

**EEIA-2017**  
**2017 International conference**  
**"Education Environment for the Information Age"**

**DIAGNOSIS OF THE EDUCATIONAL SPACE:  
THE PROBLEM OF DETERMINING CRITERIA**

Lubov N. Akulova (a), Marina V. Dyuzhakova (b), Marina V. Shakurova (c)\*  
\*Corresponding author

(a) Dr.Sc. (Education), Professor, Head of the Department of Physical Education, Voronezh State Pedagogical University, Russia

(b) Dr.Sc. (Education), Associate Professor, Head of the Department of Pedagogy and Methods of Preschool and Primary Education, Voronezh State Pedagogical University, Russia

(c) Dr.Sc. (Education), Professor, Head of the Department of General and Social Pedagogy, Voronezh State Pedagogical University, Russia, [shakurova@mail.ru](mailto:shakurova@mail.ru)\*

*Abstract*

The article analyses the problem of determining invariant criteria for the diagnosis of the educational space. A complex of theoretical research methods (ontological and structural analysis, interpretation, concretizing, comparison, modelling) is essential in identifying and characterizing research trends of the space phenomenon in modern socio-humanitarian knowledge, including pedagogy (referred to as a metaphor; physicalist; transition from physicalist to non-physicalist; non-physicalist). This makes it possible to specify essential characteristics of the educational space and single out the invariants, which leads to formulating a set of invariant criteria for the diagnosis of the phenomenon under study. It is found that for the diagnosis of the educational space as a social space subtype the following criteria have to be employed: subject interaction; activity degree of these subjects (in certain cases qualitative orientation of this activity); the nature of the relationship between the interacting subjects (including the measure of referability and membership rating); the correlation between social and cultural components in the relations predominating between the subjects; interaction peculiarities (event evaluation); temporary characteristics of the activity (attitude and its stability measure); the subject's internalization of spatial influences; certain personal changes and changes of the subjects' identity.

© 2017 Published by Future Academy [www.FutureAcademy.org.UK](http://www.FutureAcademy.org.UK)

**Keywords:** Socio-cultural space, educational space, diagnosis, criteria.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## **1. Introduction**

The concept of "space" is widely used in modern academic language. With the help of this notion the attempts at describing socio-pedagogical and educational reality of different levels are made. The research potential of the space phenomenon is given due attention (Ivanova 2015; Selivanova, 2000; Jeske 2010; Remm, 2010, 2015, and others). As a result, original concepts and approaches are developed actualizing, specifying and applying research instruments for characterizing and analysing properties of the phenomenon under consideration. The question remains about the application potential of these scientific developments. In their turn, educational practices call for scientific-based guidelines, which can prove instrumental in diagnosing the state of the child's environment, the existing educational organizations, the impact nature and intensity, etc. Remm, draws attention to the fact that the active use of spatial metaphors, as well as making attempts at formalizing spatial models, clarifies the role of space as a simulation system (Remm, 2010). Consecutively, the diagnostic results would allow for correcting educational interactions and predict outcomes and risks. The diagnostic performance is measured by the correctness of the criteria identification.

## **2. Research Questions**

The problem of our study is identified through a contradiction between the need for a scientifically-based diagnostic model of the educational space as a subtype of the social space. The problem is also put down to lack of scholarship on invariant criteria for such a diagnosis. As a consequence, there exists a long-standing need for the analysis of the modern understanding of space, singling out essential characteristics of the phenomenon under study and modelling a certain set of criteria to explore the educational space on this basis.

## **3. Purpose of the Study**

The purpose of the study is to identify and justify the invariant criteria for the diagnosis of the educational space.

## **4. Research Methods**

Defining the criteria for the diagnosis of complex phenomena, the socio-cultural space and its various subtypes being the case, calls for the ontological and structural analysis of the considered phenomenon. In a situation of a paradigm shift this analysis may not be linear in nature as different approaches to understanding space stress invariant (matching) and variable (divergent) characteristics. Besides, for pedagogy to obtain a correct set of criteria, the interdisciplinary tradition of analysis has to be taken into account. This will encourage active interpretation of the space research data in socio-humanitarian knowledge as a whole. To identify a set of invariant criteria the methods of concretizing, comparison and modelling have been employed.

## 5. Findings

The practice of using the concept "space" in pedagogy ("socio-cultural space", "education space", etc.) can be differentiated in terms of metaphoricity-scientificity, physicality - non-physicality. As a result, it provides an opportunity to single out four vectors in the study of this phenomenon in the socio-pedagogical context. It should be noted that the national pedagogy follows traditional concepts of the social (socio-cultural) space (Pitirim Sorokin's social space, Pierre Bourdieu's social space, Yuri Lotman's cultural space).

The first vector. It is based on preserving the tradition of using the category "space" metaphorically without specifying its scientific and pedagogical meanings (Baeva, 2006, etc.). Remm (2010) emphasizes: «Even though spatial notions have often been used as everyday metaphors rather than fine-tuned concepts, there remain a number of works, in which these notions occupy a central role in analysis and in the construction of theoretical models.»

The second vector. In physicalist logic space is considered an objective reality; it is distributed and there are all material objects; relationships between objects as one of the spatial characteristics considered mainly in the part of materialized forms; environmental phenomena are considered in the context of space. A kind of marker is the use as the unit of analysis the concept of "conditions". Most appeals to the phenomenon of space, in this case associated with the characteristic arrangement of school environment, experience in the standardization of educational spaces, the definition of space priorities, the formulation of educational policies (Educational Space Standards, 2015; Jules, 2015).

The third vector. Since early 1990s scholars have been moving from physicalist to non-physicalist research logic of the phenomenon under investigation. In physicalist space subjectively conditioned forms can be defined, i.e. social (socio-cultural) space, communicative space, educational space, etc. Space is defined as a product of interaction determined by a person's activity and experience, since man is the source of space, the subject constituting spatial characteristics in the surrounding reality. Spatial forms are designed in the environment.

One of the first experiments was the concept of the educational space developed in Novikova's scientific school in transition from physicalist to non-physicalist logic.

The research and pedagogical foundations are as follows: the development of synergetic ideas, the adoption of such educational reality characteristics as openness, non-equilibrium, the combination of organization and spontaneity; clear personal orientation of scientific-pedagogical concepts, the activity of the subject (child, teacher, educational institution) as a criterion of pedagogical processes and phenomena effectiveness; the ability to clearly differentiate positive and controlled (mainly educational) and negative, natural (mostly socializing) influence, the search for the appropriate language of formative pedagogical activity description in the environment (the environment is the basis of reality while the educational space is the result of creative and integrative activities); an active analysis of communication as a pedagogical category (Novikova, 2010).

In Ivanova's research the education space phenomenon is viewed in the same way: it is the objective world, a combination of objects related to education building up and filling this space. It also serves as the subject of subject activities which consists in subjects' perception, action and impact on this space" (Ivanova, 2015). It is important that the space begins to be seen as subjects' activity result, its

product, which is presented as segmentation of the sense of spatiality, its objective in the process of cultural genesis, writes Fedoseeva (2015).

The present state of "transition" in modern pedagogical researches of space on the one hand, are put down to the complexity and ambiguity of the phenomenon; on the other hand, to turning to the priority of the system and activity approach as the basis for the design of pedagogical processes and phenomena. In the system and activity approach logic, on the one hand, the subject activity and reality transformation are actualized; on the other hand, far less attention is paid to personal grounds of the subject activity and relations as essential characteristics of the subject interaction. Grigorjeva's (2014) and Shendrik's studies (2006) pertain to this viewpoint.

The fourth vector. It lies in conducting educational research of space according to the non-physicalist approach (Demakova, 2012; Shaposhnikova, Yakushkina, 2016) and others). The concepts "interaction", "coexistence", "relation", "reflexive activity" and "identity" serve as a unit of analysis.

Non-physicalist logic acts in tune with the socio-cultural approach to analysing phenomena and processes. The socio-cultural space is the next qualitative level of the space phenomenon expression, for which the social space is basic or "native". It is not a mechanical imposition of the cultural environment characteristics on the social space characteristics. The genesis essence is to increase the role of the cultural factor predetermined by the increasing importance of cultural foundations connected with the ongoing differentiation and qualitative complexity of the social process. In terms of increasing dynamism and diversity of social processes no social role, status or position have a clear, sustainable evaluation criteria and need external evaluation scale (cultural, sub-cultural) relevant for much longer and larger scale evaluative practices. On the other hand, each cultural object has its own social scale (number of people or social groups for whom the cultural object is the main source of organization and meaning of everyday life), which determines the possibility of social and cultural analysis.

Solving purely pedagogical tasks, researchers differentiate the socio-cultural space, highlighting different types. Considering the phenomenon of childhood socio-cultural spaces, children's space (the space of childhood) is of particular interest. A trend is quite obvious that the more actively researches are inclined to physicalist views of the phenomenon, the more often the space of childhood is associated with the processes of separation, segregation and exclusion (for children). For instance, Adams and Slyck stress that there have always been children's spaces in the sense that every culture has understood some spaces to be more appropriate than others for children and their activities. However, the practice of providing purpose-built spaces exclusively for children's use became widespread only in the nineteenth century, coincident with the conceptualization of childhood as a special phase of human existence. While much of the historical literature interpreted building up child-centered spaces as a boon to the young, scholars of contemporary childhood have started to bemoan what the two German sociologists, Helga and Hartmut Zeiher, called "islanding" of childhood—the tendency to insulate children's spaces from one another, as well as from spaces used by adults (Adams, & Slyck, 2004).

The original dominance of non-physicalist ideas leads to the fact that the abstraction measure in defining the essence of the concept prevails and the space of Childhood is seen mostly as a positive phenomenon, which does not deny its difference and separation from the space of adults (Novikova, 2010; Forsberg, & Poso, 2011). In Panchenko's work it is said that the child's socio-cultural space can be understood as a segment of "granulated social environment" of life. It is not soluble without residue in the

array of social influences alien to the outside world, (this is the essence of the term "granulated medium), but may shrink or expand depending on cultivation conditions. It depends on a number of factors: influence from the adult world which can be aggressive and can narrow the segment allotted to children's socio-cultural space in the world of social interactions; the children's activity measure who may aspire or not to expand their horizons, their efforts of building their own environment; the nature of specific historical conditions of children's subculture" (Panchenko, 2005).

The education space is part of the social space. The fundamental differences, in our opinion, are due to the differences in **socialization** processes (including enculturation) and education: the measure of spontaneity combined with the measure of control and accountability; quantitative and qualitative characteristics of the subjects; content and procedural content of different interaction types.

## 6. Discussion

The fundamental basis of criteria identification for the educational space diagnosis is a) the space structure; b) types of space.

The space structure with distinction without difference in the majority of researches is semantically similar:

- (1) interacting subjects;
- (2) the activity measure of these subjects (in some cases, the qualitative focus of this activity);
- (3) the nature of the relationship between the interacting subjects (as an important basis isolated the measure of reference is singled out as well as features and ratings of membership);
- (4) the correlation between social and cultural components in predominant relations existing between the subjects;

For educational space the following is of importance:

- (5) features of interaction (the measure of eventfulness),
- (6) temporal characteristics of the activity (view and the measure of its stability),
- (7) the subject's internalization of spatial impact, individual changes and changes of the subjects' identity.

A significant number of the criteria necessary for diagnosing the space relate to the complexity of the phenomenon. However, diagnostic procedures in this connection should be differentiated defining the stages.

In the first stage a basic set (1-3 items) can be used as the criteria for diagnosis. It can be used to diagnose and describe both socio-cultural and educational space, as well as to define types of space. As an example, we have identified and described a refined educational space.

- rigorously selected subjects admitted to interaction. Their qualitative characteristics are not just safe for children but easy for understanding and acceptance, manageable, easily removable in a situation of unnecessary tension, and if necessary, "always at hand" (as a consequence, they are so inconspicuous that they can simply be ignored);
- simplified, sometimes hard-coded and regulated relations between objects. On the one hand, they are deprived of tension, transparent, clear, "children like" (often to the detriment of socio-cultural conformity). On the other hand, the child should not feel discomfort by participating

in this relationship. During the development of these relations children should not have any stresses; on the contrary, they should be filled with automatism or anticipating mechanisms of the activity and independence of the child mechanisms;

- quasisubjectivity of the child in the education space.

In the second stage for the evaluation of the education space it is necessary to use a set of seven selected criteria.

## 7. Conclusion

The research has been conducted on the basis of defining and analysis of the four vectors in the modern research on the space phenomenon in socio-humanitarian knowledge, pedagogy being the case. This has made it possible to develop a set of criteria necessary for the diagnosis of the educational space as a subtype of the social space, i.e., the interacting subjects; the activity measure of these subjects (in some cases, the qualitative focus of this activity); the nature of the relationship between the interacting subjects (as an important basis the reference measure features and ratings of membership can be singled out); the relationship between social and cultural components in the predominant relations between the subjects; peculiarities of interaction (eventfulness); temporal characteristics of the activity (viewpoint and a measure of its stability); the subjects' internalization of spatial influences; some personal changes and changes in the identity of the subjects. The next step for building a diagnostic model of the educational space is concretizing the indicators, levels, and selection of appropriate methodological tools.

This article was prepared with financial support from Russian Foundation for Basic Research, project 16-06-50103a(f) "Diagnostics of socio-cultural and educational space of educational institution".

## References

- Adams, A., Slyck, A. (2004). *Children's Spaces*. Retrieved from <http://www.encyclopedia.com/children/encyclopedias-almanacs-transcripts-and-maps/childrens-spaces>.
- Baeva, E.A. (2006). *Organizatsionno-pedagogicheskie usloviya vhozhdeniya otechestvennoy vysshey shkoly v obshcheevropeyskoye obrazovatelnoe prostranstvo (na materiale regionalnykh negosudarstvennykh vuzov)*: Avtoref. dis. ...kand.ped. nauk. Volgograd: VGPU, 26. [in Rus.].
- Demakova, I.D. (2012). Pedagogika i psichologiya o fenomine "prostranstvo detstva". *Vestnik Kalmytskogo universiteta*, 1, 42-49. [in Rus.].
- Educational Space Standards. Draft*. (2015). Retrieved from <http://www.fultonschools.org/en/SPLOST/Documents/September%20Community%20Meetings%20-%20Ed%20Space%20Standards.pdf>
- Evaluating Quality in Educational Spaces: OECD/CELE Pilot Project*. (2009). Retrieved from [http://toolkit.ineesite.org/toolkit/INEEcms/uploads/1257/von\\_Ahlefeld,\\_H.\\_2009\\_Evaluating\\_quality\\_in\\_educational\\_spaces.pdf](http://toolkit.ineesite.org/toolkit/INEEcms/uploads/1257/von_Ahlefeld,_H._2009_Evaluating_quality_in_educational_spaces.pdf)
- Fedoseeva, N.V. (2015). Duhovno-nravstvennoe obrazovatelnoe prostranstvo lichnosti kak put eyo sovershenstvovaniya. *European journal of education and applied psychology*, 3, 50-54. [in Rus.].
- Forsberg, H., Poso, T. (2011). Childhood Homes as Moral Spaces – New Conceptual Arena. *Social Work & Society*, Volume 9, Issue 1.
- Grigorjeva, I.V. (2014). *Informatseonno-obrazovatelnoe prostranstvo vuza kak factor formirovaniya mediakompetentnosti budushchego pedagoga*: Avtoref. dis. ...kand.ped. nauk. Moscow: Moscovsky gosudarstvennyi lingvistichesky universitet, 24. [in Rus.].

- Ivanova, S.V. (2015). Obrazovayelnoe prostranstvo i obrazovatel'naya sreda: v poiskah otlichy. *Tsennosty i smysly*, 6, 23-28. [in Rus.].
- Jeske, K. (2010). *The social maze: navigating the space between cultural ideas and social action in an urban world*. Iowa: Iowa State University.
- Novikova, L.I. (2010). *Pedagogika vospitaniya : Izbrannye pedagogicheskie trudy. Pod red. N.L. Selivanovoy, A.V. Mudrika*. Moscow: OOO "PERSE", 336 pp. [in Rus.].
- Panchenko, S.V. (2005). *Socioculturnoye prostranstvo rebenka: Avtoref. dis. ...kand. ped. nauk*. Rostov-na-Donu: Rostovsky gosudarstvennyi universitet, 23. [in Rus.].
- Remm, T. (2010). *Time in spatial metalanguage: the ambiguous position of time in concepts of sociocultural, social and cultural space*. Retrieved from <http://www.biomedsearch.com/article/Time-in-spatial-metalanguage-ambiguous/243958021.html>
- Remm, T. (2015). *Sociocultural Space: Spatial Modelling and the Sociocultural World*. Tartu: University of Tartu Press.
- Selivanova, N.L. (2000). Sovremennye predstavleniya o vospitatel'nom prostranstve. *Pedagogica*, 6, 35-39. [in Rus.].
- Shaposhnikova, T., Yakushkina, M. (2016). *Unified educational space of the CIS countries in conditions of integration and information*. Retrieved from [http://www.shs-conferences.org/articles/shsconf/pdf/2016/07/shsconf\\_eeia2016\\_01065.pdf](http://www.shs-conferences.org/articles/shsconf/pdf/2016/07/shsconf_eeia2016_01065.pdf). (Date of access: 31.03.2017). DOI: 10.1051/shsconf/20162901065.
- Shendrik, I.G. (2006). *Proektirovanie obrazovatel'nogo prostranstva subjekta uchebno-professional'noy deyatel'nosti: Avtoref. dis. ...kand. ped. nauk. – Ekaterinburg: Pos. gos. prof.-ped. un-t*, 43. [in Rus.].
- Tavis, D. J. (2015). The Caribbean educational policy space: educational gradualism, zero-sum policy reforms, and lesson-drawing in small (and micro) states. *Journal of supranational policies of education*, 3, 307-329.