



DIDACTIC OF ORIENTAL SCIENTISTS SCIENCE LOOK AT THEIR ATTITUDES

Nishonboev M.X.

lieutenant colonel, associate professor, senior teacher of the JV Academy of the Russian Academy of Sciences

The article reveals the views of Eastern scientists on the theory of didactics in different periods.

V dannoy state raskryty vzglyady na teoriyu didkatiki different time uchenyx Vostoka.

This article reveals views on the theory of didactics from different times of the East.

Key words: didactics, education, theory, scientist, upbringing, East, knowledge, practical, activity.

Key words: didaktika, obuchenie, teoriya, vospitanie, Vostok, znanie, prakticheskiy, deyatelnost.

Keywords: didactic, training, theory, education, East, knowledge, practical, activity.

Didactics is an independent branch of pedagogy that studies the general principles of education, the process of imparting knowledge and the theory of teaching.

Didactics is derived from the Greek word "didasko" which means "teaching", "teaching".

Didactics is the theory of imparting knowledge. More precisely, it is a branch of pedagogical science that determines the laws of pedagogical relations between educators and their recipients, scientifically substantiates the concepts, terms and rules used in this field and teaches them to others [6].

seeks answers to questions of pedagogy such as "**what to teach**", "**what to teach**" and "**how to teach**". If we look at the history of the theory of education, Uzbek folk pedagogy believes that the most important condition for a person to be mentally mature is education and training in childhood. An important feature of the views of many scholars of the East, such as Al-Khorazmi, Kindi, al-Razi, Farabi, Beruni, Ibn Sina, A. Avloni, Niyazi, is that they focus on the subject and sources of knowledge, the stages of the knowledge process, the activity of knowledge. who paid attention to the relationship between practical activities. **For example**,

Muhammad ibn Musa al-Khorazmi made an important contribution to the development of the theory of continuous development of the individual, defined the principle of individuality and unity of generality in inductive and deductive thinking.

In his theory of knowledge, he describes the objective relations between objects and events in the material world, natural processes "...knowing through intuition, if it is partial knowledge, it is a logical statement, if it is mental knowledge, it shows the important side of true knowledge". considered that. According to the scientist, "a person's behavior and behavior can be perfectly formed only when it is based on logical thinking . "

Yaqub ibn Ishaq

al-Kindi, the scientist who was the first to classify sciences in the East, things in the material world, i.e. "primary substances" can be known only on the basis of studying their properties - quantity and quality . In

his classification, the scientist believed that the most necessary factor for the formation of positive qualities in a person is the development of his intellectual power . If the power of reason is not developed, even if a person reads Aristotle's books all his life, he will not be able to master any of the sciences expressed in them. No matter how hard such a person tries, he can only repeat the words of others. He does not understand the essence of anything and cannot master it . While expressing these thoughts, Al-Kindi meant the principle of scientificity and consciousness of teaching.

expressed emotional and rational knowledge in his didactic ideas . He emphasized that emotional cognition is the knowledge of individual things, while rational cognition is the knowledge of general things . According to him, emotional knowledge only provides material for the mind. Reasons help the human mind to know the truth and to act in accordance with that truth. "Truth" is the reason for knowing anything and its stability, therefore everything that exists in life exists in reality. "It is necessary to know the truth , and according to that one can know the things that exist," al-Kindi wrote.

Abu Bakr al-Razi holds that the human mind and thinking is a highly developed social being above all things in the universe: " In order to be able to rule ourselves in the things that are useful to us, we have been given superiority over animals with intelligence. Through reason we can know everything that glorifies us, adorns us and makes our life beautiful. With the mind, we achieve our goals ..." is enough.

Abu Nasr al-Farabi developed a classification of teaching methods. He divided them into practical and theoretical methods, and thus put forward the ideas of the practical direction of teaching and its connection with people's lives and daily activities. The scientist paid special attention to experimental, demonstrative, inductive and deductive practical methods of teaching. He combined all methods based on the students' life experience and logical thinking. In developing the requirements for the organization of the educational process, giving preference to the deductive method, what to pay special attention to when explaining the material to students, highlighting the most important things with evidence that provides reliable knowledge of science and does not raise doubts, etc. expressed valuable recommendations for teachers.

Farabi developed the principles of scientificity, instructiveness, comprehensibility and consistency of teaching based on the examples of mathematics. He explained the essence of the process of knowledge and forms of knowledge in science. According to him, these processes are formed as laws, and their observance improves thinking and prevents gross errors in the process of complex cognition. The process of knowing must go through the logic of thinking. The object of logic is aimed at understanding, and the essences that can be understood serve to determine the correctness of the thought process that is analyzed. Logic is a weapon and it helps to know things clearly.

Farabi has developed many detailed recommendations on the issues of organizing knowledge activities. He writes that in order to be a good theoretician, regardless of the discipline, the theory must meet the following three conditions:

1. Full knowledge of all principles based on this science .
2. To be able to draw appropriate conclusions from these principles and information about this science.
3. To be able to reject the wrong theory and distinguish the truth from the lie, to be able to analyze the opinions of other authors in order to correct the mistakes.

In the treatise "Exemplary education", the scientist focused on the issue of explaining the material to be mastered by students in a good way and recommended two types of teaching, a new principle: one of them is direct intuition, the other is intelligence. is related to

He interprets his opinion in this way: "Things outside of us, our senses, affect our sense organs, the things affected are infinite. A person uses his mind and imagination and learns things he does not know by means of them, based on them he

can gain deeper and more comprehensive knowledge and information about the world, which is the source of knowledge. He continued his thought: "... the science that needs to be known first is studied, this is the science of the foundations of the universe. It is necessary to study the structure and shape of bodies, knowledge about the sky. After that, in general, the science of living nature, plants and animals is studied. Before gaining knowledge and experience, a person does not take many things into account, after gaining knowledge and experience, he changes his view of things, he feels the necessity of things that he considered

useless before, what he did not pay attention to before, on the contrary, surprises him . .

The problem of emotional cognition as a reflection of existence and the main issue - the question of the sources of cognition were always in the center of attention of **Abu Rayhan Beruni's** theoretical cognitive activity.

He emphasized that the pedagogue should strictly adhere to the following during the educational process:

- not boring the learner;
- based on diversity in education;
- compliance with coherence, systematicity, consistency and logic;
- interesting presentation of new topics, mainly visual presentation, etc

The scientist analyzed and interpreted the theoretical basis of knowledge as an endless and continuous process. He made important didactic conclusions by developing the scientific methods of knowledge developed by ancient scientists. " Through reading and repetition ," Beruni wrote, " knowing the structure of the world, the shapes of the sky and the earth is extremely useful for the science of astronomy." Therefore, in this way, the learner develops skills and learns the words used by the people of this art, and understands the meaning of these words. Later, when studying various reasons and proofs in the science of astronomy, if he comes across such words, he will easily understand them and will not get tired of mastering this or that thing . As Beruni noted, teaching should be consistent, demonstrative, appropriate and conducted in a certain system. Therefore, visualization makes education more understandable, specific and interesting, develops thinking.

Abu Ali ibn Sina about the results achieved through knowledge has a special place in the theory of teaching. In his opinion, the true knowledge of objects is reached by reason on the basis of analyzing their appearance and determining their causes.

The scientist looks at visual teaching with great interest, and if a person studies the external properties of an object in the initial training sessions, examines that object and its image, he will acquire knowledge independently. believes that he will get The scientist emphasizes the formation of an image that correctly reflects the objective reality in a person due to the perception of real things or their images. Also, Ibn Sina's principles of methods and ways of acquiring scientific knowledge, teaching students in the form of a class-lesson are important:

- not to make the learner busy with the book at once when imparting knowledge;
- paying attention to teaching as a team (class);
- taking into account the interest and ability of students in education;
- combining training with physical exercises, etc. [1,2].

Ibn Sina developed the stages of development of the mind. The first step in observational perception is the clarification of mental categories. The second stage is the perception of two different thoughts. The third stage of the development of the mind is reached with the perception of absorbed thoughts. Then it is called true intelligence. Dividing intelligence into stages, the scientist meant the mind of a child who can memorize at the first stage, but does not yet know letters, ink and pen; in the second stage - the mind of a child who begins to draw sticks and learns to use a pencil is imagined; in the third stage, a person acquires mental forms and corresponding emotional images.

Ibn Sina understands the innate talent of a person, as well as the ability to think that is formed on the basis of experience and in the process of knowledge, by Ibn Sina, he defines the mind as the primary innate healthy thinking of a person, the power that creates good and bad deeds and differentiates them. . Intelligence is manifested in human behavior. It is said that man analyzes things and events with the help of his mind, summarizes and chooses the best of them. It also divides the mind into two categories. One of them is the theoretical mind, which is the perception of the essence of the common things in existence, and the other is the practical mind, which is the ability to be seen as a motive in the selection of objects.

Abdulla Awlani put the problem of science in the first place in all his works. " As a result ," he wrote, " all our life, health, happiness, wealth, life, effort, enthusiasm, world and the hereafter are connected with knowledge... That's why we don't miss the time to study and know, it's the enemy of our body." We should try our best to get rid of our ignorance ." A. Awlani believes that knowledge is acquired in the process of education and that it allows distinguishing good from evil, good from evil, permissible from

illegal. In particular, he developed the problem of unity of upbringing and education . Although A. Avloni said that there is little difference between education and upbringing, he says that they are closely related to each other, like body and soul.

Hamza Hakimzada Niyazi developed the method of teaching sound literacy in his textbooks such as "New Literature", "Reading Book", "Reading Book". The main idea in his theory of education is the collective approach to teaching and upbringing, the interdependence of mental, moral and aesthetic education of young people [1,2].

In order to understand the essence of didactics, we present several points in the table, by the method of direct application of quotations.

Table

Definitions given by Eastern thinkers to the didactic concept

t/r	The author of the concept	the essence of the concept of didactics	Keywords
1.	Muhammad Ibn Musa al-Khwarizmi	Intuitive knowledge, if partial knowledge, is a logical statement, whereas intellectual knowledge reveals the essential aspect of true knowledge	A person's behavior and behavior can be perfectly formed only if it is based on logical thinking
2.	Yaqub ibn Ishaq al-Kindi	Things in the material world, that is, "primary substances", can be known only on the basis of studying their properties - quantity and quality	If the power of reason is not developed, even if a person reads Aristotle's books all his life, he will not be able to master any of the sciences expressed in them.
3.	Abu Bakr al-Razi	We are endowed with reason over animals, so that we can judge for ourselves what is good for us	With the mind we achieve our desired goals
4.	Abu Nasr al-Faroabi	Things outside of us, outside of our senses, affect our sense organs, the effects are infinite.	First, the science that requires knowledge is studied, this is the science of the foundations of the universe
5.	Abu Rayhan Beruni	<ul style="list-style-type: none"> - not to bore the learner; - that education is based on diversity; - that it observes coherence, systematicity, consistency and logic; - interesting presentation of new topics, mostly demonstratively 	Teaching knowledge
6.	Abu Ali ibn Sina	Looking at instructional teaching with great interest, if a person learns the external properties of an object in the initial training sessions, examines that object and its image, he can acquire knowledge independently.	Due to the perception of real objects or their images, a person has an image that accurately reflects objective reality.
7.	Abdulla Avloni	Our whole life... is connected with	Knowledge is acquired in

		knowledge... Therefore, we should not miss the time to study and learn, and try our best to get rid of ignorance, which is the enemy of our body.	the process of education
8.	Hamza Hakimzada Niazi	The main idea in the theory of education is a comprehensive approach to teaching and upbringing, the realization of the mental, moral and aesthetic education of young people in an interdependent manner.	The method of teaching sound literacy

It can be concluded from the above that it is impossible to achieve high efficiency in the process of education and upbringing without using the didactic heritage of Uzbek folk pedagogy and Eastern thinkers in the creation of curriculum, manuals and textbooks from the theory of pedagogy. In particular, the didactic ideas of al-Khorazmi, al-Kindi, Abu Rayhan Beruni, al-Farabi, Ibn Sina and other thinkers influenced the development of world socio-pedagogical ideas in many ways, and to a certain extent they were the main elements of the Renaissance in Europe. created the conditions, of course.

The following few facts are enough to confirm such opinions. For example, from Al-Khorazmi's treatises "Al-kitob-al-mukhtasar fi-hisab al-jabr wal-l-muqabila" ("A brief book on the calculus of countermeasures in algebra") and "Kitab surat al-arz" the world-famous mathematician and geographer Fibonacci, Piccioli, Tartaglia, Cardano, Ferrari, Leonardo were widely used by the famous Greek scientist Claudius II Ptolemy, Newton, Herschel, Joseph Toussaint Reynaud and others. Also, Abu Ali ibn Sina's work "Hayy ibn Yaqzon" ("Smart - Living Boy"), the story of the Spanish pedagogue and writer ibn Tufaila about "Hayya son of Yaqzon"; JJ Russo's work "On Emil or Tarbiya" and Farabi's treatise "The Enumeration of Sciences" became the basis for writing the work "Division of Philosophy" by the Spanish pedagogue Gundisal (XII century) [3,4,5].

Oxford University professor Roger Bacon (XII century) al He deepened the didactic ideas of Farabi and ibn Sina and wrote encyclopedic books. These works were used as textbooks in European universities, and to some extent, this gave impetus to the pansophic movement in pedagogy in the 15th and 16th centuries. One of the bright manifestations of **the pansophic movement** Although the Czech pedagogue Jan Yamos Comenius made a great contribution to the development of the educational theory of didactics in his work "The Great Didactics", but in the educational theory of didactics, the content, form and methods of education (especially the class-lesson system) It should be noted that the idea) belongs to Ibn Sina [7].

Because in the East in the 9th century, in many regions of Europe, at a time when khusnikhat was not used

and did not know what the class-lesson system was, the pedagogical theory created by the encyclopedic scientists who were engaged in scientific and pedagogical activities in the schools and madrasas established under the Ma'mun Academy in Khorezm the peculiarity is that the didactic ideas they put forward are not directly separated from the logic of the science being studied. Ideas specific to educational purpose, principles, content and methods are highlighted in the process of formation of specific knowledge and skills in any subject [8].

The works of encyclopedic scholars who came from the East were used as teaching manuals in the medieval European universities in Latin. There is no doubt that these works were the basis for the development of natural and social-pedagogical sciences in Europe.

In general, didactics serves as a basis for the teaching method (methods) of each academic subject, along with defining the general laws of education, the process of imparting knowledge, and the theory of teaching. Didactics serves as a methodological basis for the entire pedagogical activity, that is, for the theoretical and practical actions of those engaged in education. Therefore, **it is possible to find an answer to the questions of what is the research object, subject, purpose and research methods of didactics.**

The object of scientific research of didactics is the process of education and training. The subject of scientific research of didactics is "recipient of education", "provider of education", "curriculum, textbook and other didactic materials", "method of teaching and consists of functional relationships between "methods" and "technical means of teaching" .

References:

1. Mavlonova, R. Pedagogical theory and history / R.Mavlonova, N.Vokhidova, N.Rakhmonkulova //Textbook. - T.: "SCIENCE AND TECHNOLOGY", 2010. pp. 55-58.
2. Hasanov, S. Spiritual schools of Khorezm / N. Ataeva, M. Salieva// – T.: "Justice", 2001. pp. 103-119.
3. Khaidarov, F.I. Motivation of educational activity/ F.I. Khaidarov//– T.: Fan, 2005. - 122 p.
4. Yoldoshev, J.G'., Advanced pedagogical technologies/ J.G'. Yoldoshev//– T.: Teacher, 2004. – 150 p.
5. Tolipov, O'., Practical foundations of pedagogical technologies/ O'. Tolipov// – T.: 2006. – 260 b.
6. Dictionary of pedagogical terms. - T.: Science, 2008. – 196 p.
7. Anarbayev, OI Innovations in Military Education as a Condition for Forming Professional Competence. / OI Anarbayev // International Journal of Economy and innovation. ISSN: 2545-0573. 2024.
8. 8 . Anarbayev, OI The role and role of our historical, spiritual and cultural heritage in patriotic education of youth: / OI Anarbayev // Best journal of innovation in science, research and development. ISSN: 2835-3579. 2024.