

**EdCW 2020**  
**International Scientific and Practical Conference Education in a Changing World: Global  
Challenges and National Priorities**

**PEDAGOGICAL SEMIOTICS: NEW GUIDELINES IN  
PERSONALITY DEVELOPMENT**

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**Abstract**

The article examines pedagogical semiotics as a new methodological direction that adequately reflects the specifics of the information society and is able to ensure the achievement of new guidelines in personality development. The main research methods were the generalizing analysis of scientific literature on the problems of pedagogical semiotics; conceptual analysis of terminology; an interpretive method regarding the understanding of the categories “pedagogical semiotics”, “semiotics of education”; google questionnaire survey. The authors have established the scientific “contours” of this new branch of pedagogy, its methodological parameters and the guidelines for the development of the information society personality determined from the standpoint of its concepts. Pedagogical semiotics is defined as a category of philosophy of education that solves the tasks of theoretical comprehension, explanation, forecasting, conceptualization, substantiation of the main categories and concepts of pedagogy in the logic of the structure of semiotics. It explores the principles of the use and generation of various signs, sign systems and the use of their meanings in educational practices, i.e. is aimed at solving applied educational problems. The article provides examples of the use of sign systems in the educational process of a school, outlines the role of semiotic competence of an individual, experimentally revealed is its deficit among practicing teachers, students – future teachers, teachers of higher education. The main concepts of the semiotic approach, defining new guidelines in the development of the personality of the information society, are revealed: meta-subjectness, modeling, specific characteristics of pedagogical activity, convergent and nomadological approaches.

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*Keywords:* Skills of the 21st century, pedagogical semiotics, semiotics of education, semiotic competence



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## 1. Introduction

Education is determined by the socio-cultural and economic conditions of the life of civilization, being a kind of a “mirror”, reflecting the dual existing in society, traditional and new developing phenomena. The current state of the educational sphere is characterized as critical. Research activities in pedagogy are aimed at finding guidelines for personality development in the era of global challenges of our time. A personality of an individual of the information society differs significantly in terms of the parameters in demand from that of an individual of previous eras (Competencies, 2017).

One of the scientific trends that can determine certain “breakthroughs” in the methodology of pedagogy and educational practices in the right direction is semiotics as the science of signs and sign systems. Semiotics of education received the status of a new branch of theoretical semiotics in September 2014 at the 12th World Congress of the International Association for Semiotic Research in Sofia (Bulgaria). In 2017, the integrative field of knowledge – pedagogical semiotics – was officially formalized. The new term “semiotics of education” (edusemiotics) was used by Danesi (2010) (editor-in-chief of the journal “Semiotica”) in the subhead of his introduction to the work “The experience of semiotics of education” by I. Semetsky. In the semiotics of education, there is a transition to a new philosophy of education with an emphasis on epistemological, ontological and ethical aspects, existential issues of meaning that seem especially valuable for education (Edusemiotics, 2017; Semetsky & Stables, 2014). The semiotics of education proceeds from the principles of the priority of the educational process over the result; rejection of the consistency of the educational process and the logic of direct transfer of educational content from teacher to student, bypassing the stage of their interpretation; a holistic approach to education and integration; continuity and empirical nature of education (Deely & Semetsky, 2016). Consequently, this scientific area “challenges” the modern state of education, the traditions of dualism of interaction between the subject (teacher) and the object (student), the objective method of the modern era, asserting human subjectivity rejected by traditional education. In the domestic version of the philosophy of education, this scientific branch is still poorly developed.

## 2. Problem Statement

At the moment, in science, two similar terms “*pedagogical semiotics*” and “*semiotics of education*” are considered either as an integral part of theoretical semiotics (in the context of the philosophy of education), or as a part of applied semiotics. In the interpretation of foreign authors, pedagogical semiotics does not differ from the semiotics of education. Education from the standpoint of semiotics is considered as a process of continuous interaction with signs of various types and mastering the skills to work with them. The idea of interpretation (search for meanings, understanding, activation of critical thinking in subjects of education) is important.

Pedagogical semiotics as a science studies the patterns of constructing the language of pedagogical science, the processes of searching, discovering and symbolic fixation of the meanings and meanings of educational reality (Lukackij, 2015). The semiotic approach allows for connecting the content, goals, means, and methods of education with the structure and functioning of sign systems; semios is as a

process of generating a sense of meanings is identified with the educational process (Veryaev, 2000). The learning process is understood as communicative-semiotic, providing the transfer of sign information. An educational system is an information system in which all stages of the information process take place (Piotrovskaya, 2005). Information around us is presented in the form of a semiotic system – a set of various types of signs that provide full-fledged collective and individual communication processes. All these symbolic differences are present and can be purposefully applied in pedagogical theory and practice.

The semiotic approach gradually becomes general methodological. It has the potential for designing systems of any level of education, orienting them towards training a person capable of developing their own vision of cultural worlds.

### **3. Research Questions**

- What are the methodological parameters of pedagogical semiotics and semiotics of education?
- What is the level of semiotic competence of teachers?
- What are the main concepts of the semiotic approach that define new guidelines in the development of the personality of an individual of the information society?

### **4. Purpose of the Study**

The purpose of the study is to establish the scientific “outlines” of pedagogical semiotics, its methodological parameters and the concepts of personality development in the education of the information society, determined from its position.

### **5. Research Methods**

The research methods were the generalizing analysis of scientific literature on the problems of pedagogical semiotics; conceptual analysis of terminology; an interpretive method regarding the understanding of the categories “pedagogical semiotics”, “semiotics of education”; google questionnaire survey. In total, the study involved 425 respondents (47 teachers of secondary schools, 338 students – future teachers; 40 higher school teachers from various Russian universities, participating in the training of students of the “Pedagogical education” education program. To obtain empirical information on the use of sign systems in the educational process of schools and universities, the authors’ methods were used (Danyushenkov et al., 2020).

### **6. Findings**

In foreign studies, pedagogical semiotics and semiotics of education are considered as synonyms (*edusemiotics*).

We understand pedagogical semiotics as the conceptual basis of educational semiotics. The ambiguity of the category “education” determines many meanings of understanding the semiotics of education. At the moment, the category of semiotics of education in science is ambiguously formulated.

Pedagogical semiotics in the field of syntactics explores the specifics of the pedagogical language and the patterns of its construction, the categorical-conceptual apparatus of pedagogy, the functions of pedagogy, criteria for the scientific character of pedagogical theories, and the model of formation of pedagogical concepts. In the field of semantics, it is occupied with the search for the significations and meanings of educational reality, the definition of the meaning (sense) of the sign units of the theory. In the field of pragmatics, questions of a special language in the world of pedagogy and education (a “mixture” of natural language and languages of other branches of science – philosophy, psychology, sociology, neurophysiology, etc.) are investigated; perception and interpretation of oral and written language messages, constructions (cognitive psychology, psycholinguistics, neurolinguistics, ethics); theoretical foundations of pedagogical scientific and educational communication.

The main semiotic meanings of education as a practical activity are manifested at the levels of a student's “vision” in the educational process; “the process of designing” the educational process; design and implementation of professional self-education. Their detailing is also carried out in the logic of the structure of semiotics.

As a result of the experimental research, the following examples of the use of various sign systems in the educational process were obtained:

- natural – in the activities of students: observation of natural processes in nature, on excursions, laboratory work, experiments; in the teacher's activities: observation and understanding of the external manifestations of the psychological state of schoolchildren, behavior; signals of schoolchildren about fatigue, distraction, etc;
- functional – the use of images in class, allowing one to evaluate or learn facts from the life of civilization;
- conventional – *signals*: signs informing about something – an exclamation mark next to important material, coloring the number of an additional paragraph in a textbook, etc; symbols: images with additional meaning / value meaning (school uniform, anthem and emblem of the school), underlining essential main words in the definition of the term;
- iconic – the transfer of images (musical, artistic works; non-verbal communication; photographs, etc);
- verbal – oral explanation of the material; reading texts in native and foreign languages;
- sign systems of writing – written record of educational material, texts in various media (paper, digital).

The semiotic approach includes a set of theoretical provisions that determine the principles, research methods in science and the use in pedagogical practice of signs and sign systems that have developed in modern society to achieve the goals and objectives of the formation of students' semiotic competence. Semiotic competence is a key interdisciplinary human competence that helps to quickly adapt to changes in certain activities and make decisions responsibly; mediated through communicative,

sociocultural and informational competence. It consists of knowledge, abilities, skills and personal qualities that provide an understanding of signs and sign systems, their use and application in a wide range of tasks, the ability to operate with their meanings, significations, and interpretations.

However, empirical studies of the level of semiotic competence of practicing teachers, students, and higher education teachers indicate the existing professional deficit. 20% of teachers do not realize the importance of semiotic competence in performing professional activities; 100% only intuitively represent the phenomenon of semiotic competence as a personal potential in the field of sign-symbolic information; 80% are willing to master new knowledge and methods of working with sign systems. 88.3% of students – future teachers do not realize the importance of skills in working with signs and sign systems in professional activity; 49.3% of them demonstrate an average level of proficiency in the skills of independent creation of signs and sign means; 77.9% have a low level of readiness to develop semiotic competence; 97.1% have no idea what educational material will be optimal from a semiotic point of view, and how it will affect the effectiveness of learning by students.

A survey of higher schoolteachers revealed:

- the concept of “semiotic competence” is known to 60% of the respondents, 25% have only an intuitive idea of it; 15% are unaware of it;
- when performing a semiotic analysis of a fragment of a textbook, 25% of respondents found it difficult to answer, the rest of the options testify in favor of an intuitive, non-scientific understanding of the semiotic analysis of educational texts;
- 40% are not sure of the ability to transcode into another sign system of educational information;
- 40% do not confirm their own ability to generate signs and sign systems;
- 45% rarely use creative methods of working with signs when explaining material to students.

The study identified the fundamental concepts of the semiotic approach that define new guidelines in the development of the personality of an individual of the information society:

1. The approach is based on the structure of semiotics – the unity of syntactics, semantics, pragmatics, hermeneutics. Orientation on a broad vision of a particular subject, going beyond its boundaries leads to the problem of achieving meta-subject results of education.

2. The approach is based on modeling. Semiotics explores the structure, properties and dynamics of formal symbolic systems in their relation to the physical and cultural world; construction and use of symbolic models of reality, the rules of their interpretation, behavior. Modeling for a teacher is important in the context of pedagogical design, for students – in mastering modeling skills as a kind of methodology.

3. The use of a semiotic approach in pedagogical activity includes the following characteristics: flexibility of thinking, motivation for self-improvement through culture, the ability to make independent constructive choices in project situations, social consistency, adaptation in different social environments, sociocultural activity. All components of the educational process are subordinated to its principles.

4. Understanding of texts is important in pedagogy and education. A pedagogical text can be defined as an open system that is comprehended, rethought and interpreted by the subjects of the

educational process, which determines the development of the intellectual and spiritual potentials of an individual. The idea is developed by communicative/convergent pedagogy based on the understanding of learning as communication (Tyupa, 2012).

5. The approach is based on the theory of multilateral education (Okon, 1971), which substantiates the algorithm of the teacher's actions, focused on the holistic development of the student's personality. It identifies the factors influencing the internal and external changes of the student in the knowledge of the world, the perception of values and changes in oneself and the environment. Learning becomes cognitive for learners (Dautova et al., 2019; Fullan & Langworthy, 2014; Higgins, 2016).

6. The semiotic approach reveals a connection with the convergent and nomadological approaches. The convergent approach accepts as the main concept the interaction with thinking minds and the development of a common opinion based on dialogue and discussion (that is, the creation of a single intellectual “product” by many monad-subjects). The nomadological approach is based on the “learner – nomad” idea in the world of digital content, with its own unique trajectory in the development of individual content (Elkina, 2016).

## 7. Conclusion

According to foreign and domestic scientists, the semiotic approach provides a key to understanding the transformation of the educational process in the new conditions.

The study revealed the specificity of pedagogical semiotics and semiotics of education. Pedagogical semiotics is defined as a category of philosophy of education, which studies the principles of using and generating various signs and sign systems, operating with their meanings in pedagogical science for scientific communication. It solves the theoretical problems of explanation, forecasting, conceptualization, justification. Semiotics of education explores the principles of using, generating various signs and sign systems and operating them with meanings in educational practices when solving practical pedagogical situations.

The semiotic approach to education is aimed at the formation of semiotic competence of an individual, which provides an understanding of signs, sign systems and their application in a wide range of tasks. However, an insignificant level of possession of semiotic competence of practicing teachers, students – future teachers, teachers of higher education was revealed.

The main concepts of a semiotic approach to education were formulated: metasubject teaching, characteristics of the educational process in the information society, multilateral and meaningful learning. The semiotic approach as a methodology of the general scientific level is implemented at the private scientific level through nomadological and convergent approaches. This makes it possible to provide the semantic component of education through the correlation of signs as a form of storing knowledge with the semantic systems of subject experience, changing the nature of the interaction between the subjects of educational activity.

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