



Innovative Technologies In Education: Development Trends, Prospects

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ABSTRACT

This article describes the study of innovative educational technologies and pedagogical principles, the effective use of modern interactive teaching methods in the educational process. The effective methods of innovative technologies in strengthening the knowledge of students studying in higher educational institutions are analysed. The formation of stable theoretical knowledge and professional skills increases the effectiveness of the educational process. For this purpose, proposals and recommendations on new pedagogical technologies in the educational process have been developed.

KEYWORDS

Assessment of market opportunities, dynamics of development, the effectiveness of the learning process, innovation process, interdisciplinary approach, motivation.

INTRODUCTION

According to the Law of the Republic of Uzbekistan "On Education" and the "National Training Program", the management of higher education and vocational education is a

priority of state policy. The development of higher

education institutions and vocational education is bringing their goals and objectives closer together and uniting them. With the introduction of modern innovative technologies in the management of higher and vocational education, the implementation of a unified state policy in teaching and educating a harmoniously developed generation is bearing fruit [1]. The basis is needed for the transition from "voluntary construction and implementation of the educational process, aimed at a consistent diagnosis of each of its parts and stages, aimed at a fair diagnosis of the final result" [2]. The task of all state and public organizations is, first of all, a complex process that requires a radical, reconsideration of the content of the institutions of continuing education. Social practice, public education, education and upbringing with a clear purpose are the basis for the formation of a free individual. Modernization of the educational process and improvement of the material and technical base, spiritual renewal of society will be ensured, first of all, through the inculcation of humane and democratic values in the traditions of the younger generation. All this is of particular importance in the training and development of young professionals.

MATERIALS AND METHODS

The socio-pedagogical necessity of an innovative approach to education in the current process of globalization is measured by:

1. Scientific and technical progress and socio-economic renewal of the system of continuous education, in particular, the improvement of the educational process in higher education institutions through the study of advanced foreign experience,

- innovative approaches to education and the use of information technology;
2. Development and implementation of effective organizational forms, technologies of person-centred teaching that serve to develop the level of education, intellectual potential, social activism, creative skills of students;
3. The need to develop the professional and innovative competence of the teacher in relation to the development and implementation of pedagogical innovations.

The correct introduction of innovative technology in the educational process leads the teacher to act as the main organizer or consultant in this process. This requires students to be more independent, to develop their creative and volitional qualities, and the lessons conducted allow young people to express their views on important life achievements and problems, and to think independently. Innovative technologies are a pedagogical process, as well as innovations, changes in the creative activity between teacher and student, in the implementation of which mainly interactive methods are used, because the role of management in education is played by the teacher. The implementation of interactive learning technologies takes the following forms: individual, pair, group and teamwork [6]. The teacher develops students' skills through interactive learning technologies, self-control and management, effective communication, working with peers, listening and understanding their opinions, independent, creative, critical thinking, promoting alternative ideas, free-thinking it is possible to achieve the formation of qualities such as articulation, defending one's point of view, striving to find a solution to a problem,

coping with complex situations. Most importantly, through the use of interactive learning technologies, the teacher organizes the interaction-based actions of students to achieve a specific goal in the educational process. It also allows students to objectively assess their knowledge and skills by directing, managing, monitoring, and analysing a specific area of knowledge. Therefore, as a result of the use of interactive learning technologies in the teaching process:

- Stimulates students' interest in learning;
- Encourages every participant in the educational process;
- Positively affects the psyche of each student;
- Creates favourable conditions for effective mastering of educational material;
- Has a multifaceted impact on students;
- Stimulates students' opinions and attitudes on the topics studied;
- Develops students with vital skills;
- Provides a positive change in the behaviour of students.

The perfect scientific and methodological organization of educational processes is the key to success. At the same time, all kinds of classes and independent assignments teach students to think, to work creatively, to think in all directions, to solve tasks based on their own life experiences. Today, one of the most important issues in our lives is to radically change the content of education, to raise it to the level of modern requirements. Because of the renewal of society, the development and prospects of our lives, the fate of the effectiveness of ongoing reforms, the independence of the Republic and the formation of socio-economic policy in line with

the market economy - all this is closely linked with the problem of training highly qualified specialists. One of the main principles in the implementation of the national training program is the retraining of teachers and trainers to reform the structure and content of the education system, harmonize the activities of educational institutions to train highly qualified, competitive professionals, the introduction of advanced pedagogical technologies, pedagogical innovations. But advanced pedagogical technologies and innovations do not enter the education system on their own. It is a process that depends on the teacher's performance and his or her motivation. It is impossible to take a step forward in education without changing the teacher's activities and increasing his/her responsibility and activism.

Academician A.N. Leontev: "The first condition for understanding the world is an activity, the second condition is education. In the process of activity, people's abilities, knowledge and skills are formed, which means that activity is a social phenomenon and a basic condition of the struggle for life "[5]. Today, as a result of the emergence of a new scientific direction in the field of pedagogy - the idea of pedagogical innovation and renewal of the educational process, a new direction in the pedagogical activity of teachers has emerged - the concept of "innovative activity of the teacher". Innovative activity implies a creative approach of the teacher to the acquisition of existing forms and means of professional development. It should also be acknowledged that the stable and universally accepted scientific ideas and classifications about innovations in education and innovative pedagogical activity have not yet been

perfectly composed. One of the main reasons for this is the difficult-to-overcome gaps between education-oriented scientific knowledge systems. An even bigger reason is the gap between educational knowledge and practical pedagogical activity. The teacher, as a subject and organizer of innovative activities, participates in the creation, application and dissemination of innovation. He must be able to analyze the content and essence of knowledge in science, changes in traditions. Innovation is an important part of practice and theory, a system of action of social actors aimed at improving the qualities of the socio-cultural object. There are different approaches and opinions regarding the creation of the essence of this idea theory, and there is no single opinion in science about its essence.

Innovations are current, important, new approaches formed in a system. They are born based on initiatives and innovations and are promising for the development of educational content, as well as have a positive impact on the development of the education system as a whole. Innovation is the end result of technology, form, or method in a particular field of activity or production, a new approach to solving a problem, or the application of a new technological process that is known to lead to greater success than ever before. Today, the classification of innovations in the education system is approved as follows:

- Depending on the direction of activity (in the pedagogical process, in management).
- According to the description of the changes made (radical, modified, combined).
- According to the scale of changes (local, modular, systemic).

- According to the source of origin (taken internally or externally for this community).

The goal of innovation is to get the most out of the money or effort expended. Unlike other types of spontaneous innovations, innovation constitutes a mechanism of controlled and controlled change. Any innovation in the education system cannot be an innovation. Therefore, it is necessary to point out the main differences between the concepts of "innovation" and "innovation". The clear form, content and scope of reform activities serve as a basis for this. If the activity is short-lived and does not have the character of an integrated system, if it has set itself the task of changing only some elements of a particular system, then we are communicating with innovation. We can say innovation only if the activity is carried out on the basis of a certain conceptual approach and the result leads to the development of that system or its fundamental change. The criteria for both concepts are as follows: innovation is carried out within the framework of existing theory, limited in scope and time, methods are updated, and the result is an improvement of the previous system. Innovation, on the other hand, will be systematic, integrated and sustainable, will design a new system of activities in a particular practice, will completely update the positions of the subjects of practice. At the same time, new areas of activity will be opened, new technologies will be created, new qualitative results of activities will be achieved, and as a result, the practice itself will be updated. The implementation of innovation takes place in innovative processes. The innovation process is the process of preparing for and implementing innovative change. Innovative

changes in the educational process, the introduction of any innovations in the education system will be carried out directly by updating and changing the activities of teachers. There is an opportunity to define the concept of innovative activity through the analysis of innovations in the education system, their implementation, management of innovative processes.

Innovative activity is a driving force, motivating, developing the pedagogical team. "Innovative activity is an activity aimed at solving complex problems that arise as a result of incompatibility of traditional norms with new social requirements, or the collision of a newly formed norm of practice with an existing norm," said V.I. Slobadchikov. Innovative activity is an important part of practice and theory, a system of action of social actors aimed at improving the qualities of the socio-cultural object, which is not only the ability to solve problems in a certain range but also motivational readiness to solve problems in any situation [8, 9]. The central issue of the innovative activity of the teacher is the effective organization of the educational process. Innovative activity is a continuous work on the basis of innovations, which is formed and improved over a long period.

Based on the views of pedagogical scientists who have studied the characteristics of innovative activity of the teacher, the following can be considered as the main features of innovative activity:

- Striving to master the philosophy of creative activity;
- Mastering pedagogical research methods;
- Ability to create authorship concepts;

- Be able to plan and carry out experimental work;
- To be able to use the experience of other researchers and teachers;
- Cooperation with colleagues;
- Be able to exchange ideas and provide methodological assistance;
- Prevention and elimination of conflicts;
- Find news and adapt it to your situation.

The approach to the problem of preparing teachers for innovative activities has emerged as a result of understanding the growing dynamics of innovation processes in society. Its analysis covers not only the use of modern advances in science and technology, but also processes such as the search for, creation, adaptation, application, and re-examination of the results obtained. In general, the structure of innovative activity - a creative approach, creative activity, technological and methodological preparation for the introduction of innovation, innovative thinking, a culture of behaviour [10, 11]. Levels of innovative activity can be reproductive, heuristic, creative. During the period of innovative activity, innovations, innovations, enter the educational process. Therefore, the introduction of innovations in the education system in the pedagogical process is carried out in 4 stages:

1. Identify the problem based on the analysis.
2. Design of the planned education system.
3. Plan changes and innovations.
4. Make changes.

The purpose of preparation for innovative activities is to develop the teacher's aspiration for innovation, the ability and skills to work independently, to improve the skills of

teaching and extracurricular activities using new pedagogical technologies, interactive methods. “Innovative activity stems from a teacher’s dissatisfaction with his or her performance. It arises on the basis of the teacher's desire to solve a pedagogical task in the face of any obstacle. The innovative activity begins with the search for a new idea [12]. Pedagogical innovation requires a new approach from the teacher, as it is focused on solving important and complex problems in the educational process. There are several psychological barriers to preparing a teacher for innovative activity. The first of these is that it is very difficult for a teacher to go beyond the limits of the activity to which he is accustomed, i.e., there is a lack of creativity in teachers, another reason is that new and unknown things always cause fear and apprehension in people. Such a conclusion can be made based on the above considerations.

RESULTS

Although most of the studied works define the concept of “innovative activity”, there is no single definition that is acceptable to everyone in this field and reveals the full content of the innovative activity, and there is no single approach to the process of forming this activity. In other words, an important condition for increasing the effectiveness of teaching in the system of continuing education today is a systematic approach to the educational process and the provision of services consisting of diverse pedagogical activities. At the same time, modern pedagogical technology demonstrates the interaction of human potential and technical means necessary for the simplification of forms of teaching based on systematic approaches, guaranteeing its results and objective assessment. Clarification of

educational goals, diversification of methods, techniques and tools used in the process of teaching and learning, deepening the content of the educational process - all this means improving the activities of educational institutions. However, it is said that there is no limit to perfection. As such, both pedagogical technology and pedagogical mastery are limitless concepts. The more research is done on this and the more initiative there is, the less likely it seems. This is the simplest and most basic truth of teaching. Only the activity of teachers in this way will ultimately lead to the fulfilment of a high social order.

CONCLUSION

In short, innovative activity is the creation of a new technological process or a new improved product using scientific research, development, experiments or other scientific and technical achievements, the pragmatic feature of which is that it is both in the field of ideas and separately. nor is it carried out in the field of action of the subject, but the experience of carrying out this activity is truly innovative only if it becomes universal in people’s lives. The essence of innovative activity is the formation of new technology in practice, the result of which is the activity aimed at the transformation of the invention-project, the project-technology, which emerged as an innovation. In the innovative activity, scientific insights are not born of the logic of academic science but arise from the reflection of practice that develops as a result of the support of modifications of the development process.

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REFERENCES

1. Ishmukhamedov R.J. (2005). Ways to increase the effectiveness of education using innovative technologies. Tashkent. TDPU.
2. Bepalko O. V. (2009). Social pedagogy: diagrams, tables, comments (textbook). Moscow. Center for educational literature, 208 p. ISBN 978-966-364-837-8.
3. Semenova, V. G. (2019). Modern innovative technologies of teaching students. Revista San Gregorio, 1(30).
4. Bepalko, V.P. (1995). Pedagogy and progressive teaching technologies. Moscow. Pedagogy.
5. Shoaxmedova, N., & Mannanova, S. (2020). Innovative technologies as an aspect of the development of modern higher education. Архив научных исследований.
6. O'Shaughnessy, D. (2001). Competitive Marketing: A Strategic Approach. SPb.: Peter, 864.
7. Ishmukammedov R., Mirsolieva M. (2014). Innovative technologies in the educational process (methodical manual). Tashkent.
8. Slobodchikov, V.I. (2003). Problems of the formation and development of innovative education. Innovation in Education, (2), 4-28.
9. Clarin, M.V. (1978). International Yearbook on Technology for Education and Training 1978/79 London, New York.
10. L. Farberman. (2000). Advanced pedagogical technologies. FAN.
11. N.X. Avliyakov. (2001). Modern teaching technologies. Tashkent.
12. L.V. Golish. (2001) Modern educational technologies: content, design and implementation. Express guide, Tashkent. TESIS. 59 p.