

DEVELOPMENT OF STUDENTS' CREATIVE THINKING BASED ON PEDAGOGICAL INTEGRATION

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<https://doi.org/10.5281/zenodo.7725862>

Abstract. *According to the world experience of reputable research centers in several developed countries, significant practical results have been achieved in creating a scientifically based methodological system for designing the process of vocational education based on a competence-based approach. The article provides introductions and factual theoretical materials for the development of creative thinking of students.*

Keywords: *creative thinking, professional education, aspect, didactic thinking.*

It is important to change the existing educational approaches in the training of qualified personnel and the development of skills to put into practice the acquired theoretical knowledge through independent work. In the improvement of didactic competence in the process of independent work of students of the direction "Vocational education" of technical higher educational institutions, the skills of using interactive teaching methods in the process of finding and putting into practice solutions to professional problems in their activities play an important role.

From this point of view, it is necessary to pay special attention to didactic competencies in the training of specialists who are able to develop through independent work, the skills of applying in practice the acquired theoretical knowledge, using interactive teaching methods in the process of finding and putting into practice solutions to professional problems in their independent activities, who are active, creatively thinking, engaged in search, able to independently find the necessary information and using it in their activities in higher education, and also in the effective organization of the process of independent work in the educational process in a higher educational institution. The concept of "thinking-ability" was introduced into the theory by S.L. Rubinstein, who in his writings emphasized that "it is impossible to determine a person's intelligence by the result of his activity alone, without revealing the thinking process that leads to it." The scientist warned pedagogical science and practice against approaching thinking as a "skill", because this leads it to function in a ready-made form. Based on what has been said, we can conclude that there is a rather fruitful way in teaching — the way of guiding the development process of students, the way of developing their thinking.

In pedagogy, the question of the possibility or impossibility of managing creative processes is constantly debated. Let's highlight two of the most optimistic approaches to solving this issue:

- you can manage creativity through mastering the appropriate thinking techniques;
- creativity can be controlled through the creation of the most favorable conditions for its flow, for example, through an appropriate psychological atmosphere that stimulates the development of personality.

Our experience has confirmed that these two approaches in pedagogy can and should coexist in organic unity.

In pedagogical theory there is a sufficient number of works devoted to the study of the mechanisms of control of the thought process in learning. Each of them is fundamentally distinguished by a peculiar interpretation and originality of the scientific approach, a set of ways to strengthen various links of mental activity. However, the problem of developing students' creative thinking in the context of problem-based learning has so far remained insufficiently investigated in higher school pedagogy.

Analyzing various approaches to the interpretation of creative thinking, we found that they are based on the essential characteristics of consciousness and thinking in general - as a process of accumulation of associations, as an action, an act of discretion of relationships, as an act of restructuring the situation, as the behavior of a person, etc. After analyzing a lot of definitions, we came to the conclusion that it is hardly possible to consider any of them exhaustive. Moreover, such a definition is probably impossible in principle, given the complexity of the phenomenon under study. In our case, we found it possible to use all the variety of definitions.

The study has shown that if we set a goal for ourselves — the development of creative thinking, we will not be able to achieve it without understanding the relationship between the subjective and objective in thinking, empirical and creative, rational and sensual (epistemological aspect), without understanding it as a motivated and purposeful activity with personal significance (psychological aspect), without having understood the forms and rules of the thought process (logical aspect), etc.

Analyzing the content of creative thinking, we came to the conclusion that it can be considered both from the point of view of the process and activity. This made it possible to highlight the specifics of creative thinking and the mechanisms of its functioning. The analysis also showed that it is necessary to distinguish between the concepts of "the content of thinking" and "the content of thinking activity" (as well as consciousness).

The basis for the development of creative thinking of students is the presence in the human psyche of a number of properties, the most important of which can be considered: image manipulation, features of the emotional-volitional sphere, a high level of development of cognitive skills, creative imagination, etc. Traditional education, which is based on the reliance on memory, weakly contributes to the development of creative thinking and intellectual activity of students, does not pose problems, does not develop a tendency to put them forward and solve them by the students themselves. In this regard, the study attempted to develop models for the development of students' creative thinking (psychological, pedagogical, didactic and technological) based on the problem-activity theory of teaching.

The experimental training of students was based on three levels of creative thinking - activation-motivational, semantic-informational and regulatory. These levels were covered by "blocks" of means and methods of pedagogical influence. In order to develop students' creative thinking, different didactic strategies were used - exhibiting, reproductive-adaptive, productive and complexing.

As the study showed, the logic of constructing and deploying the content of educational information is essential in the development of students' creative thinking. It is advisable to consider all issues of selection and construction of content, as well as the organization of its assimilation at four levels — theoretical presentation, curriculum, academic discipline and didactic cycle. Each

level of the construction of the educational content in the undertaken study corresponded to the training strategy.

Pedagogical observations and the results of the ascertaining experiment have shown that the effectiveness of the formation and development of creative thinking of students requires a deep methodological restructuring of the entire educational work, the main direction of which is the widespread use of methods and forms of an active nature. At the same time, traditional forms and methods of teaching should be preserved, but with their reorientation to an auxiliary function.

The management bodies of the education system annually focus on achieving high labor productivity in educational institutions. For this purpose, a curriculum will be developed, new textbooks will be created. This will help both students and teachers to grow professionally. The practical actions performed will lead to students' achievements, the need to strive for progress in a particular tool, the development of their learning skills and cognition will help to some extent.

However, by the end of the academic year, higher educational institutions have achieved positive results in increasing the level of assimilation of scientific knowledge by students. The interest of many students in studying has been lost. As a result, teachers do not even think about the organization of professional activities with such enthusiasm as before.

The situation remains unchanged, although the governing bodies of the education system have taken new measures to change the activities of students who have no desire or desire to receive education, teachers who do not want to train such teachers. What is the reason for this? Perhaps the preliminary thinking and planning of lessons will not be of interest to students, but the fact that the content of education is placed in a certain template will not give any incentive to students, not an incentive.

The rejection of preliminary planning of educational activities, the formation and development of students' critical, creative thinking, their creative thinking, forcing them to think about new ideas, have become the main factors in changing attitudes to education, encouraging them to achieve achievements. The missing factor in learning is creativity.

Creativity of a person is manifested in his thinking, communication, feelings, certain types of activities. Creativity characterizes an individual as a whole or as his specific characteristics. This is also reflected as an important factor of creativity. It remains to say that creativity determines the sharpness of the mind,"it ensures the active involvement of students' attention in the educational process." Before forming students' creative thinking skills, it is necessary to create a comfortable atmosphere in the classroom. Students studying in a creative environment have a gradual increase in interest in performing creative tasks, as well as a tendency to creative thinking as a result of observing a teacher with creative thinking. The educational and cognitive environment of the nature of creativity leads to the development of critical and creative thinking skills, which are of great importance in the educational process of students.

Students with creative thinking: - express ideas that do not occur to other students; - choose a certain style of self-expression; - sometimes ask questions that have no subject connection or are unusual; - enjoy tasks whose solution remains open; - prefer to discuss ideas based on concrete evidence; - choose an unconventional an approach to finding a solution to the problem.

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