

DEVELOPMENT OF CREATIVE THINKING IN HIGHER EDUCATION

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Abstract. *The role of the formation of knowledge and their understanding in the development of creative thinking of the student is determined.*

A new approach is proposed in the process of creating educational materials with the need to enrich them with Internet resources for the development of creative thinking.

The qualities of a person characterizing the level of development of his mental functions are determined – this is the ability to analyze, compare, generalize, concretize, classify, plan, abstract.

A particularly significant role in the development of a student's creative thinking is demonstrated by the example of studying physics.

Keywords: *Creativity, formation, ability, abstract, analyze.*

Creativity of the individual. In any branch of a person's professional activity in modern society, initiative workers with creative, flexible and dynamic thinking occupy a special place. One of the main tasks of an educational institution, especially a higher professional educational institution, in addition to teaching professional knowledge, skills and practical skills, is the formation of creative, flexible and dynamic thinking in a student.

Active and creative thinking of a student is understood as creative. This is an activity that is accompanied by the constant generation of new analytical and constructive solutions.

Creativity (or creativity in English) by definition, it characterizes a person's creative abilities, manifested in his thinking, feelings, communication, and certain types of activities. Creativity characterizes a person as a whole or its individual sides, or products of activity, or the process of their creation [1].

Creative quality. The mental functions of a person characterize his ability to analyze, compare, generalize, concretize, classify, plan, abstract certain tasks in various moments of professional activity. As a rule, clear mental functions are formed when studying certain courses (or disciplines) in any educational institutions.

In the formation of mental functions, the role of natural sciences and, first of all, physics is especially significant, the methodology of teaching which from the very beginning combines the presentation of knowledge about certain natural phenomena with the clarification of the causes of these manifestations. For example, kinematics (a section of mechanics) informs (or presents knowledge) about various types and varieties of types of movements in nature. The student receives new information about how (?) physical bodies move: fast, slow, straight, curved, rotationally, vibrationally. These are the types of movement that you need to know and be able to distinguish them from each other!. And immediately after that, in dynamics (another section of mechanics), the process of logical interpretation of the causes of a particular type of

movement begins. The student learns why (?) there is one or another kind of movement of the physical body. The student begins to understand the reasons for what he learned in kinematics, understands why (?) this is exactly the kind of movement that everyone seemed to know about!. Such knowledge, perceived to a greater extent through logical thinking, will be preserved for a long time.

In addition, there is also an acquaintance with the mathematical apparatus of modeling and describing the causes and consequences of a particular kind of movements and their changes.

Forms of development of creative thinking. Creative thinking can be developed by brainstorming methods, inventive problem solving, conducting educational expert assessments of knowledge, using educational situations in which some incompleteness of new elements of knowledge encourages students to formulate a variety of questions[2-4].

It is this method of studying any discipline that combines the process of acquiring knowledge with the process of understanding everything that has been learned, stimulates mental activity, develops flexibility and originality of thought, breadth and variability of imagination.

The development of educational materials in all disciplines of the field of education - both humanities and natural sciences, and special courses (especially with an emphasis on elective disciplines) can also serve as a means of implementing the creative thinking of students of higher professional education. A positive effect is possible only if the educational materials being developed contain Internet resources (hyperlinks, QR-code, and others) that demonstrate the diverse possibilities of solving certain educational and methodological problems[5]. They can significantly contribute to the realization of creative thinking abilities and activation of motivational activity of the student.

In addition, such an appeal to Internet resources through educational materials developed by teachers will help create a visual and problematic nature of the lesson, introduce listening elements into the lecture session.

In practical classes, when solving communicative and cognitive tasks of the educational process, the student's understanding of the information used in the context of the development of the student's creative thinking is checked.

Conclusion. The process of formation of knowledge and their understanding is very important for the development of a student's creative thinking.

A new approach is proposed in the process of developing educational materials: they need to be enriched with Internet resources for the development of creative thinking.

The level of development of a person's mental functions is determined by his abilities to analyze, compare, generalize, concretize, classify, plan, and abstract.

The significant role of physics in the development of a student 's creative thinking is demonstrated.

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