



APPLICATION OF INFORMATION TECHNOLOGY IN TEACHING TECHNOLOGY AND IMPROVEMENT OF STUDENTS' INDEPENDENT THINKING

G.Joldasova

Trainee-teacher of NSPI, technological education department

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ABSTRACT

In our republic, along with developed countries, the adoption and practical application of advanced educational technologies, which are highly effective in the world education system, are being implemented at a rapid pace. As a vivid example of this, it can be shown that "Principles and Rules of Pedagogical Technology" was developed by a group of pedagogical scientists at the initiative of the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan and recommended for practical use [1.3].

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Today, the era of information technology has entered the educational process. The issue of improving the content, method and organization of education is an urgent issue. Therefore, the educational process requires the creation of new technologies in pedagogy. In the process of research, we used the term modern, in some cases, new pedagogical technology. In fact, in our imagination, we considered both terms to be synonymous. The content of the new pedagogical technology refers to the processes related to technological developments, specific classifiers that control the educational goals, the Internet system and electronic textbooks, test assignments, and full mastery technologies.

For this, we use advanced pedagogical technologies, that is, we try to develop students' independent learning activities with the help of advanced pedagogical technologies.

A set of activities at the level of modern demand, which renews the professional activity of the teacher and guarantees the final result in education, through the driving force of the advanced educational process or a predetermined specific goal.

Advanced pedagogical technology is a process of developing and designing rational

ways of the educational system, in which the teacher is the main responsible person. Because its main task is to deliver information to students in a fast, clear and understandable way. Despite the fact that students' reception of news and their inclinations and character are different, the teacher should teach students to think independently, observe, and draw conclusions. In this, the student is the main driving force, reading, reading, drawing, understanding projections, formulas, knowing how to use tools, being able to use tools correctly, helping each other in solving the problems set before them in a friendly manner are their main tasks[2.5-8].

The changes and updates taking place in the higher education system, in addition to providing students with new knowledge, skills and qualifications, also envisage the change of our youth towards themselves and other people, society, the state, nature, and inculcate patriotic ideas in their minds and hearts. Therefore, the activity of our educational institutions should be focused on the formation of our students as independent thinkers and morally perfect individuals with their own worldview in a democratic society.

A teacher-pedagogue should have the following qualities in order to fulfill the complex, responsible and urgent tasks set before him and to form new views on the educational process:

- ability to deeply understand the essence of modern, scientific and cultural development;
- to understand the system of knowledge about the world and man from a deep and broad perspective;
- application of educational information technologies and teaching tools in education;
- have an understanding of the Internet and be able to use it to improve their knowledge;
- know ways to analyze the effectiveness of pedagogical work and be able to self-assess;
- develop ideas on family education and upbringing problems;
- to understand the essence of the national idea and national ideology and economic reforms;
- to understand the true essence of new pedagogical technologies;
- to know ways to effectively use pedagogical technologies in the course of the lesson;
- create conditions for students to think and exchange ideas with each other and create a friendly atmosphere;
- to have mastered the use of laboratory equipment and training to increase the effectiveness of the lesson;
- know how to use technical tools and educational tools;

such as providing education and training through one's own research, creativity, initiative, and hard work in order to help children become well-rounded people[3. 68-93].

In order to fulfill the above set of requirements for teachers, each teacher should develop a new way of thinking, independently study pedagogical technologies, and learn deeply about its goals and tasks.

Currently available electronic textbooks and video informational technical tools, handouts, and test sets can be used to teach technical subjects to students studying in the field of technological education. In addition, the use of computerized, information and other modern technological means of teaching (various animations, virtual laboratories, etc.) is a modern

requirement.

It is known that teachers (pedagogues) spend a lot of time on laboratory and practical work in the traditional teaching method. This is a very important component of professional training. It helps not only to strengthen the student's theoretical knowledge and increase the effectiveness of learning the learning material, but also to create practical skills in a specific field. However, such training does not give full results. This is because the laboratory equipment is insufficient and many laboratories and classrooms are not equipped with modern devices and equipment, and most of the existing ones are outdated and cannot fully meet today's requirements. At the present time, when technologies are developing rapidly, it is necessary to improve laboratories and stands for practical training every academic year. For this, it is necessary to make additional expenses. Another important factor is that, due to the slowness of work and processes in some laboratory studies, learners find it difficult to perform repeated analysis or tests in the allotted time.

Taking into account the above, there is a need to introduce a new, effective, universal pedagogical method that can help solve important tasks for the training of new system specialists. For this purpose, it is necessary to make the activities in laboratory stands and educational workshops not only interesting, but also convenient and easy for all students. It is necessary that the training should be attractive, take into account all mental and didactic factors, demonstrate the processes in a lively way, conduct training and master the taught subject, in general, increase the effectiveness of the entire training, provide an opportunity to self-evaluate the acquired knowledge. It is from this point of view that the implementation of modern IT helps to optimally solve the above-mentioned tasks and eliminate a number of shortcomings of the traditional teaching method. To date, the virtual laboratory is successfully used in higher and secondary special educational institutions.

Virtual laboratories allow each student to "order" his input parameters to the technique, control his knowledge. The loss of time associated with carrying out laboratory work, understanding it in the necessary order, etc., is reduced due to the efficiency of the computer. In this, it is especially important to save huge financial reserves related to the purchase of modern equipment and apparatus, their distribution in all educational institutions. A simple compact disc with modern information technology can accommodate tens, and sometimes hundreds, of laboratory works. Now, it is not difficult to calculate how much one such virtual laboratory stand will cost. In addition, with them, educational institutions can be grossly provided. Even better if they have a network of computers connected to the internet.

- thus, the introduction of modern IT into the educational process leads to:
 - to provide more individualized support, taking into account the educational process, the specific level of preparation of students, their abilities, the pattern of mastering new material, their interests and inclinations;
 - to strengthen the cognitive activities of students, to support and develop their self-improvement, interest and aspirations in education and profession;
 - strengthening interdisciplinary relations in the educational process, comprehensive study of the phenomena of existence;
 - constant and dynamic updating of the educational process due to the improvement of its flexibility, efficiency, organizational forms and methods;

- use of problem and computer teaching tools and virtual stands in all educational institutions;

- improvement of the technological base of the educational process by introducing modern technical means[4.67-69].

Development of electronic textbooks is a long-term and expensive process. Therefore, it is desirable to determine in advance all the main stages of creating computer electronic textbooks and possible solutions at each stage of their development. The process of creating an electronic textbook requires authors to know the content of the textbook being created and knowledge in the field of information technology. In practice, this envisages the cooperation of specialists of two directions - "speaker on science" and "programmer - specialist". The following basic steps are recommended in performing this work:

- preparation of the first version of the text of the textbook (at least it should be a lecture text of the subject);

- preliminary preparation of the scenario of interconnected parts of the electronic textbook, as well as the scenario of audio and video plots, various illustrations that are statically located in the text or appear dynamically during the reading of the electronic textbook;

- implementation of electronic textbook components on a computer.

In short, the teaching of technology science consists of lectures, experiments, practical exercises and independent works outside the classroom. The main theoretical concepts are given in the lecture classes, general laws are explained in interdisciplinarity, and calculation methods necessary for practical and experimental exercises are given.

Summary

The article teaches students to formulate their own thinking. The main purpose of these recommendations is to develop skills and abilities in this area. Teachers are told about new thinking, independent learning of pedagogical technologies, the necessity of its goals and tasks.

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