



Innovative Approaches to the Organization of the Educational Process—The Basis for Increasing the Effectiveness of Teacher Education

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Abstract

The article deals with the problem of introducing innovations into the educational process of educational institutions of higher education at the present stage. Education acts as a guarantor of the formation and strengthening of the innovative potential of effective socio-economic development of the country. It is not only a guarantee for the personal quality of all citizens of the country, but also concerns the future and destiny of the country. The article emphasizes that the dissatisfaction with the urgent needs of society, the exhaustion of traditional resources for training and education, changes in the structure of economic sectors and the market, demographic changes, changes in values, and new knowledge are the main reasons for the need to introduce innovations in the educational process. At the same time, there are contradictions associated with a certain availability of science-intensive technologies, computerized systems, and the lack of a clear algorithm for the introduction and implementation of the innovation process at the university.

Keywords

Innovations, high technologies, educational organizations of higher education, innovation process, innovation activity, educational process

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1. Innovation in teaching technology

The teaching profession in the modern world plays a huge role in providing quality education and the development of society. Teachers are key figures in the educational system, they not only pass on knowledge and skills but also educate the next generation.

The teaching profession is also important because teachers play a key role in shaping the personality of students. They not only transmit knowledge but also educate students, helping them to become literate, creative, responsible, and ethical citizens. The modern world has become very complex and volatile, so teachers must be ready to constantly learn and improve their professional skills. They must be able to work in an innovative environment and use new technologies and teaching methods in order to improve the learning process and achieve better student outcomes. Modern education requires teachers to constantly develop and adapt to new technologies and methods.

An innovative environment creates a need for the development of professional competencies and skills, which will allow teachers to work successfully in a rapidly changing educational process. The professional development of a teacher begins with the realization of the importance of modern teaching methods and the need to constantly update their knowledge. The teacher must be ready to use innovative technologies in teaching, such as interactive whiteboards, online courses, multimedia presentations, and others. It is also important to understand that the development of innovative approaches to teaching involves the use of new pedagogical methods.

Modern education requires a new approach to teaching methods in educational establishments. Teachers try to keep up with innovative methods of teaching general education subjects, special disciplines, and industrial training classes. It is clear that it is necessary to produce a specialist not only with good knowledge but able to use it in practice. In order to teach students to think independently, make decisions, work in groups, develop communicative, and creative abilities, and take responsibility, teachers and masters have to study and use new methods.

2. Innovation in teaching methods

The term "innovation" comes from the Latin "novatio", which means "update" (or "change"), and the prefix "i", which translates from Latin as "in the direction", if translated literally "Innovatio" - "in the direction of change". The very concept of innovation first appeared in scientific research in the 19th century. Innovation—this is not any innovation or innovation, but only one that seriously increases the efficiency of the current system (Gary Thomas, 2021). Accordingly, the development of innovative processes is a way to ensure the modernization of education and improve its quality, efficiency, and accessibility. Innovations in education are necessary, as they require a creative approach in the preparation of teachers, which qualitatively affects the personal growth of students.

The following innovative methods are used in pedagogy: the portfolio method, the method of problem presentation, the project method, problem-search methods, students' research activities embedded in the educational process, problem-based learning, practice-oriented and creative activities, lecture-visualization, the use of information technology in teaching.

The portfolio method is a modern educational technology based on the method of authentic evaluation of the results of educational and professional activities. portfolio—a systematic and specially organized collection of evidence that serves as a way of systemic reflection on one's own activities and presentation of its results in one or more areas for the current assessment of competencies or competitive entry into the labor market. This method is used in the defense of the WRC for demonstration to the employer.

The method of problem presentation is a method in which the teacher, using a variety of sources and means, before presenting the material, poses a problem, formulates a cognitive task, and then, reveals the system of evidence, comparing points of view, different approaches, shows a way to solve the problem. Students, as it were, become witnesses and dreamers of scientific research.

The project method is a learning system in which students acquire knowledge and skills in the process of planning and completing progressively more complex practical projects (Naomi Novik, 2021). We start work on the project in the classroom, students continue it at home, and the presentation is carried out in the classroom. When presenting a project, it is not so much knowledge that is evaluated as the efforts of students. If a weak student is able to present the results of the group's joint work, and answer questions, then the goal has been achieved. In our time, the project method has become the most popular and effective in education and is aimed at educating the individual. Naturally, teachers consider the method of projects to be one of the most effective forms of work that shape the personality of a student. In the technology of the educational process, there is a shift in emphasis on independence, enterprise, activity, and ingenuity. When summarizing, consolidating, and repeating educational material, while developing the skills and abilities of its practical application, this method is one of the most effective. The project method is especially relevant when new updated standards are introduced during a demonstration exam.

Problem-search methods of teaching (acquisition of knowledge, development of skills and abilities) are carried out in the process of partially searching or researching activities of students; are implemented through verbal, visual, and practical teaching methods, interpreted in terms of posing and resolving a problem situation.

3. Difficulties and challenges

Research work of students, built into the educational process—such work is carried out in accordance with the curricula and programs of academic disciplines without fail; this type of research activity of students includes independent performance of classroom and homework assignments with elements of scientific research under the methodological guidance of a teacher (preparation of essays, abstracts, analytical works; preparation of reports on educational and industrial practices, completion of course and final qualifying works, defense of a diploma); the results of all types of research activities of students, built into the educational process, are subject to control and evaluation by the teacher.

Problem-based learning is a technology aimed primarily at “stimulating interest”. Education consists of creating problem situations, in understanding and resolving these situations in the course of joint activities of students and the teacher with optimal independence of students and under the general guiding guidance of the teacher (Routledge. Peters, R. S., 1997). The master poses a problem, for example, to determine the malfunction of the carburetor by certain signs.

Practice-oriented projects—a feature of this type of project is the preliminary formulation of a result that is clearly significant for the student and has practical value, expressed in material form: identifying and correcting a breakdown of the engine and other parts and mechanisms of the car (for example, auto mechanics). This type of project is characterized by tight control by the master of industrial training.

Creative projects are the most difficult types of project activities, as they require a lot of preparation, and there is no chaolon or execution algorithm. Students need to study a large number of times, often contradictory. The teacher only directs the activities of students and offers articles, material, and links on the Internet (Tara Westover, 2018). Creative projects cause the maximum activation of the cognitive activity of students and contribute to the effective development of skills and abilities to work with documents and materials, the ability to analyze them, draw conclusions, and enrichment.

Lecture-visualization—“It is better to see once than to hear a hundred times”, says a Russian proverb. And we can't help but agree. The principle of visualization has been used in pedagogy for many years, it makes it possible to "photograph" the proposed video material, which allows you to somewhat enhance the theory and practice of the material being taught. Visualization can be expressed in different forms: natural materials, visual representations (slides, drawings, photos), and symbolic (diagrams, tables). It is important to observe: the visual logic and rhythm of the presentation of the material, the dosage, the style of washing, application of information technologies in education. One of the large-scale educational technologies is the development and creation of information (computer) technologies (Honan, James P., 2002).

4. Summary and reflection

In our country, despite the economic difficulties and the lack of proper funding, the education system is actively mastering information technologies and actively attempting to apply them in educational and educational processes. New information geology is the pedagogical technology of today, enabling students to present the material being studied in a new way, to systematize it. For a teacher, this is an extension of the possibility of using visualization in a lesson (or with a local network in the office, or with the help of a multimedia projector). New information technologies lead pedagogy in the context of a single-world educational space and a single global educational community (Falmer Mallick, Kanka, 1998). Teachers and students alike need to use the Internet. The purpose of innovation is a qualitative change in the personality of the graduate: excellent professional training, raising his cultural level, the ability to behave correctly in society, and being able to see the situation and solve problems on his own. However, this will become possible only with the masterful use of certain innovative methods by teachers and teachers.

This is a process that requires constant learning, self-development, as well as active participation in professional communities, and exchange of experience with colleagues. The teacher must be ready to use innovative technologies and methods, but at the same time maintain a critical eye and the ability to evaluate their effectiveness in accordance with the learning objectives and students' needs. Modern innovative technologies allow teachers to expand their opportunities in learning and student development. In general, the professional development of a teacher in an innovative environment is an important aspect of improving the quality of education. Educators who continually develop their competencies and adapt to new environments can provide more effective and quality learning for their students.

The professional development of a teacher in an innovative environment is a key aspect of providing quality education for all students. Educators must remain open to new ideas and technologies, constantly update their knowledge and skills, and use research and data analysis to optimize the learning process. Only in this way can educators effectively respond to the challenges and opportunities offered by the innovative environment and provide quality education for all students.

It is necessary to emphasize the importance of an individual approach to each student, taking into account his needs, interests, and abilities. Only in this way can we ensure a high level of education and prepare the next generation for life in a rapidly changing world.

Finally, we note that the professional development of a teacher in an innovative environment is a process that must be ongoing. Modern technologies and teaching methods are developing very quickly, and the teacher must constantly upgrade his knowledge and skills.

5. Conclusion

In conclusion, the professional development of a teacher in an innovative environment is an urgent and necessary task for modern education. For the successful implementation of innovative approaches in teaching, it is necessary that teachers constantly improve their level of professionalism and develop their competencies.

References

- Honan, James. (2002). *Using Cases in Higher Education: A Guide for Faculty and Administrators*. Jossey Bass. Pp. 70-71.
- Mallick, Kanka. (1998). *Researching Education: Perspectives and Techniques*. Routledge Falmer. Pp. 101-103.
- Naomi Novik. (2021). *A Deadly Education*. Penguin UK. Pp. 256-257.
- Peters, R. S. (1997). *Education and the Education of Teachers*. Routledge. Pp. 83-84.
- Tara Westover. (2018). *Educated: A Memoir*. Random House US. Pp. 61-62.
- Vishnyakov Gary Thomas. (2021). *A very short introduction*. Oxford University Press. Pp. 96-98.