CONTENT AND METHODOLOGY OF EXPERIMENTAL WORK ON THE DEVELOPMENT OF CREATIVE THINKING OF FUTURE PRIMARY EDUCATION TEACHERS BASED ON INNOVATIVE TECHNOLOGICAL TASKS

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ABSTRACT*. This article highlights the system of developing creative thinking skills of future primary school teachers through innovative technological tasks. The stages of experimental work (diagnostic, formative, control) organized in pedagogical higher education institutions, the types of creative tasks used in the lessons, and the criteria for evaluating students' activities are methodologically justified. The results of the research demonstrate the effectiveness of innovative tasks in enhancing students' professionalcompetence.*

Keywords: *creative thinking, innovative tasks, future teacher, primary education, experimental work, formative stage, pedagogical skill.*

The modern primary education system requires the teacher not only to transfer ready-made knowledge, but also to have a creative and non-standard approach to the teaching process. Formation of creative thinking of future teachers is one of the most important tasks of higher pedagogical education. This article describes the content and methodology of experimental work aimed at increasing the creative potential of students with the help of innovative technological tasks.

Methodological foundations of experimental work

Experiments organized within the framework of research, in contrast to traditional educational methods, teach students to make independent decisions and find creative solutions to pedagogical problems. The experiment process is carried out in three main stages:

1. Determining stage

• Purpose: To determine the initial state of students' level of creative thinking.

• Methodology: Experimental and control groups are selected. E.Torrens's creativity test and pedagogical situation questionnaires will be conducted. Students are divided into lower, middle and higher levels according to their intellectual and creative indicators.

2. Formative stage

• Purpose: To introduce a set of innovative technological tasks into the educational process.

• Methodology: Practical and seminar classes are held in the experimental group based on specially developed creative modules. In the control group, lessons are continued based on the current traditional program.

3. Control (Control) stage

• Purpose: To check the effectiveness of experimental lessons and to analyze mathematically.

• Methodology: The final diagnosis is carried out. The obtained results are processed using mathematical-statistical methods (for example, Student's t-test) and the reliability of the method is proven.

System and content of innovative technological assignments

Tasks used in the formative stage are aimed at ensuring active independent thinking of students and are divided into the following types:

Quasi-professional (Modeled) tasks: Students are presented with unexpected problems in the real lesson process. Example: “An elementary school student refuses to accept the topic in math class. Suggest 3 interactive game ways to get out of this situation.”

2. Pedagogical Case-studies (Case-studies): Pedagogical conflicts and methodological errors occurring in school life are analyzed and non-standard solutions are sought.

3. TRIZ (Theory of Inventive Problem Solving) assignments: Eliminating contradictions in elementary school subjects. Example: “The textbook material needs to be studied in groups, but there are not enough desks in the room. How do you solve the problem?”

4. Design Thinking projects: Students create a digital model of the future primary classroom or a completely new type of didactic game model.

Criteria for evaluating creativity

During the experimental work, the level of creative thinking of future teachers was evaluated based on the following four criteria (in accordance with the theory of J. Gilford and E. Torrens):

• Fluency (Speed of Thought): The ability to give a large amount of pedagogical ideas in a short time in relation to the problem.

• Flexibility: Ability to quickly switch from one method of problem solving to another (eg, visual to digital).

• Originality: Ability to create unique and non-standard lesson plans that stand out from others.

• Completion: Bringing a creative idea to the level of a practical methodical instruction or a finished lesson project.

The results of the experimental work show that the systematic use of innovative technological tasks in higher education significantly increases the creative thinking skills of future elementary school teachers. Students develop the motivation to analyze pedagogical situations, design and organize lessons creatively. This, in turn, serves to ensure the professional competence of future specialists.

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