

## **The Influence if Pedagogical Taxonomy and Innovative Technologies on the Educational Process**

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**Abstract:** Currently, the higher education system in Uzbekistan is undergoing an unprecedented period of transformation. Undoubtedly, the main factor driving these changes is the influence of pedagogical taxonomy and innovative technologies on the educational process. Traditional forms of teaching have become outdated, and it is essential for teachers and scholars to implement pedagogical taxonomies and innovative technologies to capture students' attention and enhance the effectiveness of learning.

**Keywords:** educational institution, higher education, pedagogical taxonomy, factor, technology, innovative technology.

Today, many higher education institutions are paying special attention to the use of pedagogical taxonomy and educational technologies in the learning process. This is because these approaches are important not only for the higher education system but also for improving the knowledge level of school students.

**Taxonomy** (from the Greek *taxis* — arrangement, order and *nomos* — law) is a theoretical and applied branch of systematics that deals with the classification of organisms. The term was proposed by the Swedish botanist O. Decandolle in 1813. Sometimes taxonomy is considered synonymous with systematics and classification; however, systematics typically studies the diversity of organisms and their relationships, while taxonomy investigates the principles, methods, and patterns of classification. Traditional classification methods focus on identifying similarities among organisms, homology of traits, and common ancestry. The main task of taxonomy is to develop a rational doctrine of taxonomic categories and their hierarchy, which allows for the creation of a natural classification of organisms.

**Educational goals** are a crucial and leading component of the educational process. Regardless of complexity and duration, any learning process begins with defining a goal. All other components of the educational process (principles, content, methods, means, forms) are subordinate to the established goals. They are selected and aligned according to these goals.

A **pedagogical goal** is a mental representation of the expected outcome of the joint activity of the teacher and the student. Based on the goals and objectives of the academic discipline, we will limit ourselves to specifying the educational goals at the level of the subject (course) and its sections, as this is where the design of the educational process manifests from a technological

perspective. Here, the teacher works on the subject and its sections, formulates educational goals, and organizes the learning process based on them.

Now, let's focus on traditional methods of formulating educational goals that have gained wide acceptance in pedagogical practice:

**1. Formulating goals through the content of the studied educational material.**

Examples: "Study the order of operations," "Study the circle and circumference," "Study the multiplication of a two-digit number by a one-digit number" (Mathematics, 2nd grade, 4th quarter), or the study of a specific topic, theorems, laws, etc.

2. Examples: "Infinitive form of the verb," "Pronoun," "Learning to write an essay" (Russian Language, 2nd grade, 4th quarter) or the study of another topic. Examples: "I am a person," "Traditions of cooperation," "Respect and politeness" (Education, 2nd grade). What does such a formulation of goals provide? It merely indicates the content to be studied in one or several lessons but does not give a clear direction for organizing the educational process. Moreover, it is impossible to verify whether the goal has been achieved. Such goals cannot be implemented as a practical part of organizing learning. Therefore, proponents of pedagogical technology criticize this formulation of goals as being too vague.

3. It should be emphasized that without clearly formulated educational goals, it is impossible to achieve the desired results. The goal determines the result. Only when the teacher sets a specific ultimate goal does he begin to seek ways to achieve it. In the process of goal-setting, it is necessary to analyze needs and problems, pay attention to important issues, set serious and clear goals, formulate them in such a way that the degree of their achievement can be determined, create motivational goals, inform students about the learning objectives, and ensure that the goals of each lesson align with the objectives of the curriculum.

4. Based on these requirements, the teacher should be able to formulate the goal of a lesson in such a way that they understand what should be achieved by its conclusion and what indicators to use to assess the outcome.

5. However, today there are many shortcomings in goal-setting, including: an excess of goals, a mismatch between their scope and educational resources, a formal approach to formulation, frequent changes to goals during the learning process, and inaccuracies in their formulation.

When defining educational goals, we recommend the following algorithm:

1. Assess existing problems and identify the main ones.
2. Clearly formulate these problems.
3. Determine the stages and sequence of their resolution.
4. Formulate intermediate results at each stage.
5. Evaluate which of these stages can be clearly measured within the educational process, after which the educational goal is formed.

**The tasks of the study on the influence are as follows:**

- Theoretically justify the relevance of improving the effectiveness of education through the use of pedagogical taxonomy as an educational issue.
- Examine the features of applying pedagogical taxonomy in the system of general secondary education.
- Develop scientific and methodological recommendations for enhancing educational effectiveness using pedagogical taxonomy.
- Describe the technologies for applying pedagogical taxonomy in educational practice.

In our subsequent research, we will attempt to address the tasks we have outlined and their application in secondary education (using "Primary Education" as an example).

**List of References:**

1. V. Relyova, "Mathematics," 2nd grade, 4th quarter. Textbook for secondary general education schools with Russian as the language of instruction. Novda. Tashkent - 2023.
2. V.Yu. Uvarova, N.M. Usanova, K.V. Arutyunova, G.F. Buzikova, O.Sh. Evstafyeva, "Russian Language," 2nd grade, 4th quarter. Textbook for secondary general education schools with Russian as the language of instruction. Novda. Tashkent - 2023.
3. Ovcharova R.V. *Practical Psychology in Primary School*. Moscow, 1996.
4. Seleko G.K. *Social and Educational Technologies*. Pedagog.
5. Usanova, Yu.V. Rysyukova, "Education," 2nd grade. Textbook for secondary general education schools with Russian as the language of instruction. Novda. Tashkent - 2023.