

# Important Cognitive Ideas Underlying the Methodology of Preparing Teachers to Provide Creatively Developing Education to Primary Students

Abdusamatov Alisher Sobirovich

Termez University of Economics and Service, Associate Professor of the Department of “Preschool and Primary Education”, Doctor of Philosophy in Pedagogical Sciences (PhD) Termez, Uzbekistan

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**Abstract:** This article provides information to junior students of general secondary schools on the semiotic approach, the areas of semiotics and their boundaries and types, the importance, history and application of semiotic aspects, necessary pedagogical conditions, scientists and their views, branches, directions and applications of semiotics. in our everyday life. How we use it is described.

**Keywords:** Semiotics, education, education system, philosophy, semasiology, pragmatics, syntax.

**Introduction:** In order to reveal the basic cognitive ideas of the methodology for preparing teachers to provide creatively developing education to primary school students and to clarify their essence, in addition to the philosophical level of the structure of teaching all subjects studied in primary schools, we need to touch on such levels as general scientific, focused scientific, technological (specific methodologies and research methods).

General scientific level. This level of the methodology involves elaborating the answer to the question “What is knowledge?”, which is considered the subject of study of epistemology. The concept of “knowledge” is one of the concepts that is interpreted differently in different fields of science and does not have a generally accepted definition.

In the early interpretations of epistemology, knowledge is defined as an adequate and justified belief in a person: that is, the fact that a person has an adequate and justified idea of the properties of the elements of the environment when perceiving them means that he has the necessary level of knowledge.

If we proceed from this interpretation, we can conclude that the bearer of knowledge is the person himself, while, taking into account that information is also a constituent element of knowledge, the bearer of information can be any object. The fact that the

definitions given to the concept of “knowledge” are extremely limited in their ability to cover all its properties can be explained by the fact that “knowledge is a multifaceted phenomenon”.

We will clarify our idea by citing sentences used in our everyday language based on the concepts of “knowledge” and “knowing”. For example:

- I know how to get to the stadium.
- I know how to perform this task.
- I know this person well.
- I know that a rectangle has four sides.

In the four examples we have given, we can see that the word “I know” is used in different meanings as a derivative of the concept of “knowledge”.

In the first sentence: in the science of epistemology, there is adequacy, but there is no basis for confidence in the definition given to the concept of “knowledge”; here “knowledge” is manifested as familiarity with the object of knowledge.

In the second sentence: there are properties necessary for the concept of “knowledge”; here “knowledge” comes in the form of skills and knowledge, which we can also call “competence” in a certain sense.

In the third sentence: the object of knowledge is specific, the method of knowledge is abstract,

therefore, the laws of knowledge are reflected, because here we see knowledge in the form of “knowledge-information”.

In the fourth sentence: information about the object of knowledge is transmitted in the form of information. In this example, we see the harmony of information and intellect.

From the above sentences, which partially embody the forms of existence of the phenomenon of “knowledge” and the properties of this concept, it is clear that we can draw conclusions such as “knowledge is familiarity with the object of knowledge”, “knowledge is skill, competence, competence”, “knowledge is the possession of reliable and adequate information about a certain object” and “knowledge is the harmony of information and intellect”.

So, if the stages of knowledge from familiarity with the object of knowledge to the harmony of information and intellect cover the subjects studied in primary grades and if the exchange of these stages is carried out on the basis of creativity, the essence of the issue we are studying will become somewhat clearer.

We will briefly dwell on the properties that underlie these ideas. The property of knowledge “familiarity with the object of knowledge” does not imply understanding how this process occurs and informing about it: here we witness the manifestation of the imaginative nature of knowledge.

The property of knowledge as “knowledge, skill and competence” indicates that a specific situation is distinguished and the existence of knowledge demonstrates the skill and competence of the person who provides information in the field of solving that particular situation. Thus, in order to find an answer to the question “what is knowledge?”, First of all, it is necessary to understand and comprehend the organizational-functional and ontological significance of knowledge in a particular complex or system.

The conclusion is that depending on the situation and method of organizing activity and the purpose of the person in this situation, the forms of manifestation of knowledge may be different, but each of these forms shows a certain property of knowledge.

According to the criteria of periodicity, it is correct to distinguish the following forms of knowledge:

-perceptual knowledge - elementary knowledge in the verbal form of imagination, formed during the initial interaction of a person with the object of knowledge (an element of the environment, a concept related to the subject of study, an event, a phenomenon, etc.);

-rational (purposeful) knowledge - initial knowledge consciously mastered from a conceptual point of view;

-scientific knowledge - the product of initial aspirations to explain the worldview that has begun to form about the elements of the environment, real realities, and phenomena on a scientific basis.

The ability to perceive, understand, and express certain feelings is endowed to man by nature.

Therefore, the most optimal means for acquiring perceptual knowledge are human feelings and sensory organs. Science rightly recognizes that there are five natural means of acquiring perceptual knowledge (five senses, five modalities).

Among these five means of acquiring perceptual knowledge, the most important is perception through sight (visual modality). We call it the modality of vision. Through vision, a person receives more than 80% of the information he can receive. The image formed through vision causes the appearance of a specific feeling, and the feeling is perceived and provides the formation of a certain level of knowledge about the properties of a particular object.

However, the role of reason, thinking in this process can be called primary: because a feeling that is not combined with reason and thinking cannot stabilize the image of a visually acquired object (thing, body, subject, event, phenomenon). Therefore, the conclusion is that a person sees not only with his eyes, but also with the eyes of reason and thought.

The second important form of modality is auditory modality, which implies that a person creates sensations through hearing. Like visual modality, the participation of reason and thought is extremely important in auditory modality. Generally speaking, in all manifestations of modality (i.e., perception of the surrounding world with the help of sensory organs), reason and thought are important. Without this, imagination does not turn into knowledge, the image of the elements of the surrounding world does not reach the level of a means of creating a picture of the world.

The next level of knowledge according to the criteria of periodicity is rational (purposeful) knowledge. We can say that rational (purposeful) knowledge is the accumulation of ideas about oneself, nature, society, and individual people as a result of such realities as daily communication, perception of events within society, and the increase in the experience of interacting with the surrounding world. The acquisition of rational (purposeful) knowledge is not a process that occurs within a certain period of time: this process covers a person's entire life.

Also, this process does not require any special education, training, or basic knowledge of the elements

of the environment from a person; it can be said that rational (purposeful) knowledge is the result of natural improvement, such as the expansion of imagination resulting from perception, the development of intelligence and modality, and the increase in the scope and scope of human communication.

From this point of view, rational (purposeful) knowledge is primary in the development of a person and has a conceptual nature.

According to the rules of reality in science, individual objects, phenomena, events, properties, and relationships that can be explained with the help of scientific theories to create a picture of the world have a primary ontological status. Only with the help of theoretical interpretations and explanations of science can we clearly imagine what kind of structural structure the world has and the properties of events and phenomena that occur as a result of the existing connections between these structural elements, as well as their cause-and-effect patterns.

It is also worth noting that one of the forms of knowledge that is significant in terms of content and content for research in the field of pedagogy is "educational knowledge". A.B. Kalinichenko proposes to consider this form of knowledge as a separate category and defines it as "a detailed and clearly manifested result of the process of scientific cognition".

According to the scientist, scientific knowledge includes four levels of abstraction (phenomenal, analytical-generalizing, predictive, axiomatic) [Kalinichenko, 2011:33]. Educational knowledge is given on the basis of principles necessary for all times (all periods in the history of pedagogy), such as systematicity, planning, purposefulness, consistency, reliance on a fundamental basis, and is mastered by the learner.

One of the peculiarities of educational knowledge is that each of its levels is obtained within a certain period of a person's life, and achieving the intended results is considered the ultimate goal. The requirements for educational knowledge are formed on the basis of the needs of the modern era, society, the state and the individual, as well as on the basis of proposals formed on the basis of educational paradigms.

However, there are requirements common to all periods of the history of pedagogy, which also remain an important component of constantly updated requirements. These requirements include:

- knowledge (including educational knowledge) as a constituent part (an important element) of the culture of the individual, reflecting the level of social culture at

the time of acquisition;

- knowledge must have a basis;

- knowledge must serve as a primary factor in the formation of new paradigms;

- knowledge must embody the truth about the worldview, that is, knowledge must be guaranteed by truth.

The last requirement for knowledge (including educational knowledge) is related to the interpretations of the concept of truth (here we mean not socio-ideological truth, but the degree of correspondence of perceptions of the properties of things and phenomena to existing reality - author) in different periods.

Such truth was defined by Aristotle in the pre-Christian period of human development. This definition has not lost its significance as a perfect and classical concept of truth. According to it, truth is the degree of correspondence of an idea or claim to the existing picture (or situation).

Later philosophers and thinkers put forward two different views in interpreting this definition of truth. According to the first, the degree of correspondence of the claim put forward or the formed idea to the actual picture can be different, and this degree determines the value of truth (in educational knowledge this consists of a recognition of the content "you have come close to the correct answer", "very close to the truth", and is not accepted as truth). Supporters of the second view believe that truth is accepted only when the degree of correspondence is complete and detailed, and vice versa, "in part and in part" it will never be significant (in educational knowledge the essence of this view can be explained by the rule called "two times two always makes four").

Due to uncertainties about the degree of correspondence, new concepts were put forward in the Middle Ages, which became the modern version of the Aristotle concept. According to the concept of the so-called coherent theory of truth put forward by Hegel, truth is unique, and the truths that each person discovers must have correspondence to absolute truth as its constituent elements. It should be noted that the application of this theory in educational practice, in the search for scientific knowledge, causes some difficulties.

According to the theory developed by researchers of educational knowledge from a pragmatic point of view (W. James), any knowledge that can be used in practice is truth.

However, this theory does not address the signs that ensure the recognition of a particular knowledge or set

of knowledge as truth. One of the main principles applied in the dialectical approach to the study of knowledge and cognitive phenomena is the principle of recognizing the certainty of truth. The main conditions implied by this principle include:

- taking into account all the conditions that ensure the existence of the object of knowledge;
- revealing the most important features and properties of the object of knowledge;
- studying the laws of a brighter manifestation of the properties of the object of knowledge.

In dialectical materialism, the recognition (and universal recognition) of the objectivity of truth is considered important. However, this process has a historicity and hereditary nature, and the importance of each period in the unfolding, brightening, and clarification of truth must be taken into account.

Consequently, knowledge, confirmed in experiments and applied in social practice, is not only an unobjectionable and pragmatically useful discovery of consciousness and thinking, but also a reflection of the objective properties of existence (being) with a certain degree of accuracy.

The scientific level of the methodology of creative development of future primary school teachers (we have already touched upon the philosophical and general scientific levels of the methodology) mainly includes the teaching of the general principles of training students of primary education departments of pedagogical universities as future primary school teachers.

The development of functions related to the formation and expansion of worldview in the didactic system of training future primary school teachers (improvement of the functions of the formation of scientific worldview of pedagogical education) should be considered as a necessity arising from the most modern requirements for education.

This necessity is explained by the tasks of "effective organization of the innovative society of human (learner) knowledge and cognitive abilities" [A.O. Karpov, 2010: 21].

Thus, in education (including teaching), it is not the student's "excellent" mastery of the materials and laws presented in textbooks, the requirements that include perfect and detailed mastery of academic subjects, but his individual creative activity that is important: during this activity, the student is not only engaged in discussing and verifying the presented knowledge, but also independently creates his own complex of knowledge on the way to understanding the surrounding world.

Summarizing the above thoughts and considerations, the following basic cognitive ideas are used in preparing teachers for creatively developing education for primary school students:

- defining the problem, that is, posing a problem that needs to be solved;
- creating knowledge in the process of transformational activity;
- determining the boundaries of the application of knowledge;
- determining the semiotic aspects of the presentation of knowledge.

The importance of education that develops creativity in a child in the overall development of the personality does not require proof. In this process, a primary school student masters many psychophysiological mechanisms of understanding the object of knowledge, his creative thinking, thinking and creative approach to problem solving increase.

Therefore, we need to create such a system of training primary school teachers that in this system the student freely (without strain and as a product of natural need) comprehends the essence of all concepts that embody the properties of the object of knowledge. Here we mean the fundamental, basic concepts of all academic subjects included in the primary education program.

The student's understanding of them, as well as their creative understanding of their essence and the emergence of laws, phenomena, and situations expressed through these concepts, is one of the important conditions in education that develops creativity.

Learning these concepts may not be difficult, but understanding their fundamental essence is so complex that this complexity is explained by a number of specific features of education that develops creativity. In our opinion, these features include the following:

- in education that develops creativity, it is assumed that all academic subjects are mastered through a symbolic (figurative, allegorical) semiotic system (that is, no information or subject-related information is presented to the student in a ready-made form, but is transmitted figuratively, figuratively, symbolically);
- the content of all general education subjects contains content that develops creativity and allows for the creation of problem situations;
- the definition of each concept is received individually by students during the study of this concept, and a generally acceptable definition is adopted under the guidance of a teacher using communicative discussion

(or any other interactive method);

- an important condition is that each concept has an integrative ("mixture" of interpretations from all subjects) definition.

As we can see, one of the most important conditions for providing creative education to primary school students is the mastery of academic subjects based on the semiotic system.

In our article, we will touch on the basic principles that are applied in education aimed at the creative development of primary school students through the teaching of academic subjects based on the semiotic system.

## **REFERENCES**

Atamanskaya M.S., Fizika o'qitishning shaxsiy-semantik modeli // Rostov n/d.: Rosizdat, 2015. – S. 124.

Dutova, N.V. Madaniyatlararo muloqot kontekstida gender noverbal xulq-atvori [Matn] / N.V.Dutova // Transbaikal davlat universiteti: monografiya / N.V.Dutova. – Chita, 2014. – 120 b.

Galaktionova T. G. "Matn pedagogikasi: semiotik yechim tajribasi". [Matn] / T. G. Galaktionova. – Sankt-Peterburg, 2013. – 379 b.

Kolpakov V.M. Boshqaruv usullari // Katta kutubxona. 2006 - 2011.

Komenskiy, Ya.A. Tanlangan pedagogik ishlar [Matn] / Ya.A. Komenskiy. – T. 2. – M.: Pedagogika, 1982. – 576 b.

Maksimova, G.P. Universitet o'qituvchisining kommunikativ madaniyati va uning kasbiy faoliyatdagi rivojlanishi: dis. ...kand. ped. Sci. Rostov n/d., 2000. - 179 p.

Morris, C.V. Belgilar nazariyasi asoslari // Semiotika. M. 1983 yil, 39–40-betlar.

Pedagogikadan amaliy dars davomida aqliy xaritalar [Elektron resurs] // Sidorov S. V. O'qituvchi-tadqiqotchining veb-sayti 18.03.2013.

Polyankina S. Yu. Ta'limning yangi kontseptual metaforasini izlashda ta'lim semiotikasining salohiyati / S. Yu. Polyankina // Ta'lim falsafasi. - 2018 yil. – 1-son (74). – 166– 174-betlar.