the Head of "Balabanovo Town" Administration on the results of socio-economic development in 2019.

Serohina-Berestovska, O.. (2018). Factors determining management practices of modernization of social infrastructure of municipalities. *Science and Education a New Dimension*. VI(31). 36-39. 10.31174/SEND-HS2018-185VI31-08.

Shahata, Khaled & El-Zahab, Samer & Zayed, Tarek & Alfalah, Ghasan. (2021). Client-driven performance-evaluation framework for municipal infrastructure. *Structure and Infrastructure Engineering*. 10.1080/15732479.2020.1867590.

Sycheva I.V., Sycheva N.A. (2012) Study of the content of the "Social infrastructure" category // *Proceedings of Tula State University. Economic and legal sciences*. №2-1.P.230-238.

Toshchenko J. T. (2001). *Sociology. General Course*. - 2-nd, supplemented and revised edition: Prometheus: Yurite, 511 p.

Vanier, Dana & Danylo, N. (2021). Municipal infrastructure investment planning: managing the data. VCIOM. URL: <https://wciom.ru/index.php?id=236&uid=3364> (accessed 30.06.2020).

Yarkova, Mikhailovna. (2020). Basic aspects of rural social infrastructure development. *International Review*. 98-104. 10.5937/intrev2003098Y.

Yashima, Atsushi & Huang, Yu. (2021). *Social Infrastructure Maintenance Notebook*. 10.1007/978-981-15-8828-0. 2021

Zhukova T.I. & Strashnova Yu.G. & Strashnova L.F. (2020). MONITORING DEVELOPMENT OF SOCIAL INFRASTRUCTURE IN TERRITORIAL MANAGEMENT. *EurasianUnionScientists*. 6. 12-16. 10.31618/ESU.2413-9335.2020.6.70.560.