



MODEL OF DEVELOPMENT OF CREATIVE THINKING IN STUDENTS BASED ON THE COMPETENCE APPROACH

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Annotation

The article examines requirements for improving the quality of learning in physics classes and various models in the process of creative teaching.

Keywords: quality of education, competence, competence approach, creative, education, educational process, students.

The methodical system of physics teaching in public educational institutions is understood as a coherent interrelated structure that includes the purpose and content of teaching, forms and means of teaching, methods and training projects. The methodical system of teaching physics represents a complex, dynamic and high-quality educational system, with the internal structure of the system subject to certain laws and regulations, its constituent elements interacting with each other, and ensuring close connection in external communication, guaranteeing the quality of education. [1].

Many definitions have been given to the concept of a methodical system of teaching. Russian pedagogic scientists G.N. Gavrilova, E.V. Gavrilova gave the following definition: "Pedagogical system is a set of interconnected methods, tools and processes required to have a clearly targeted, organized, pedagogical effect on the formation of a person with certain qualities. Therefore, the priority values of the society determine the requirements and goals of the formation of the individual, based on this, the pedagogical system changes as well" [2].

O'.N.Sultanova recommends creating a methodical model as one of the main tasks in creating a methodical system of teaching physics in scientific research work. It represents the model as follows (Figure 1).



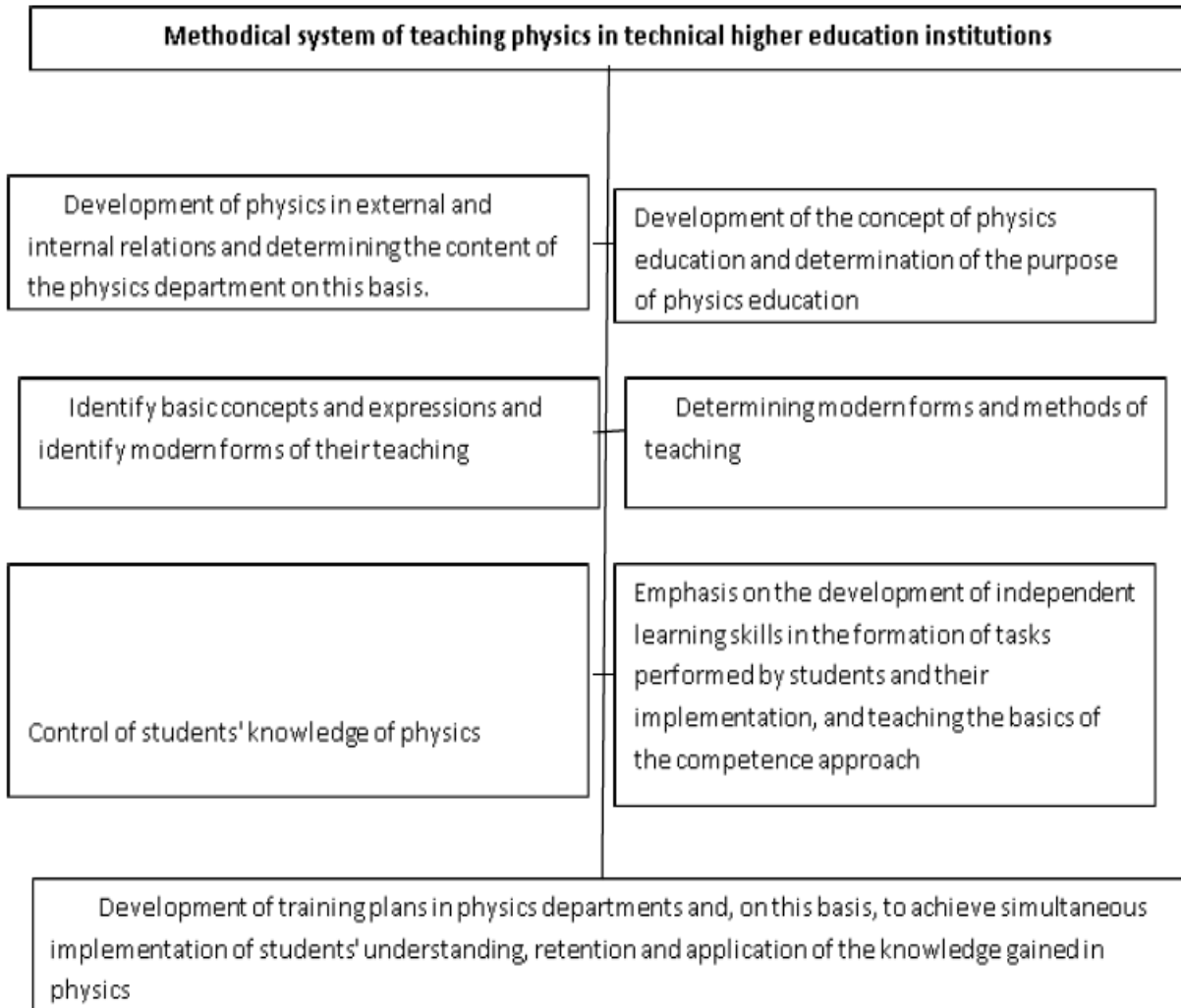


Figure 1

Source: O'. N. Sultanova Improving the methodology of teaching physics in technical higher education institutions based on the competence approach. Dissertation written for the Doctor of Pedagogical Sciences (DSc) degree. Tashkent, 2022.-66 p. The main element of the methodology of teaching physics in institutions of public education is the teaching goals, which should be aimed at teaching students the basics of physics. Various innovative approaches are used in the development of a methodical system for the development of creative thinking based on the competence approach in general educational institutions, and the teaching of each taught section of physics. For example, in contrast to the methodical system of traditional teaching, lesson plans are the main element of the methodical system in the development of creative thinking based on the competence approach.



In the process of teaching physics in general educational institutions, it serves to ensure the following: students are given physical knowledge, skills and qualifications; students' interests are taken into account during physical education; it is important to approach students' thorough assimilation of new physical concepts or laws, and the method of its presentation is chosen; it is explained using abstract concepts, giving explanations and examples; it is also possible to use the method of repeating the topics covered; In order to avoid the deepening of academic subjects, it is impossible to reduce and change the subject system.

The main goal of teaching physics based on the competence approach is to educate the young generation, who have developed knowledge, skills, creative thinking skills and competence. The goal is the product of the achievement of pre-planned results, the achievement of high efficiency as a result of the joint action of the subjects participating in the educational process (teacher and student) (Fig. 2).

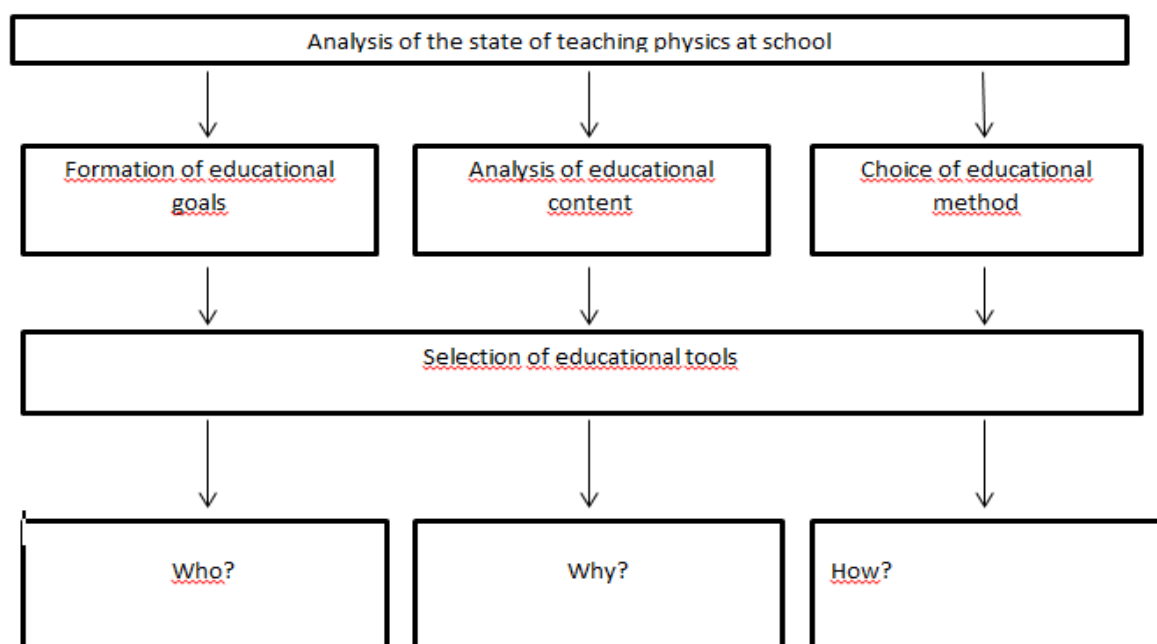


Figure 2.2. The current state of teaching physics based on the competence approach in general education institutions.

Source: Compiled by the author.

According to the content and essence of the problems in teaching physics, they can be divided into two types: creative and non-creative problems. Creative problems characterized by the level of complexity encourage the student to think and think independently, creatively, in order to fully understand the content of the problem. In such a case, interdisciplinary integration becomes important and encourages the acquisition of new knowledge in solving creative problems.



In our opinion, in the process of teaching physics, it is necessary to take into account the didactic and educational goals and tasks of each lesson. The following can be included in the didactic goals of the training: a) students learn the content of new material (form concepts, imagine laws and algorithms);

b) Strengthen their knowledge of the subject (repetition, solving problems). Also, during training, attention is paid to educational issues:

a) Increasing and developing students' interest in physics;

b) To increase students' responsibility to study physics, to instill love for physics;

c) Is to arouse enthusiasm for studying physics and to form certain skills. Textbooks, instructional and teaching methodology manuals, educational materials, technical tools, visual educational materials, modern ICT materials and all necessary tools designed for imparting knowledge are the main educational tools in teaching physics [3].

The question-and-answer method of teaching and learning is called conversational dialogue (Greek: dialogos - a conversation between two or more people). By engaging the student and guiding him to the goal using cleverly posed questions, he tries to remind and explain the student's knowledge on the topic, and the topic is discussed with classmates under the guidance of the teacher. With such communication, they acquire new knowledge through independent thinking, drawing conclusions and summarizing. The advantage of conversation is that it activates students' thinking ability and helps to develop creative thinking.

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