



TECHNOLOGICAL APPROACH TO EDUCATION AND PEDAGOGICAL TECHNOLOGIES AS A FACTOR OF EFFICIENCY

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ABSTRACT

Today, the incentive to get an education and its content can be a guarantee of the success of the educational process, to put forward the necessary ideas and proposals for the organization of all stages of education on the basis of a modern technological approach, to teach young people to think comprehensively while giving them deep and reasonable knowledge, during the educational process, students dedicated to the formation of students' ability to learn independently, organization of education based on innovative technologies, activation of students in education, optimization of education based on the principles of modern technological approach. In the article, the organization of all stages of education based on a technological approach, teaching young people to think comprehensively while providing deep and reasonable knowledge, forming the ability of students to acquire independent knowledge in the educational process, organizing education on the basis of innovative technologies, activating pupils and students in education, the principles of the technological approach Based on this, the issues of optimization of education are interpreted.

KEYWORDS

Technology, student, approach, education, process, content, principle, preparation, aspiration, method, effect, precision, quality, process, result, formation.

INTRODUCTION



Today, technological approaches are implemented in the educational process on a global scale. Simultaneously with this process, significant changes are taking place in the theory and practice of the pedagogical process. The composition of approaches in education is changing and the use of modern approaches is emerging day by day. The educational system is being enriched by focusing on the individualization of the educational program, the ability to work with new information. An important part of the educational process is the person-oriented interaction between the student and the teacher. The educational process is extremely complex. The effectiveness of education depends on the activity of the pedagogue and pupil-student, the availability of educational tools, the organizational, scientific, methodical excellence of the educational process, the need for knowledgeable people in society and other factors that have not yet been determined. The society demands high educational efficiency based on its socio-political and economic needs.

All aspects of education should be organized in such a way that it teaches young people to think comprehensively, while giving them deep and sound knowledge. It is a requirement of the present day that the student's need for independent education is formed during the educational process. A number of working methods were used in pedagogical practice and research. The problem-based organization of education, the activation of students in education, cooperative pedagogy, basing on key words, optimization of education, etc., were tested. But even if these pedagogical tools are effective for some teachers, they could not be included in the education system in a mass way. The main essence of pedagogical technology is to make students interested in teaching and to achieve full mastery of knowledge. The main goal of the introduction of pedagogical technology is

the thorough mastery of the knowledge provided in education by the majority of students.

The unique aspect of the new relationship differs from the traditional education, not prohibiting the independence and educational activities of the students, but directing them to the set goal, consciously sending them to the activity, not implementing any activity by command, but by effectively organizing the students to learn the basics of science. It is important to increase their interests, to organize educational activities in cooperation, to give the right to free choice without limiting the needs, interests and capabilities of the individual.

MAIN PART

Education is the main factor in reforming society and turning it into a society more open to the outside world and oriented to new technologies and knowledge [14]. Increasing the effectiveness of modern didactics and educational content in education, scientific development and practical justification of new ideas and technologies is underway. In this case, the connection between various pedagogical systems and teaching technologies, the approbation of new forms of the state education system in practice, and the application of pedagogical systems of the past in the current conditions are important.

The educational process aims to regularly awaken the student's activity and curiosity throughout the training. Pedagogical technology based on the creation of educational factors allows to quickly involve students in educational or educational production activities. Otherwise, weak, insufficiently clear, or unclear tasks will lead to an ineffective completion of the training. Such situations often lead to a negative attitude of the teacher towards the student. As a result, the student-student becomes overly emotional, decreases motivation to study, gets



tired of studying, and has a negative attitude towards the subject and the teacher. The relationship between the teacher and the pupil-student should be organized on the basis of humanitarian criteria and should be aimed at eliminating unpleasant feelings. Enjoying the achievements in the pedagogical relationship, thirsting for educational activities should invite joint creative communication. It is impossible to achieve the expected demand, especially the establishment of conscious discipline, when the student-student is treated with disrespect in the educational process.

By its essence, the concept of "pedagogical technology" serves to express the consistent, systematic, step-by-step implementation of practical actions aimed at achieving a clearly defined educational goal and obtaining the expected result.

Goal orientation, diagnostic examination of the results of the process makes it possible to incorporate all aspects of the educational process into the period of redevelopment. It mainly includes:

- setting an educational goal;
- transition from a general goal to a specific goal;
- to pay attention to the learning indicators of students;
- activity in assignments and discussions during training sessions;
- evaluation of the result.

The standard of complete standardization of learning objectives can be as follows [1]:

- a) high, but not absolute;
- b) absolute.

In the first case, due to the complexity of the goal, it does not allow to turn it into a type of fully observed behavior, the period is not completely reproduced. In the second case, work is carried out with the

reproductive type of education, which is a conveyor process.

At all stages of the educational process, it is possible to observe that the main technological aspect of the entire system is oriented to the final results of the educational process.

In general, pedagogical technology includes the following [5]:

- development of identified educational goals;
- taxonomy of learning objectives;
- turning educational goals into control (test) tasks;
- ways to achieve the goal;
- evaluation of the achieved educational goals.

The main directions of improvement of modern pedagogical technologies from a psychological-pedagogical point of view are represented by the following:

- transition of the pupil-student from memorization to the function of remembering, i.e. transition to the process of mental development that allows to use what has been acquired;
- transition from average student-student orientation to differentiated and individualized programs of education;
- transition from the external motivation of the student to the internal spiritual order.

Conditions of the technological approach to the educational process. The technological approach is one of the important factors of the modern educational process. Thorough mastering of its essence, structural foundations and terms of use will help to organize the teaching process effectively. Choosing appropriate pedagogical technologies according to the nature of educational materials,



processing educational information in accordance with them helps to organize pedagogical activity in a lively, interesting and energetic manner.

The technological approach to the educational process is organized according to the following basic conditions [4]:

- 1) emergence of social (or personal) needs for education, acquisition of certain theoretical and practical knowledge;
- 2) the awakening of the motivation for learning, mastering certain theoretical and practical knowledge;
- 3) determining the content of the student's learning activity;
- 4) the presence of factors for establishing the management of the student's educational activity.

The functional structure of modern pedagogical technology directly serves to fully illuminate the essence of the educational process. The functional structure of educational technology can be reflected as follows.

Today, the motivation to learn and its content can be a guarantee of the success of the educational process. Because, in the recent past, the participation of students in the educational process was limited to the role of subjects who receive theoretical knowledge and demonstrate acquired theoretical knowledge and practical skills, but according to the requirements of educational technology, students appear as the leading subject, the main performer of the educational process. Now the students do not accept the information (knowledge) transmitted by the teacher. Perhaps, by independently familiarizing with the educational resources recommended in accordance with the instruction of the teacher, he acquires theoretical knowledge, develops practical skills and competencies under the supervision of the teacher.

Pupils are required to develop the ability to work independently, advance independent and free opinion based on mastering theoretical knowledge, present arguments, defend their opinion, self-criticism, self-evaluation qualities. The demand of the times requires students to be transformed from passive listeners to active participants in the educational process.

The student's leadership role in the educational process provides an opportunity to solve the following pedagogical tasks:

- to determine the internal need of students to acquire knowledge;
- forming a conscious approach to knowledge acquisition;
- formation of independent activity skills in students;
- ensuring the activity of students;
- creating and improving the skills of students-students to think independently, analyze the essence of theoretical and practical knowledge, draw conclusions about them, generalize and apply them to their practical activities.
- formation of self-control, evaluation qualities.

The goal of the educational process should be clearly defined. Such determination of the educational goal creates an opportunity to draw a conclusion about the level of organization and implementation of the didactic process when it is known and implemented [7].

The diagnostic determination of the target is characterized by the following conditions:

- spiritual and moral qualities and mental potential formed in a person are guaranteed to be so clear and obvious that as a result they can be easily distinguished from the qualities of a person formed in any desired period of time up to the situation;



- there will be a clear method aimed at the true control of the level of formation of the diagnosed spiritual-ethical and intellectual qualities of a person;

- it will be possible to determine the efficiency of the person based on the results of the control conducted to determine the diagnosed qualities;

- there will be indicators of the quality of certain knowledge, skills and qualifications based on measurement criteria.

Therefore, the goal of the educational process is based on the content of the social order and the mutual compatibility of models of the pupil-student personality.

Basic principles of the technological approach in the educational process. It is known that modern pedagogical technologies are based on the principles of educational development and should be directed to the education of the personality of the student. In the center of the theory of pedagogical technology is the leader of the educational process, at the same time, the teacher and students, who are both the subject and the object of this process. Therefore, it is necessary to be able to meet the requirements of the most modern pedagogical technologies from the mutual cooperation between these subjects, mutual communication, and their mutual influence. For this, the teacher, first of all, needs to know the requirements for the organization of the educational process, the principles and ways of organizing and managing education, the methods that serve to develop the student mentally and physically, to cooperate with him, to direct him to study and learn. - it is necessary to be armed with methods that allow for the proper organization of student activity, communication with them, joint elimination of problems and disagreements that arise in the process of organizing pedagogical activities, creation of a

creative, working environment in the audience, accurate and correct assessment of student activity .

While modern pedagogical technologies have general didactic principles, they also have the following specific principles [13]:

1. The principle of unity, integrity. This principle reflects two aspects:

- unit of education and training and personal development;

- modern pedagogic technology has a specific, strict system, the concept of "systematic" here refers to both the teaching process of a certain academic subject and the general educational process.

2. The principle of fundamentality. This principle divides the subjects into different directions (blocks) according to the object of study, their internal nature and characteristics, and expresses the advantages of learning. Academic subjects are categorized as natural, social and humanitarian sciences. Each academic subject has information (information) that can be counted as "core", "core", and this information (information) serves as basic concepts for the person to learn the basics of subjects, to obtain independent knowledge in a specific specialty, and to expand the acquired knowledge.

Such an essential approach also allows the use of interdisciplinary communication in the process of training specialists in a certain direction. The combination of academic subjects in a certain way reduces the stress on the memory of the person, and also increases the power of thinking, ensures the emergence of thinking.

A substantive approach is considered an important factor in justification. It also envisages a synergistic approach of generalizing natural, social and humanities.



3. The principle of understanding culture (compliance with the development of cultural life). This principle has not lost its importance even today. The principle of cultural awareness implies that students are given education based on the level of cultural development of their social society. If in the last century the level of knowledge and skill of the pedagogue was recognized as the leading factor ensuring the effectiveness of education, today it is clear to everyone that success cannot be achieved only with a high level of knowledge, potential and skill of the teacher. At this point, it is important to take into account the possibilities of modern science and technology, in particular, computers, multimedia tools, as well as the social and economic development of society. Now specialists should know well the specific aspects of their field or directions, have theoretical and practical knowledge in this regard, be able to perform specific activities, manage to solve specific tasks within the specified period, and be able to achieve certain achievements.

4. The principle of humanization and humanization of educational content. Although both mentioned concepts have the same root in terms of vocabulary (Greek "humanus" - humanity, "humanitas" - humanity), each of them expresses its own meanings. Humanization refers to the inclusion of social sciences (history, cultural studies, sociology, psychology, philology, etc.) among the subjects studied in educational institutions, and the concept of humanization means a positive approach to the person and his activities. In other words, humanization is the process of organizing activities based on respect for the human factor, his dignity, honor, rights and duties in the process of relations between man and society, while humanization is "all conditions for man and his perfection (development) activity process organized on the basis of the idea "for".

When designing the educational process, every teacher should strictly adhere to this principle, or it is appropriate to pay attention to its harmony with the interests of society when solving problems related to his specialty. Now, the pedagogue does not manage the activities of students in an authoritarian (single administration) manner, but humanizes the educational process based on the principles of educational cooperation, or in other words, ensures that the principle of humanization of education is followed. This situation, in turn, leads to the formation of a highly spiritual person.

5. The principle of teaching and researching, researching and teaching. This principle serves to illuminate the following two aspects:

- 1) every teacher of educational institutions should conduct research involving students in his field of study:
- 2) the teacher develops educational technology, tests it in practice, observes and makes corrections, that is, he researches the educational process.

These two aspects of the teaching process are important, and they create the basis for improving the professional and pedagogical skills of the teacher and for the thorough preparation of students for future professional activities.

6. The principle of continuity of education. This principle assumes that students have professional qualities, that existing qualities will be improved during life. It is impossible to give a person the knowledge that he can acquire for his whole life, because the existing knowledge changes and becomes richer in content every five to ten years. So, this principle means that the teacher pays attention to the organization of independent education in his work, creates conditions for students to learn independently from the education provided by the teacher's leadership.



7. The principle of an active approach is based on the didactic connection between theory and practice. In the theory of didactics, the concept of knowledge is interpreted in the following two different ways:

- a) knowledge that students should master;
- b) knowledge acquired by them, used in the process of practical activity, turned into personal experience.

Knowledge is strengthened only in the process of working; therefore, it is necessary to educate students to be able to apply theoretical knowledge in practice. Knowledge that does not have application in practice will soon be forgotten.

Thus, the main principles of pedagogical technologies, that is, the initial rules, are these. The organization of pedagogical activity based on them creates the basis for the improvement of the teacher's pedagogical skills, the acquisition of mental and moral qualities by students, as well as the formation of personal experiences.

RESULTS AND DISCUSSION

The main way to understand pedagogical technology is to focus on clearly defined goals, to establish regular interaction with the learner. Interaction forms the basis of pedagogical technology and covers the entire educational process. The teacher (pedagogue) sets a goal for the students to understand and master the content of the educational material, acquire certain knowledge and learn to apply it in practice. Only when there are clear means of knowing whether the pedagogical goal has been achieved or not, the teacher (pedagogue) can be sure that his work is effective and that the chosen methods are appropriate or, on the contrary, ineffective.

According to M.V.Clarin [3], the specific methods of setting goals by teachers (pedagogues) are as follows:

1. Setting the goal based on the plan of the educational material.
2. Determination of the goal through the activities of the teacher (pedagogue).
3. Setting educational goals through internal processes and laws of intellectual, emotional, personal development of the student.

Determining the purpose of education through the content of education, the activity of a teacher (pedagogue) or a student does not allow to have a clear impression of the expected results in education.

In general, in order to be able to measure, define, and repeat training tasks in the educational process, it is necessary to know the criteria for achieving each goal, that is, the educational goal should be set in such a way that it is possible to make a clear conclusion about its achievement.

The essence of pedagogical technology is determined by the fact that it guarantees the achievement of specific goals based on constant two-way communication. For this reason, the technology of setting goals becomes the main factor of pedagogical technology [8].

Pedagogical technology assumes the certainty of the result and its unpredictability, understanding the ways to achieve it [6].

A technological approach is understood as a process used in production processes to obtain a finished product (similar to production technology) and a condition that guarantees the expected results in achieving the set goals. According to L.V. Golish [2], if we understand the way of knowing the method, the way of research, or the acquisition of a certain field of practice and theoretical knowledge in an activity as a complex of actions, operations, methods, then pedagogical technology in a certain sense means



achieving the necessary results in educational processes.

The main goal of pedagogical technology is to improve the pedagogical process, which is an important factor in the formation of the personality of the student, to humanize it, to ensure the independence of the student, to achieve the effective use of technical tools in the teaching process [9]. Pedagogical scientist M. Ochilov said that the component of the pedagogical technology method includes the development of the general goals of education (the goals of the teacher and the student), the transfer of educational goals to control (test) tasks, and the methods of achieving the goal [5].

Based on the cooperative pedagogy, which represents the relationship between the teacher and the student, joint education of students is carried out. Cooperative education of students, design of educational processes, design of working with students are the main methods of modern pedagogical technologies.

The new pedagogical relations that have arisen in the educational process require the use of modern pedagogical technologies in this process. Various approaches are used in the science and practice of pedagogy. They are verbal-visual, research, searching, systematic, functional, complex, technological, activity approaches [14].

The introduction of modern pedagogical technologies into the educational process requires positive work from the pedagogue [10]. The teacher should have full information about the availability of external opportunities that help him, that is, theoretical-practical, educational tools and tools [11]. A pedagogue should have the ability to direct information on the educational direction under consideration and advanced teaching methods based on the available information and opportunities.

The need for pedagogical technology in education, technological approach, clear goal orientation, diagnosis of process results, redevelopment of all aspects of educational process design, embodiment of convenience, improvement of modern pedagogical technologies from a psychological and pedagogical point of view, conditions of technological approach to educational process, basic principles of technological approach to educational process the presented ideas form the scientific problems of the article.

CONCLUSION

In order to introduce pedagogical technologies into the educational process, especially in order to summarize and apply the following measures in real life, it is advisable to follow the following measures in order to generalize the work to be carried out in order to create a modern pedagogical technology system of the systematized educational process using the experiences of pedagogical technologies in foreign countries:

1. Between the participants of the educational process - the teacher (pedagogue) and the student - student: development of the curriculum, that is, when the teacher (pedagogue) makes a plan for studying a section and chapter, the activity of the student - student and the teacher (pedagogue) should be expressed in this plan. One of the principles of modern pedagogical technology, the consistently planned distribution of educational work between the teacher (pedagogue) and the pupil-student, requires the teacher (pedagogue) to consistently manage the educational process.
2. Purposeful use of opportunities for internal communication of science and interpersonal communication. Each major and minor learning unit learned builds on those previously learned. It is also important to know the interdisciplinary connections



and the level of preparation of students. Therefore, the reader-student can rely on his/her existing knowledge to learn a new chapter, if the existing knowledge is not enough to learn a new chapter/chapter, he/she can conduct intermediate preparation and only then proceed to the next stage of knowledge learning.

3. Determination of educational units (criteria). Educational units consist of concepts, definitions, rules, laws, phenomena, events that must be studied by the student. The teacher (pedagogue) calculates the criteria that students should learn in the hours allocated for the chapter and department, and determines the threshold value of the student's knowledge assessment. When drawing up the curriculum, the teacher (pedagogue) and the pupils-students determine the educational units that should be known by sections, chapters and give them tasks before studying the section as an independent task.

4. Diagnostic analysis. Diagnosing is carried out in order to identify gaps in students' knowledge, fill them in and advance them to the next level of mastery. Diagnosis is considered one of the main elements of educational technology, it ensures the guaranteed result of the educational process by determining the hour of deficiencies in basic learning, determining the level of knowledge of each student, and making adjustments to the progress of the plan.

5. Correction. If the result of the diagnostic analysis of the level of students' mastery of a section or chapter gives an indicator of less than 50%, the teacher (pedagogue) must make corrections to the progress of the educational process.

6. Replenishment (elimination of defects). The purpose of re-correction (correction) is to eliminate deficiencies in acquired knowledge. Elimination of defects is carried out on the basis of filling.

7. Getting the expected result. This element is the central idea of modern pedagogical technologies. Pedagogical technology requires that the result of the educational process be guaranteed, and it is the task of the teachers (pedagogues) to plan the implementation of the intended goal of the process and its effectiveness.

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