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Article

Improvement of the innovative and methodological system of teaching special disciplines in vocational education

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Abstract: This article analyzes the importance and effectiveness of introducing modern educational technologies in teaching special subjects in the vocational education system. It is noted that the use of information and communication technologies in the educational process makes it possible to constantly update the content of education, develop the abilities of students, and organize pedagogical processes in an interactive and individualized form. It is also shown that personality-oriented educational technologies put the student's personality at the center and help develop their independent thinking and problem-solving skills.

Keywords: Professional Education, Educational Technologies, Personalized Education, Modern Pedagogical Technologies, Distance Learning, Interactive Learning, Individual Approach, Virtual Laboratory, Educational Process.

In the context of the introduction of modern educational technologies into the vocational education system, a large-scale flow of information creates the need for constant updating and improvement of the content of education. Consistent implementation of state policy in the field of education, development of the educational process based on unified state educational requirements in personnel training, provision of educational literature, and provision of continuous methodological services to teachers are considered urgent tasks.

Thoroughness of knowledge serves to enhance a person's worldview, intellectual potential, and professional maturity. The use of modern pedagogical technologies in teaching special subjects in the educational process requires, first of all, the organization of pedagogical relations based on the principles of humanism. If this factor is not ensured, the applied technologies will not give the expected effect.

Today, the teacher should not be limited to the use of ready-made electronic resources, but also act as a specialist who can effectively use modern teaching technologies in the development and implementation of educational resources, possessing sufficient professional competence in conveying the content of the subject and its components to students.

The continuous improvement of the educational process depends on the application of new and improving pedagogical technologies used in the teaching process in various directions and purposes.

Today, the role of innovative technologies, technical means, including modern computers, in the correct and effective organization of the educational process is invaluable. The use of multimedia, animation, graphics, filmstrips, and video clips related to the lesson topic contributes to making the lesson process more interesting, and

for this, the teacher should work on themselves and ask themselves each lesson what innovations they bring to today's lesson process and how they can organize the lesson interestingly, that is, they should avoid traditional education and strive to provide non-traditional education.

When organizing the lesson process using modern information technologies, the teacher first:

- lesson objective;
- ways to achieve the goal;
- methods of presenting educational materials; - teaching methods;
- types of learning tasks;
- questions for discussion;
- ways of organizing discussions and debates;
- must identify factors such as methods of interaction and communication.

Personality-oriented educational technology involves placing the student's personality at the center of the educational process and creating the necessary pedagogical conditions for the full manifestation of their natural abilities and potential. Within this technology, the student is viewed not only as a subject of the educational process but also as a leading subject with broad opportunities. In this case, the student's personality is recognized not as a means of achieving secondary goals, but as a priority and main goal of the education system.

Pedagogical scientists have developed pedagogical technologies based on a personality-oriented approach to the educational process, which include:

- personality-oriented education;
- collaborative learning;
- pedagogical technology of adaptive communication;
- game technology;
- advanced educational technology;
- problem-based learning technology;
- differentiated education;
- modular learning technology;
- individual learning technology and others.

Within each of these areas, the educational process is organized taking into account the interests, abilities, individual capabilities, and existing conditions of the student's personality. In particular, in personality-oriented education, special attention is paid to the formation of students' skills in analyzing problem situations based on independent thinking and finding ways out of them. Also, an important pedagogical principle is considered to be the desire to study independently, to solve problems without the help of the teacher in difficult situations arising in the educational process, to turn to the teacher only when there is a need to verify and strengthen the correctness of one's conclusions.

The role of technologies in the process of modern vocational education is constantly increasing. Technologies not only facilitate the educational process, but also create new opportunities, more actively involve students, and help them acquire knowledge in various fields. Below, we will consider the main roles of using technologies in vocational education organizations and their advantages.

1. The diversity of teaching methods and educational technologies allows for a variety of teaching methods. This allows taking into account the individual needs of each student. For example:

Multimedia resources: Tools such as video tutorials, animations, interactive tests serve to make the material more understandable.

- Interactive games: Learning through games (gamification) sparks students' interest and helps them better remember the topic.

- Virtual laboratories: Virtual environments can be created for conducting experiments in the natural sciences. Such laboratories are a convenient alternative for dangerous or expensive experiments.

2. With the help of an individual approach, technology, it is possible to develop programs adapted for each student. An example of this is adaptive platforms, which offer subsequent materials based on students' achievements. Such systems help strengthen weaknesses and stimulate the development of strengths.

3. Distance learning: Thanks to Internet technology, the possibility of distance learning has emerged. This, in turn, facilitated the exchange of knowledge between teachers and students, regardless of their geographical location. Online courses, webinars, and formats such as MOOC (Massive Open Online Courses) provide learning from anywhere in the world.

4. Collaboration and communication: Modern technologies expand opportunities for collaboration in group projects. For example, forums, chat rooms, and video conferencing systems on online platforms help students and teachers communicate directly. Also, cloud storage tools (Google Drive, Dropbox) are very useful for exchanging documents between group members.

5. Accurate assessment system: With technological solutions, it is possible to monitor and evaluate student activities in real time. With the help of e-tests, automated testing systems, and anal instruments, teachers can quickly and accurately assess the level of student success. In addition, a reduction in the participation of the human factor in this process reduces the probability of error.

6. Abundance of information sources: The Internet has opened doors to access to all types of information. Students no longer need to visit libraries - they can find the book, article, or research results they want online. This makes the process of acquiring knowledge much easier and more effective.

7. Mobility and convenience: The widespread adoption of smartphones and tablets has made it possible to receive education anywhere and at any time. With the help of mobile applications, students can study independently, both while traveling or at home. Such devices also support various media file formats (audio, video, e-book).

8. Reducing social inequality: Technologies help expand educational opportunities regardless of socio-economic conditions. For example, online lessons for rural schools provide access to educational standards available in educational institutions in urban centers. In addition, specially programmed technologies for people with disabilities serve to eliminate barriers to education.

In the process of developing the vocational education system, the role of educational technologies is increasing. Their introduction into the educational process serves to increase the level of interactivity, effectiveness, and individualization of the educational process. Educational technologies allow students to receive information in real time, effectively use various sources, and independently deepen their knowledge. In addition, these technologies create broad opportunities for reducing territorial and organizational limitations through the development of distance learning, as well as for the development of educational programs adapted to the individual needs and capabilities of each student.

One of the important advantages of using information and communication technologies in the educational process is the possibility of diversifying teaching methods. This situation serves to actively involve students of different types in the

educational process and further strengthen their knowledge. Through the use of virtual laboratories, simulators, and online educational platforms, students will have the opportunity to develop practical skills and abilities. At the same time, the introduction of technologies in educational institutions serves to automate the processes of storing and managing information, as a result of which the workload of teachers and administrative personnel is significantly reduced.

In conclusion, modern technologies used in teaching special subjects have brought a new breath to the education system and fundamentally changed it qualitatively. They increase students' motivation to learn, improve the effectiveness of the educational process, and open the door to broader opportunities for future generations. Therefore, it is very important to continue integrating technologies into education and improving their practical application.

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