METHODOLOGY OF STUDENTS' CREATIVE COMPETENCE DEVELOPMENT

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ABSTRACT

As in many areas of education, innovative processes in the organization of creative activities of learners require the introduction of new forms and mechanisms in the relationship between theory and practice. From such forms and mechanisms, it is envisaged to create science-related innovative banks, centers for the implementation of innovative programs, and scientific-practical centers. The article focuses in detail on the group of methods that provide person-oriented education and the creative methods identified by Khutorsky based on the three essential needs of activity in the development of creative competence of students.

Keywords: Cognitive, creative, method, perception, analysis, empathy, comparison, heuristic questions, heuristic observation, research, facts, concepts.

INTRODUCTION

The development of creative competence of students is one of the urgent tasks facing modern higher education, and in solving the existing problems in this process, it requires the training and qualification of mature personnel who can independently solve problems in accordance with the requirements of today's times and fully meet the requirements of their professional specialization. This made it a task for experts of all disciplines to create modern educational technologies that meet modern requirements in the continuous education system. To date, a number of works have been carried out in this regard, including: the creation of new educational programs, the creation of textbooks and teaching methods.

The main problem of modern pedagogy is to reveal the objective foundations of the existing educational paradigm and the essence of the law that ensures their development. At this point, the need to create a new paradigm of humanity based on new knowledge and thinking criteria is shown, which shows that it will bring to the fore the problems of education, which broadly reflect aspects such as content, method, organizational criteria, and personnel supply, as a particularly urgent issue.

ANALYSIS OF LITERATURE ON THE SUBJECT

It should be said that the need for heuristic creative methods appeared at the very beginning of the development of the methodology. The first and main theory of teaching methods developed by F.I.Buslaev included heuristic methods. This problem is discussed in "Pedagogy: innovative activity" (V.A. Slastenina and P.S. Podymova), "Pedagogy of creative self-development: an innovative course" (Andreev V.I.) and, of course, A.V. Khutorsky's "Didactic heuristics. Theory and technology of creative education" and other scientists' works.

The possibility of forming creative thinking in the educational process was discussed by many foreign and domestic scientists in the 60s of the last century. M. I. Meerovich and L. I. Shragin argue that creativity does not depend on the field of activity or the material from which it is produced, and this allows it to be transferred to another material.

However, today, the study of special subjects is often based on traditional teaching methods, and therefore a contradiction arises, which consists of a discrepancy between the existing methodological foundations of the educational process and the methodology required by modern trends.

The need to resolve this contradiction determines the relevance of our research.

RESEARCH METHODOLOGY

As in many areas of education, innovative processes in the organization of creative activities of learners require the introduction of new forms and mechanisms in the relationship between theory and practice. From such forms and mechanisms, it is envisaged to create science-related innovative banks, centers for the implementation of innovative programs, and scientific-practical centers.

Not every teacher has the ability to perceive and understand innovative innovations. The main thing here is that the teacher himself should be psychologically ready to notice the novelty. The innovative activity of the teacher encourages to quickly identify the problems that arise in the educational process. Identifying problems and looking for ways to solve them quickly forms a new innovative culture and innovative philosophy.

One of the principles of creative pedagogy is not only to create and distribute news, but also to teach the whole population to think in a new way.

Based on the three essential needs of the activity, we distinguish three groups of methods that provide person-oriented education:

Cognitive methods of teaching - educational methods that include various methods of perception and analysis of knowledge by students: empathy (or use), semantic vision, figurative vision, symbolic vision, comparison, heuristic questions, heuristic observation, research, facts, concepts, rules, building hypotheses and theories, predicting errors.

Creative teaching methods are methods aimed at students' creation of their own learning products.

Methods of organizing education - methods of organizing the educational process are divided into 3 groups: methods of teachers, students and educational leaders. Most importantly, we are interested in students' methods, because it is directly related to the topic of study.

Student methods - the method of setting educational goals, planning students, creating student educational programs, creating rules, self-organization of learning, mutual learning, review, control, thinking, self-evaluation.

The existence of different classifications of methods shows that the teaching method is a multifaceted formation that performs various functions (educational, developmental, educative, stimulating (motivational), control and corrective). Therefore, it can be viewed from different perspectives. It is for this reason that many researchers abandoned the special division of methods and switched to the usual enumeration and disclosure of the essence and characteristics of their use in different conditions and at different stages of education.

Let's take a closer look at the creative methods identified by Khutorsky. Let's remember that the scientist defines them as "methods aimed at creating students' own educational products". A.V. Khutorskoy presents the following creative methods that can be used in teaching.

The method of invention is a method of creating a previously unknown product as a result of certain mental actions of students. The method is implemented using the following methods:

- a) replacing the quality of one object with the quality of another to create a new object;
- b) find the characteristics of the object in another environment;
- c) change of the studied object element and description of new, changed object properties.

"If..." method. Students are encouraged to describe or draw a picture of what would happen if something changed in the world, for example:

- gravity increases 10 times;
- endings in words or words themselves disappear;
- all volumetric geometric shapes become a flat shape;
- predators become herbivores;
- all people will move to the moon, etc.

Completing such tasks by students not only develops their imagination, but also allows them to better understand the structure of the real world, its connection with everything in it, and the fundamental foundations of various sciences.

The method of figurative painting restores the state of the student, when the perception and understanding of the object of study are combined, and its integral, undivided vision is formed. As a result, the student will have a figurative image of a flower, a tree, a cloud, the Earth or the entire Cosmos. Since it is very important for a person to create and convey a holistic image of a well-known object, students are offered to depict, for example, a unique image of nature or the whole universe, that is, to express the fundamental principles of nature, the connections between them, using drawings, symbols, basic expressions. In the process of such work, each student not only thinks on different scales, connects the knowledge gained from different fields of science, but also feels the meaning of the depicted reality. By offering such a task 2-3 times a year, it is possible to evaluate changes in the worldview of students and make necessary adjustments to the educational process.

Method of random associations. The method is used to change the object, improve its properties and create new ideas related to problem solving. The essence of the method is based on random associations that occur in connection with the name of the object and its functions. For example, the following associations may be associated with the word "nail"; "hammer", "fist", "boxer", "champion", "fruit juice", "motor oil", "reduce friction", "lubricate nails before hammering".

Hyperbolization method. The object of knowledge, its individual parts or qualities increase or decrease: the longest word, the smallest number is invented; passengers depicted with large heads or small feet; the sweetest tea or very salty cucumber is made. The Guinness Book of Records can give the initial impression of such visions, which are on the verge of transitioning from reality to fantasy.

Agglutination method. Students are invited to combine qualities, properties, parts of objects that are not connected in reality and described, for example: warm snow, the top of the abyss, the volume of the void, sweet salt, black light, the power of weakness, a running tree, a flying bear, a meowing dog.

Brainstorming (A.F. Osborne). The main task of the method is to collect as many ideas as possible, freeing the participants of the discussion from inertia and stereotypes. The attack

begins with the search for quick answers to training questions. Then the task is clarified once again, the rules of discussion are reminded and the discussion begins. Anyone can express, supplement and clarify their opinion. An expert is assigned to the groups and their task is to write down the presented ideas on paper. "Attack" lasts 10-15 minutes. Questions that require an unconventional solution to the "attack" are offered. For example: How to determine the length of a coil of copper wire without unwinding it? How to determine if an unknown planet has a magnetic field without a compass. Propose a method of viewing objects underwater without resorting to additional lighting.

The work is carried out in the following groups: creating ideas, analyzing the problem situation and evaluating ideas, forming opposing opinions. The generation of ideas is carried out in groups according to certain rules. Any criticism is prohibited during the idea generation stage. Replies, jokes, relaxed atmosphere are strongly encouraged. Then the ideas received in the groups are systematized, united by common principles and approaches. In addition, various obstacles to the implementation of selected ideas are considered. Criticisms are appreciated. Only those ideas that have not been rejected by critical judgment and opposing views are selected.

RESEARCH RESULTS

A.V. Khutorsky said that a number of creative methods are based on the development of creative multifaceted thinking in students and the ability to create and find new knowledge based on existing realities.

After analyzing the block of psychological scientific explanation of the concept of "creativity", we can show a parallel between creativity in psychology and pedagogy.

As we remember, F. Barron, who reviewed many studies on creativity, gives a comprehensive definition of creativity in his work, which is usually based on key words such as innovation, product creation, creative process and ability to adapt to changes.

Accordingly, we came to the conclusion that the concept of "creative methods of education" fully corresponds to the goals of educating students' creativity, because a person acquires unique characteristics by creating his own product (whether it is educational, creative, material or intellectual), his way of thinking, adapting to changing conditions. get, as well as the ability to find several solutions to the same problem, that is, it becomes the owner of this creativity).

Indeed, the success of education depends on the textbook, teaching methods and the teacher. A good teacher must have mastered his subject, love his profession and children. A teacher is a children's coach in educational work. A teacher's job requires constant enthusiasm and enjoyment more than any other job. From the outside, the role of the teacher is simple and simple, but he should understand the high social importance of his work, it is necessary to always pay attention to treating teachers with great respect and care. Because a teacher not only teaches a subject, but also an educator. It is required that he loves his profession, strives to carry out excellent research for educational work, the ability to enter a new situation, a new community, sincerity, correctness and honesty, sharp intelligence, and the ability to check one tool with another. Pedagogical skills include extensive knowledge about children, the organization of the educational process and its content and methods. This knowledge constitutes general pedagogical culture. A teacher can never become a true master if he does not acquire this culture. General culture alone is not enough for a modern teacher. It includes the skills of observing children, comparing the important things in their growth with the main

social ideas that have arisen in society, determining the ways and methods of their development, in-depth analysis of the dialectic of the mutual transition of various means of educational influence, and scientific systematization of pedagogical research and achievements. will have

Naturally, the use of creative teaching methods in which students themselves create knowledge is not the only real one, because knowledge is not equivalent in terms of its importance. Some of them are fundamental, while others are designed to form a general picture of the world of a person. That is why it is important and meaningful to clearly define what kind of knowledge should be born with the help of heuristic creative teaching methods during the educational process.

Students' creative development was considered a by-product of learning that was spontaneous and practically uncontrollable. Until recently, the problem of managing the development of students' creative abilities was not singled out as a separate task of pedagogy. The concept of "creativity" was more related to physiology and psychology than to pedagogy. The problem of purposeful, rapid development and management of students' creative development has recently become one of the central tasks of education, a problem of theory and practice, the purpose of which is "to increase the conscious management of the process of creative development of thinking".

CONCLUSIONS AND SUGGESTIONS

The Republic of Uzbekistan is building a democratic legal state and an open civil society that ensures the observance of human rights and freedoms, the moral renewal of society, the formation of a socially oriented market economy, and integration into the world community.

To carry out vocational education of pupils and young people that meets the requirements of modern science and technology development, to arm students with deep and independent knowledge of the fundamentals of science, to educate them to independently complete and apply their knowledge and skills by striving for continuous improvement of their knowledge and skills, and active work and preparing for public activities, acquiring a conscious profession is an important and complex task. In order to solve this task, the conscious mastering of study motivations, positive attitude of students to study, interest in the educational subject of skill and professional pedagogy play an important role.

Man, his all-round harmonious development and well-being, creation of conditions and effective mechanisms for the realization of personal interests, change of outdated patterns of thinking and social behavior are the main goal and driving force of the reforms implemented in the republic. The formation of an excellent system of personnel training based on the rich intellectual heritage of the people and universal values, on the basis of the achievements of modern culture, economy, science, technology and technology is an important condition for the development of Uzbekistan.

It should also be noted that the methodology of developing students' creative competence consists of carefully teaching students how to create new objects, structures and methods with the help of information technologies, to formalize existing technical solutions as inventions, and to carry out patent research for this.

In the course of lectures, students acquire in-depth theoretical knowledge of the technology of creative activity. Attention is paid to the creative development and practical application of the knowledge acquired by the students in pedagogy, psychology, vocational education.

In order to deepen the acquired knowledge, to test it in practice, as well as to prepare students for pedagogical activity through practice, laboratory exercises are held.

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