PEDAGOGICAL EXPERIMENT-METHODOLOGY FOR ORGANIZING AND CONDUCTING TEST WORK

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Annotation: this thesis contains feedback on the methodology and statistical characteristics of the organization and conduct of experimental and test work to determine the scientific feasibility of pedagogical research.

Keywords: pedagogical research, scientific-theory, experimental-testing, statistics, technological education.

The purpose of pedagogical experimental and test work was to prove how much of our hypothesis, which was put forward in our scientific research, is correct. This process can be conditionally divided into the following stages::

1. The preparatory stage was held as part of the thematic quarter theme of the academic year, during which the following works were carried out:

- ❖ determining the main direction of research;
- ❖ study the theoretical and practical state of the problem;
- ❖ analysis and study of educational and regulatory documents;
- ❖ the choice of the institution, the study of the existence of material and technical, scientific and methodological basis and pedagogical conditions for conducting experimental and test work in it;
- ❖ preparation of materials necessary for conducting experimental test work;

2. The second stage was carried out in the 2nd half of the academic year:

- ❖ start experimental test work according to plan;
- ❖ Analyzing database lessons;
- ❖ quantitative and qualitative analysis of the results obtained from experimental test work;
- ❖ t scheme in the course of the lesson, determination of the level of student assimilation through tests using cluster methods;
- ❖ collecting scientific evidence, summarizing them;
- ❖ discussion of the results of experimental test work;
- ❖ to draw scientific conclusions, scientifically substantiate the results of research, determine their suitability for hypotheses and tasks;
- ❖ in the course of our research, measures were taken to prove that it is reliable and put our methodological work into practice, giving statistical

processing to all the materials collected.[1]

In control classes, the educational process was carried out according to the current educational plan and program, teaching methodology, while in experimental test groups mixed education was carried out using the cluster methodigan.

The results of the control and experimental test groups were systematically analyzed and compared to each other, conclusions were drawn. When necessary, the feedback expressed by teachers directly involved in this process was discussed in detail and changes were made to the teaching methodology.

In assessing the quality indicators of knowledge formed in students, such as conscious mastery, systematicity of knowledge within the framework of State educational standards and the ability to use them creatively were used as criteria. We used input and output control-tests for this.

According to our program for the implementation of the study, it was envisaged to draw up a statistical description of the formation of knowledge, skills and qualifications in the subject of the database in students. This makes it possible to assess whether the use of innovative technology in teaching technology science is effective.

The stage of determining the level of knowledge of students in experimental and control groups and comparative analysis of the pedagogical experimental and test work forming on the topic of the study was carried out during the academic year. A total of 50 students attended.

Based on the processing of the results of experimental test work by the method of Mathematical Statistics, conclusions were drawn about the effectiveness of students in mastering experimental materials. To determine the difference in the level of formation of knowledge and work-moving methods of students in these groups, we have compiled a statistical description of the results of the level of assimilation of educational material. Thus, it makes it possible to apply such grades as unsatisfactory, satisfactory, good and excellent to the knowledge and skills of students in these groups. To do this, we took two independent groups, as we have already shown above (the number of members of each group is also not related) and chose a four-criterion form, such as unsatisfactory, satisfying, good and excellent.

In the experimental work carried out, the assessment of the improvement of the effectiveness of the teaching process was studied by using the methods of a

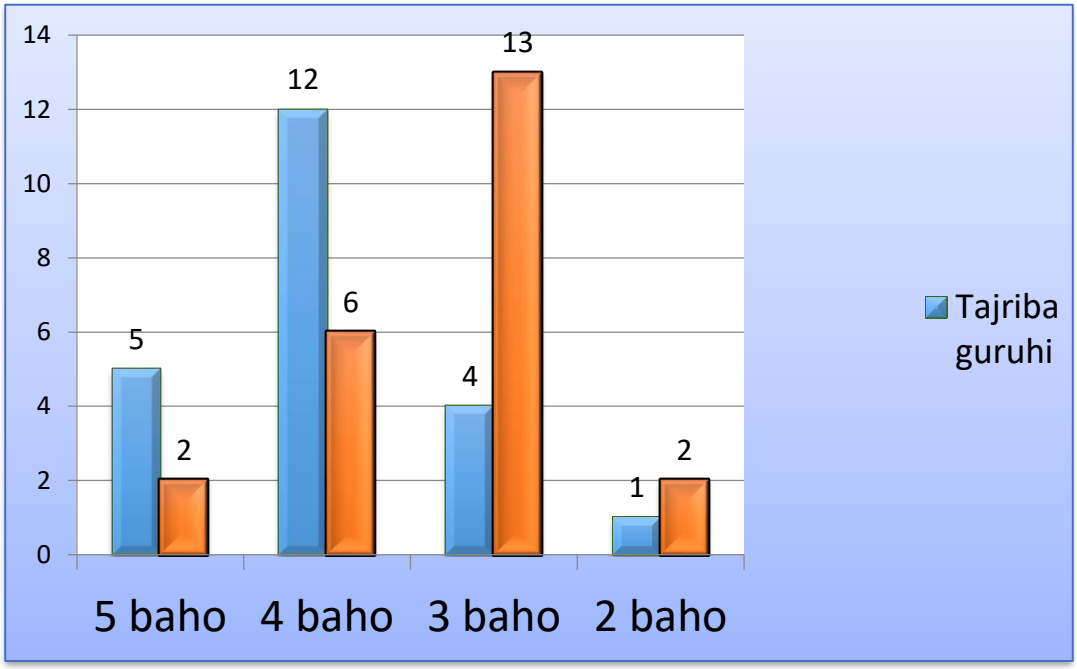
[1] Kharatova, S. K., & Ismailov, T. X. O. G. L. (2022). Use of innovative technologies in the educational process. *Science and Education*, *3*(3), 713-718.

number of scientists on the re-development of Mathematical Statistics, and the experiment was applied to the results of the test.

The success of scientific research work is determined by the level of efficiency of theoretical ideas in practical activities. Therefore, in this research work, it is one of the important tasks to develop a methodology for organizing and conducting experimental work, identify effective ways, methods and Means, determine the stages of experimental testing and ensure the decision-making of consistency and continuity between them.

In pedagogical studies, as a hypothesis, the results obtained on the basis of the traditional methodology carried out in control classes are compared with the results obtained on the basis of innovative technology carried out in experimental groups, showing that the results obtained in experimental groups are fruitful. Therefore, we used mathematical-statistical methods in order to verify the correctness of the chosen hypothesis in experimental-test work.

The goal of the experiment from the stage of conducting test work is to achieve educational effectiveness by conducting a lesson based on innovative educational technology. The appropriation index in these classes was analyzed according to the results. The assessment was conducted on the basis of a five-point system.



Price dynamics

Analysis of the results of the experiment-test made it possible to come to the following conclusions.

The radical transition from invisibility to invisibility in the educational process is a set of relationships involving the reader with various hidden essences,

agenda and different meanings, which include a complex context with mediating and learning context possibilities and limitations. Focusing on aspects such as meanings, attitudes, movement, place, participation, communities, identities, previous experiences, learning opportunity helps to evaluate pedagogy as complex, subtle, and primarily dynamic. In my opinion, the study, broadness and deep essence of pedagogy has changed in accordance with this growing concept. Obviously, the research methods adopted to study any concept must correspond to the definitions and conceptualization of the substantive field under consideration.

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