

CRITICAL THINKING AS A NEW APPROACH IN FORMING THE COMPETENCIES OF STUDENTS

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Abstract

The concept of the formation of critical thinking in the organization of educational and research activities of students is considered as a new approach that makes it possible to form the necessary competencies of university students. The formation of critical thinking of students of a modern university enables future specialists to flexibly adapt to the business world, in a new management system, and only the transition to new effective group learning technologies to achieve educational objectives. In this regard, in the system of higher professional education, it is necessary to create conditions for the formation of critical thinking in the structure of universal and professional competencies.

The development of critical thinking skills by university students is an innovative approach that develops thinking abilities, expands communication skills, writing competencies and increases motivation.

This article describes the data obtained during the analysis of identifying the level of formation of critical thinking of university students; diagnostics and verification of the results of the experiment.

Keywords: formation, competence, students, critical thinking.

1 INTRODUCTION

In recent decades, many works of prominent philosophers of education have been devoted to the consideration of issues related to the formation of general and professional competencies expressed in the form of specific skills in the implementation of practical activities. When declaring the common goals of society, the education system and each person strive for development, innovation, a variety of ways to achieve goals, independent decision-making, collegiality and the application of democratic freedoms at all levels, showing initiative, flexibility, etc. [Sariwati M Shariff]. In real social and professional life, people are poorly motivated to effective interaction in a team, reflection on mistakes and shortcomings, independence in decision-making, creativity and innovation. University graduates are often insufficiently prepared for real professional activity, having weak motivation for effective interaction in a team, reflection on mistakes and shortcomings, etc.

As new approaches that allow to form the necessary competencies of university students, we have chosen the concept of the formation of critical thinking in the organization of educational, teaching and research activities of students. The formation of critical thinking of students of a modern university allows future specialists to adapt flexibly in the modern world, and only the transition to new effective technologies of group learning allows achieving this goal. In this regard, in the system of higher professional education, there is a need to create conditions for the formation of critical thinking in the structure of universal and professional competencies based on the introduction of various group forms of organization of students' education.

2 METHODOLOGY

Critical thinking has its own characteristics, its own conceptual system that distinguishes it from other types of thinking. However, we consider critical thinking only in relation to other types of thinking, in combination and comparison with such concepts as productive, problematic, creative, logical, systemic thinking, intelligence and other concepts of active, purposeful mental and practical human activity. Critical thinking is woven, integrated into each of the other types of thinking, affects their logic, quality, integrity, interconnection: it serves as a link between all types and kinds of thinking, behavior; is one of the elements of the mentality of an individual and society [Plotnikova, N.F].

The criticality of the mind is essential in all parts of the process of problem-based learning, since analysis, comparison, generalization and denial are required everywhere. Without a critical assessment of the task, the problem is impossible to put forward assumptions, hypotheses. Here there is room for doubt, and, consequently, for a critical approach. For example, when putting forward a hypothesis, we do not always know whether it is true and therefore we set the conditions: "the hypothesis is true if ...". Critical thinking is clearly "turned on" at the stage of proving a hypothesis or refuting it (this is the actual process of solving a problem).

Critical thinking arises at the stage of summing up, evaluating the process and result of educational activities, i.e. at the stage of diagnosing the process of completing a task, solving a problem, evaluating the results of activity or behavior, confirming conclusions, searching for the most rational way to solve a problem or a task. Criticism, self-criticism and self-assessment are important already at the very first stage of problem-based learning - the stage of analyzing the problem situation and formulating the problem.

The implementation of critical thinking, and, consequently, its formation is possible to a certain extent at all stages, wherever there is an alternative – when analyzing a problem situation (analysis requires a critical attitude), the speech formulations of the problem may also be different, i.e. there may be a choice. The greatest presence of critical thinking can be when putting forward a hypothesis, since it is associated with proof and refutation, with affirmation and denial. Here creative thinking takes on a critical character.

Problem-based education is designed so that students can fully and consciously focus on improving their thinking abilities and expand the scope of the acquired skills, teaching critical thinking should include a large number of examples from various spheres of life. Critical thinking occurs when students begin to deal with a specific problem. The main question that should be asked about the situation or phenomenon taken as the starting point of the learning process is the question of what kind of problems this phenomenon generates [Dewey, J]. By collecting data, analyzing texts, comparing alternative points of view and using discussion opportunities, students seek and find answers to their questions, that is, critical thinking is "a special kind of mental activity that allows a person to make a sound judgment about the point of view or proposed behavior model" [Kluster, D.].

Students, having critical thinking skills, find their own solution of the problem and support this solution with reasonable, well-founded arguments. They also realize that other solutions to the same problem are possible, and try to prove that the solution they have chosen is more logical and rational than others. Thus, R.H. Ennis defines critical thinking as "making deliberate decisions about how to act and what to believe" [Ennis, R. H.].

The interrelation of all types of thinking in the learning process is carried out when students perform the following actions [Shakirova, D. M.]:

- 1 The study of such concepts as "criticality of mind", "self-criticism of mind", "criticism", "self-criticism" and the application of these concepts in life;
- 2 Critical analysis and assessment of political, economic, social situations in the region, the country, abroad and various fields of activity;
- 3 Discussion of errors in solving tasks and problems, the choice of the most rational solutions by organizing discussions and disputes;
- 4 Writing reviews of one's own and other people's literary works based on a critical analysis of the text in high school;
- 5 Discussion of books, articles, stories, fairy tales, etc.; writing a summary, searching for (one's own and others') mistakes in them, and then discussing them;
- 6 Solving problems on criticism and self-criticism;
- 7 The formation of skills and abilities through training in proving, refuting hypotheses put forward in the past in science, or in the process of problem-based learning in various subjects;
- 8 Special training in the procedure of proof and refutation on the material of history, physics, chemistry, biology and other subjects;
- 9 Organization of discussions on sports, films, television programs, "sensational" articles in the press; conducting a critical analysis of disputes, discussions, the process of experiment, etc.

Do students need to be taught critical thinking or is this skill formed on its own? Critical thinking, of course, is formed by the logic of life, depends on natural abilities and inclinations, the social environment and social education. But still, the main role in the formation of critical thinking belongs to teachers. The traditional disregard of pedagogy and teaching technology by university teachers has led to the fact that in the vast majority of cases a teacher of higher education cannot answer the question about the objectives of the course, the topic section, classes, teaching technologies and methods of forming thinking (more than 90% of the surveyed professors, associate professors, assistants, could not give clear answers). Similar data were obtained by the authors of the work [Wexler, M.], who surveyed two hundred teachers of pedagogical and medical universities. Critical thinking does not automatically appear as a by-product of ordinary training in some area. To achieve the expected effect, it is required to make systematic efforts to improve thinking. Each new fact is subjected to critical reflection, and the process of cognition acquires individuality and becomes productive. The desire of people to be critical and self-critical is great, but the lack of knowledge and skills to apply this knowledge in practice can lead to negative criticism, i.e. incorrect criticism. Criticism can take the form of an ordinary quarrel to find out "who is right", in the form of a scientific discussion, as a result of which a common opinion is developed or opponents disagree with each other. Criticism differs from negative criticism by a logical expression of thought.

3 RESULTS

The formation of critical thinking is a process of training and education, as a result of which such natural qualities of a person as curiosity, receptivity, self-confidence, independence, sociability, freedom of expression of thought (relaxedness), courage in expressing ideas are actualized and developed.

Based on the study of the stages and methods of formation of critical thinking of university students in the conditions of the command form of the organization of training, a model for the formation of critical thinking of students is presented (Fig. 1).

This model is proposed as a general guide for teachers, the purpose of which is to prepare and conduct training sessions for university students [Plotnikova, N].

4 CONCLUSIONS

The ability to form creative and critical thinking and teaching these types of thinking of students determines the level of professional competence of the teacher. The productivity of students' activities, and, consequently, the effectiveness of the learning process itself, depends on how the teacher will be able to teach students to think critically, provide perception, memorization, understanding, comprehension and other thought processes. Thus, critical thinking is a necessary component of the teacher's professional competence, which also guides students in the direction of critical thinking. Since this thinking is social and is most fully manifested in public speaking, in a discussion, a dispute, then the solution of group problems, when the teacher interacts with students and students among themselves, is preferable than individual classes. Students are equal participants in what is happening and perceive learning as an exchange of experience between them and the teacher. The relations that develop between the teacher and the students "free the teacher from the role of a know-it-all, but make them take the no less difficult role of the organizer of the cognition process" [Petrova, V. N.].

During the diagnostics and verification of the results of the experiment; analysis and identification of the level of formation of critical thinking of university students, future specialists, allowed us to conclude that the formation of critical thinking of students manifests itself in cognition and making assumptions, hypotheses and the search for the most rational ways to solve problems, tasks, identify errors and shortcomings in the course of learning and public life in order to overcome them, and also contributes to the creation of an atmosphere of interaction, teaching the correct perception of criticism, and the ability to respond to it deliberately, an active life position.

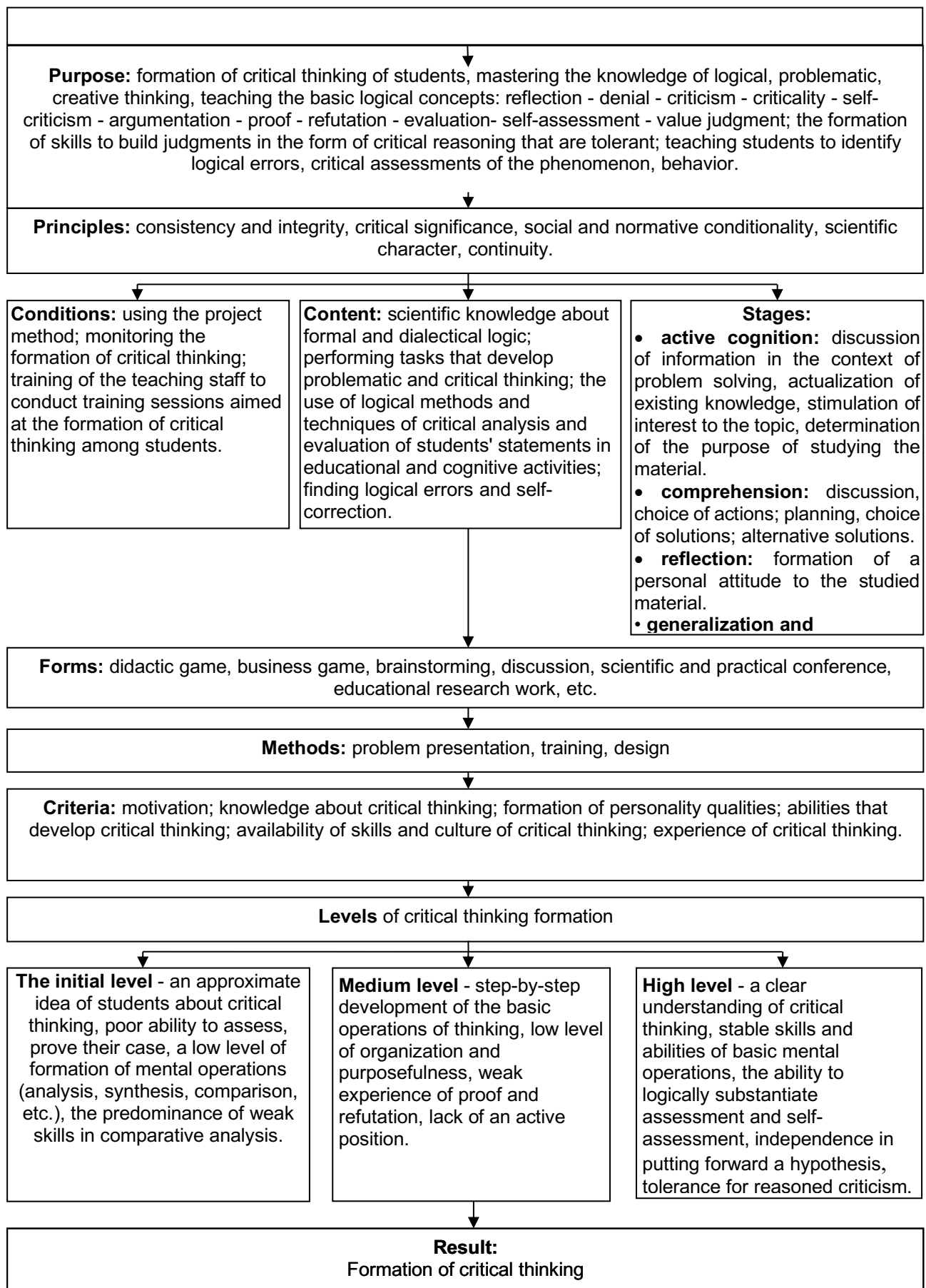


Figure 1. Model for the formation of critical thinking of students.

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