

## Modern Pedagogical Technologies in the Educational Process of Higher Education

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**Abstract:** The article discusses the educational and didactic capabilities of modern pedagogical technologies, the use of which is one of the promising areas of higher education development. The author presents an algorithm and process-effective implementation of pedagogical technologies that are most actively used in the professional training of students, namely: portfolio technology, project technology, technology for developing critical thinking and writing.

**Key words:** Terminology, pedagogical goal, portfolio of works, cinquain.

**Background.** Higher education, along with some indicators that characterize the country's innovation potential, is one of the factors of competitiveness of the Uzbek economy. The introduction of technological innovations in the educational process of higher education can help to solve the tasks of training specialists that are linked to time. The task of a modern higher school is to increase the competence of teachers in the field of highly effective use of information, communication and interactive technologies, create and develop a universal educational sphere, and stimulate the formation of a new culture of pedagogical thinking.

The use of modern pedagogical technologies in the educational process of a university creates completely new opportunities for implementing the didactic principles of individualization and differentiation of learning, positively affects the development of students' cognitive activity, their creative activity, consciousness, and implements the conditions for the transition from learning to self-education.

**Analysis of recent publications.** The effectiveness of using pedagogical technologies in the educational process is confirmed by the research of a number of authors: Selevko, V. I. Andreeva, V. P. Bepalko, V. I. Bogolyubova, M. V. Clarina, V. Ya. Pityukova, V. Ya. Slastenina, Yu. Ya. Savelyeva and others. At present, a thorough theoretical study of the problem of using modern pedagogical technologies in professional training of a specialist in a higher school environment is of particular importance and significance.

Modern technologies in education are considered as the means by which a new educational paradigm can be implemented. The most general interpretation of the concept of "technology" is that it is a scientifically and practically based system of activity that is used by a person for the purpose of transforming the environment, producing material or spiritual values. V. P. Bepalko notes that any activity can be either technology or art. Art is based on intuition, technology is based on science. Everything starts with art and ends with technology with the goal of starting over. Any planning that cannot be done without in pedagogical activity contradicts impromptu, intuitive actions, and therefore can be considered as the beginning of technology.

In pedagogical science and practice, it is possible to identify the existence of various interpretations of pedagogical technology. And this is not accidental, since each author approaches the understanding of the essence of technology as a whole based on a certain conceptual approach.

However, all existing positions are characterized by the following points:

- The technology is purposefully developed with a specific pedagogical goal, and it is based on the methodological and philosophical position of the author.
- the technological chain of actions and operations is built strictly in accordance with the goals that take the form of a specific expected result.
- the functioning of technology provides for the interrelated activity of the teacher with students on a contractual basis, taking into account the principles of individualization and differentiation, optimal implementation of human and technical capabilities, the use of dialogue and communication;
- step-by-step planning and consistent implementation of elements of pedagogical technology should, on the one hand, be reproduced by any teacher, and on the other-guarantee the achievement of planned results by all students;
- an organic part of any pedagogical technology consists in diagnostic procedures that contain criteria, indicators, and tools for measuring performance.

**Puzpose of the article.** Various innovative technologies are used in the professional training of students. In this article, we will focus on some of them, namely: Portfolio technology; Project Technology; Technology for developing Critical Thinking and Writing.

At the same time, an integral part of any course under study, with the help of which modern pedagogical technologies are implemented in practice, is a methodological complex, which, in our opinion, should include:

- a video computer system that the teacher uses to conduct lectures and seminars in specially equipped classrooms.
- "screenshot", some special handout material, the specificity of which lies in the fact that in addition to the communication and information function, it serves as an activator of the student's creative activity in the process of filling out specially designed diagrams, boxes, reference books, and so on.
- a set of interactive technical and software training resources.

**The main material.** Let's consider the algorithm and process-efficient implementation of each of the previously identified technologies. In general, a portfolio is defined as a set of works and results of an intern, which demonstrates his efforts, progress and achievements in various fields. This technology complements traditional means of monitoring and evaluation, which are usually aimed at checking the reproductive level of mastering information, factual and algorithmic knowledge and abilities. Portfolio technology allows you to take into account the results achieved by a student in various types of activities - educational, creative, musical and performing, communication and others. It is an important element of the activity – based approach to education.

The portfolio is not only a modern effective form of assessment, but also helps to solve important pedagogical tasks: to maintain high academic motivation of students; to encourage their activity and independence, to expand the opportunities for learning and self-study; to develop the skills of reflexive and evaluative activities of future specialists. The described features of the portfolio make it a promising form of representation of the individual orientation of educational achievements of a particular student, which meets the tasks of his professional training. The introduction of portfolio technology has made it possible to increase the educational activity of students of the Department of Foreign Languages, the level of their implementation of their own goals and opportunities.

When developing a portfolio, we focus on three types of portfolios:

1. “Professional and Methodical portfolio”, which includes: material for classes (informative); - games and entertaining material (games, quizzes, cross-tests, entertaining tasks); didactic material (lesson plans, textbooks, task sets); material for extracurricular activities (scenarios of holidays, evenings, discussion topics, etc.); audio library for the implementation of extracurricular activities. This model implies the possibility of both qualitative and quantitative assessment of portfolio materials. "Professional and methodical portfolio" will be useful for students during their school practice and further professional activities.
2. “Portfolio of works " is a collection of various creative, project and research works, as well as a description of the main forms and directions of their educational and creative activities: participation in conferences, competitions, additional courses, etc. This version of the portfolio assumes a qualitative assessment, for example, in terms of the variety and persuasiveness of materials, the quality of submitted works, and orientation to the chosen field of knowledge. The portfolio is designed in the form of a student's creative folder with an attachment of their works presented in the form of texts, electronic versions, photos, and videos. A portfolio of this type gives a broad idea of the dynamics of the student's academic and creative activities, the nature of their professional orientation.

Here we offer a sample version of entries in the “portfolio of works”:

- projects (the subject of the project and a description of the work are given, and there can also be an attachment in the form of photos, the text of the work (printed or electronic version), etc.);
- research papers and reports (indicate the materials studied, titles of works, illustrations, etc.);
- creative works (the list of works is given below);
- participation in contests, festivals, and contests (the topic, terms, and results achieved are specified);
- participation in scientific, practical and theoretical conferences, seminars, etc. (specify the topic of the event, the name of the organization that holds the event, the form of student participation in it, and the result);
- other forms of creative activity (participation in interest groups and other circles and societies).

Work with the "portfolio of works": students can also choose, or at the direction of their teacher, to select various types of written works performed in this discipline for their “dossier”.

3. “Portfolio of reviews " includes characteristics of the student's attitude to various types of activities, as well as an analysis of the student's own writing activity and its results. The portfolio can be presented in the form of texts-conclusions, reviews, comments, resumes, essays, references and letters of thanks (for example, after a period of teaching practice), and so on. This form of portfolio makes it possible to activate the mechanisms of students ' self-assessment, which contributes to the degree of implementation of processes related to education. Here is an approximate list of documents in the "portfolio of reviews": a conclusion on the quality of work performed; reviews of articles, reports, research papers; references about working in a creative team, speaking at conferences, competitions or Olympiads; a resume prepared by a student with an assessment of their own educational achievements.

The basis of project technology is the development of students ' cognitive interests, the ability to independently construct knowledge, the ability to navigate in the information space, and the development of critical thinking. Project technology is always focused on independent activity of students (individual, pair, group), which is carried out by students during a certain period of time.

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Basic requirements for the use of project technology for entering a problem or task that is important in research and creative work and requires complex knowledge and investigative search for its solution; practical, theoretical, cognitive and significance of the expected results; independent (individual, paired, group) activity of students; structuring the content of the project (indicating step-by-step results); use of research methods (determining the problem and research tasks that follow from it and forming hypotheses for their solution; discussion of research methods; design of final results; analysis of data obtained; summing up, correcting, conclusions).

We have defined the criteria for evaluating project development. These criteria include the significance and relevance of the problems raised; the necessary and sufficient depth of penetration into the problem and attracting knowledge from different areas to solve it; the completeness and content of the project; and the relevance and potential of the project. It is necessary to build education on an active basis, through reasonable activities of the student, corresponding to his personal interest in this particular knowledge. Therefore, it is extremely important to show students their personal interest in the acquired knowledge, which can and should be useful to them in their future professional activities. In this regard, it is necessary to choose a problem that is significant for the future specialist. This should be a problem to which he / she should apply the knowledge he / she has already acquired and in the process of solving which he / she should gain new knowledge. At the same time, the task of the teacher is to offer new channels of information or simply direct the student's thoughts in the right direction for independent search. The choice of project topics is determined by the teacher, taking into account the educational situation in the discipline being studied, or by the students themselves, if the project is intended for extracurricular activities.

Working on a project usually consists of several stages:

1. Search stage (defining the project goals, carrying out organizational work; formulation of the research problem; definition of the object and subject of research; putting forward a hypothesis).
2. Design stage (determination of work directions and immediate tasks; determination of methods for finding information channels by direction; determination of research methods; organization of groups; grouping of tasks).
3. Technological stage (independent work in groups, information exchange; performing pre-agreed technological operations; quality monitoring; analysis of information collected by groups, development of a project protection scenario, which is structured as follows: project designation; hypothesis protection; conclusions, explanation in the form of tables, diagrams, drawings, etc.; answers to questions).
4. Final stage (panel discussion, project expertise, analysis of project implementation results; conclusions).

As a result, students have to solve the problem independently and jointly, applying the necessary knowledge sometimes from different areas, and get a real and tangible result. The results of completed projects should be tangible, i.e. properly designed (album, report, essay, etc.). Thus, project technology is based on the development of students' cognitive skills, the ability to independently form their own knowledge and navigate the information space, and the development of critical thinking.

Critical thinking is the ability to ask new questions, develop different arguments, and make independent, informed decisions. The development of this type of thinking through interactive

involvement of students in the educational process is the goal of another technology under consideration.

The technology of developing critical thinking and writing has its own characteristics, namely: an emphasis on students' independence in the educational process; the search for arguments to solve a problem; the ability not to take information on faith without any verification; the search for reasonable answers, which is the result of reflection and disclosure of unknowns; creating conditions for interaction and partnership in the process of purposeful activity.

The technology consists of several stages, namely:

- activation (of material on a topic that students already know);
- understanding (of the acquired information);
- reflection (selection of information).
- Each of the above stages of critical thinking development technology includes basic techniques:
  - phase 1: cluster, individual brainstorming, group brainstorming;
  - phase 2: insertion (marking up information, marking up text), reading with stops, cross-discussion, arranging information in a logical order (I know, I want to know, I should know), the purpose of which is to organize knowledge on the topic;
  - phase 3: cluster ("information cluster", a method of graphic systematization of the material), essay, cinquain (a five-line poem, the purpose of which is to synthesize and summarize information on the topic). Reflection is a quick method of summing up a topic, summarizing the information received and presenting complex ideas, feelings and concepts in a few words.

The technology of developing critical thinking is the basis for mastering new types of activities. The subject of any new pedagogical technology is specific cooperation of students and teachers in various types of activities, organized on the basis of precise structuring, systematization, programming, algorithmization, standardization of methods and techniques of teaching or upbringing with the introduction of computerization tools and technology.

**Conclusions.** Thus, modern pedagogical technologies implement the curriculum and ensure the achievement of the set didactic goals in a new way, implying scientific approaches to the organization of the educational process in a higher educational institution. They expand the range of educational services offered to students, change and provide new forms, methods and means of learning. The use of modern pedagogical technologies is one of the most promising areas of higher education development, contributing to a deeper individualization and intensification of the educational process, the formation and self-actualization of the future specialist's personality.

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