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# IMPORTANCE OF USING ADVANCED PEDAGOGICAL TECHNOLOGIES IN THE PROCESS OF TEACHING SPECIAL SUBJECTS IN THE TECHNICAL SCIENCES

Abdura khimovich Umarov\*

\*Lecturer at TSPU named after Nizami Khusan, UZBEKISTAN

## ABSTRACT

The article discusses the importance of a technological approach in teaching special subjects in the field of technical sciences based on advanced pedagogical technologies. Also analyzed the difference between pedagogical technologies and advanced pedagogical technologies. The use of test items in the classroom provides a good opportunity for the teacher to assess students quickly and fairly. Without looking at some of the shortcomings, today in pedagogy there is no better method than testing for a really quick assessment of students' knowledge.

**KEYWORDS:** *Pedagogical Technologies, Advanced Pedagogical Technologies, Educational Process, Teaching Special Subjects, Personnel Training.* 

## INTRODUCTION

The educational system of the Republic of Uzbekistan is gradually being reformed on a large scale based on the national training program. This, in turn, requires teachers, in order to increase the efficiency of the educational process, by analyzing foreign experience, to select and use advanced pedagogical technologies when teaching special subjects.

Pedagogical technology – is an educational process or project of "building" a lesson, the art of teaching, which should determine the general didactic goals of the subject and focus on its implementation, and it is recommended to divide it into two directions. - new and advanced pedagogical technologies.

Requirements for new pedagogical technologies:

- 1. Determination of the direction of interests of students;
- 2. Separation of the most basic teaching materials;

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- 3. Clearly define the objectives of the training materials and organize them;
- 4. Determination of the scientific and technical orientation of production processes;
- **5.** Motivation for learning;
- 6. Providing interdisciplinary communication of the educational process;
- 7. Programmatic teaching of educational material;
- 8. Control of students' knowledge using of a multilevel system.

Advanced pedagogical technology – is the effective use of teaching methods and forms to increase the activity of students in the process of teaching the basics of educational goals. This is a reasonable and effective use of the achievements of didactics today, the best practices of proactive, creative teachers, namely:

- 1. Realization of the educational goal through conversation, communication, cooperation;
- **2.** Reproductive thinking;
- **3.** Productive thinking;
- **4.** Research creative thinking, scientific cyclical scheme of research (object model hypothesis experiment);
- **5.** Non-standard activities: seminars, discussions, independent work on a textbook, organizing business games.

In both cases, a clear definition of learning goals, the revitalization of students' activities, a creative approach to the choice of methods and forms, is typical for each lesson. The lesson does not stay "in shape", but its methods change throughout the lesson depending on the purpose, content and size of the lesson.

As a result, it is necessary to turn the teaching of special subjects in the field of technical sciences into a technological process in which the results were guaranteed, and thus the teacher was able to achieve high efficiency through the design of the educational process and the mastery of teaching, characterized by three different approaches.

- **1.** Demonstration explanation of special subjects, that is, the translation of educational material to the student.
- 2. Construction of the educational process of teaching using pedagogical technologies, that is, a systematic approach to teaching materials. In this case, on the basis of the relationship "teacher => student => teacher" to assess whether he has fully mastered knowledge and skills.
- **3.** Creative research thinking, that is, the creation of educational tasks that motivates students to research, problem solving. This approach includes interdisciplinary communication, integration of hypotheses and their testing in practice, collection and comparison of results, modeling.

On the basis of advanced pedagogical technology, the educational process is recommended to be structured as follows: Learning content and general didactic goal =>lessons goal => organization



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of the educational process based on advanced pedagogical technologies => assessment. The assessment determines the effectiveness of the training and the degree to which the set learning objectives are achieved.

The structure of pedagogical technology is as follows:

- a) Development of the goals and objectives of the subject;
- b) Creating tasks based on the above requirements in accordance with the learning objectives;
- c) Ways to achieve learning goals;

g) Assessment of student progress.

Considering that the educational process is assessed through current control, then in the selected technologies of the teacher, it is possible to track certain degrees of the lesson, in which the goals of learning and the tasks developed on its basis are tracked. In developing the goals and objectives of the subject, you can specify the following:

- Concepts formulated by the student;
- Knowledge that students need to get;
- Ability to apply knowledge in specific situations.

It is clear that when setting a learning goal, what needs to be understood, what needs to be learned and what can be applied to specific situations? When setting a learning goal, the development of students' intellectual, emotional and personal abilities and other characteristics are taken into account.

In pedagogical technology, the goal of learning can be likened to a tree, i.e. If the tree exists, its core is the learning goal; the branches are the branches of science, and the leaves are the special goals of each of them. The realization of the learning goal refers to the teacher's activities (teach, teach, explain, narrate, demonstrate experience, etc.).

The result of the training is the implementation of the educational task: what has the student mastered or could not master what he did not know before, in other words, what did he need to know? It is a determining factor in qualities such as how much he has mastered and how much he has learned.

Teaching by systematizing knowledge in the learning process is an important method of the new pedagogical technology, which is a necessary condition for the depth and strength of knowledge. The use of systematization not only organizes the previously formed reserve knowledge about the educational material that the student should know, but also serves as a source of new knowledge.

The advantage of advanced pedagogical technologies is that they teach students to learn on their own, foster passion, a desire for success. In the process of teaching special subjects in the field of technical sciences, as in others, control and evaluation works play an important role in teaching, since they help determine the levels of achievement of the set goal and objectives. Depending on the complexity of the studied part of science in advanced pedagogical technologies, it is advisable to use such types of control as written work, oral interview, control and practical tasks and others.



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A multilevel system for monitoring the student's knowledge of educational goals and objectives, as well as the criteria for assessing it, are an important component of pedagogical technology. Since the multi-level system itself is a feature of pedagogical technology, it allows all students of the entire group to conduct a comprehensive assessment in a short time based on carefully studied teaching materials.

In addition to the above, do not forget about the tests. Since the test items have a special role, given the purpose and characteristics of control. The use of test items in the classroom provides a good opportunity for the teacher to assess students quickly and fairly. Without looking at some of the shortcomings, today in pedagogy there is no better method than testing for a really quick assessment of students' knowledge. The main requirement for test tasks is that tasks that meet the goals of the studied educational material should be reflected in the test tasks. This takes into account the goals, objectives of training, the volume and content of the training material.

In conclusion, we can say that in the process of teaching special disciplines in technical sciences, it can be highly effective if the educational process is organized on the basis of the correct pedagogical technologies and the methods of assessment are correctly selected.

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