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IMPLEMENTATION OF MODERN INNOVATIVE PRACTICES IN THE ACTIVITIES OF GENERAL SECONDARY EDUCATIONAL INSTITUTIONS

Abstract. The article analyzes scientific research on the problem of implementing modern innovative practices; the problem of implementation of innovative practices in the activities of educational institutions is considered.

Various approaches to the interpretation of the essence of the concept of «innovation», «innovation», and «innovative practices» are characterized; an analysis of the current state of the study of innovative activity in the education system was carried out, which involves the development and approval of innovations, experimental verification of the quality of education and the possibility of application in the field of education.

Regarding the content of pedagogical innovations, the study of innovation processes is presented as a diagram of the relationship between the main structural elements of

the educational process (teaching, education, and management) with the forms, methods, and means of their implementation.

The need to introduce modern innovative practices into the activities of educational institutions, which is a purposeful systematic set of techniques, and means of organizing educational activities, covering the entire learning process from defining the goal to obtaining results, has been determined since modern innovative practices are the result of an innovative educational process, which is defined as the course of the use of innovations related to the acquisition, reproduction, and implementation of novelty.

Key words: innovative practices, pedagogical innovation, the sphere of education, innovation, modern educational institution, research and search nature of innovations.

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УПРОВАДЖЕННЯ СУЧАСНИХ ІННОВАЦІЙНИХ ПРАКТИК У ДІЯЛЬНІСТЬ ЗАКЛАДІВ ЗАГАЛЬНОЇ СЕРЕДНЬОЇ ОСВІТИ

Анотація. У статті проаналізовано наукові дослідження з проблеми впровадження сучасних інноваційних практик. Розглянута проблема реалізації інноваційних практик у діяльності закладів освіти.

Схарактеризовано різні підходи щодо трактування сутності поняття «інновації», «нововведення», «інноваційні практики»; здійснено аналіз сучасного стану вивчення інноваційної діяльності в системі освіти, що передбачає розробку та апробацію інновацій, експериментальну перевірку якості освіти і можливості застосування у сфері освіти.

У статті обґрунтовано, що впровадження сучасних інноваційних практик у діяльність закладів освіти зумовлено кількома чинниками, серед яких основним стала зростаюча потреба введення нових інноваційних підходів, сучасних інноваційних практик в освітній процес. Доведено, що наукові досягнення, винаходи технологічного прогресу уможливили інтеграцію нових засобів і методів навчання в освітню програму, оскільки це передбачає використання цифрових пристроїв та онлайн-ресурсів в усі сфери життя: від взаємодії між людьми – до підтримки навчання, розробки нового програмного забезпечення та програм, які можуть сприяти отриманню ґрунтовних знань здобувачів освіти.

Визначено необхідність упровадження сучасних інноваційних практик у діяльність закладів освіти, що є цілеспрямованим системним набором прийомів, засобів організації освітньої діяльності, котрий охоплює весь процес навчання – від визначення мети до одержання результатів. Підкреслено, що сучасні інноваційні практики є результатом інноваційного освітнього процесу, котрий визначається як перебіг використання нововведень, що пов'язані з одержанням, відтворенням і реалізацією новизни. Нововведення у сфері освіти є тією нагальною потребою, без задоволення якої ці зміни втраять взаємозв'язок із життям.

Ключові слова: інноваційні практики, педагогічна інновація, сфера освіти, нововведення, сучасний заклад освіти, дослідницько-пошуковий характер нововведень.

Formulation of the problem. In recent years, the educational sector has undergone significant pedagogical and technological transformations. The traditional method

of providing education has given way to new, modern, innovative practices aimed at improving the quality of student's education and their academic success. Since education is designed to shape the worldview of an individual, based on the development of knowledge about oneself, society, and the world; the formation of the experience of an emotional and valuable attitude towards the environment, which is based, first of all, on the understanding of the value of human life.

Modern innovative practices in education are related to new and innovative approaches to teaching school subjects and teaching children, which are aimed at obtaining thorough knowledge and successful student results. These practices are characterized by the use of technology, interactive learning methods, and child-centered learning approaches and are designed to be more attractive, relevant, and personalized than traditional approaches in the field of education because their content was aimed at ensuring the development of the personal potential of each child, her abilities, interests, requests, needs, and their corresponding motives.

Analysis of scientific research and publications. The implementation of modern innovative practices in the activities of educational institutions is determined by several factors, among which the main one is the growing need for the introduction of modern innovative practices in the activities of educational institutions, and new innovative approaches to education. Technological progress and scientific achievements have made it possible to integrate new means and methods of learning into the educational program, as this includes the use of digital devices and online resources to support learning, and the development of new software and programs that can improve the learning process.

In the Great Explanatory Dictionary of the Modern Ukrainian Language, the concept of «innovation» means «innovation, novelty, change, the introduction of something new» (Great explanatory dictionary of the modern Ukrainian language, 2005). In relation to the field of education, «innovation» means «the introduction of something new in the design of goals, the content of education, the organization and management of educational and cognitive activities, which involves the introduction of new forms and methods, technologies of education, control, evaluation, and testing of knowledge, abilities, and skills». Therefore, the innovative educational activity

involves the development and approval of innovations and experimental verification of productivity and the possibility of application in the field of education, didactic systems, the state of development, and the introduction of modern innovative practices in the activities of educational institutions.

The implementation of modern innovative practices in the activities of educational institutions is the result of creative activity aimed at the development, creation, and expansion of new research, modern technologies, and the implementation of new organizational forms and methods. Problems of the effectiveness of educational innovations, and their use in educational institutions dedicated to the research of scientists V. Bondarya, L. Vashchenko, L. Danylenko, I. Dychkivska, L. Kalinina, I. Lerner, I. Likarchuk, V. Maslova, T. Nazarova, V. Palamarchuk, O. Pehoty, I. Prokopenko, S. Sysoeva, A. Chernysh, S. Shapovalenko and others. In foreign pedagogical theory and practice, the problem is presented in the studies of such scientists as S. Wedemeyer, G. Wellington, M. Woolman, M. Clark, P. Mitchell, F. Percival, S. Spaulding, R. Thomas, and others.

The purpose of the article is to analyze the features of modern innovative practices in the field of education, their implementation in the activities of educational institutions, and the development of innovative educational space.

Presentation of the main research material. Any innovation requires a certain implementation plan, as well as an assessment of the results of its implementation under certain conditions. According to the definition of Professor V. Khymynets, pedagogical innovation is «the result of a creative search for original, non-standard solutions to various pedagogical problems», the direct product of creative search can be new educational technologies, original educational ideas, forms, and methods of education, non-standard approaches in management. As a by-product of innovations, as a process of creative activity, it is possible to consider the growth of the teacher's and manager's pedagogical skill, the level of his culture, thinking, and worldview (Khimynets, 2007, p.106).

Today's learners have different motivations, expectations, and learning preferences, and teachers are interested in innovative educational experiences that are engaging, relevant and personalized, and the latest innovative practices in education are designed to meet these expectations by providing children with interesting and exciting methods and ways of learning.

Therefore, the introduction of innovations in the educational sphere involves the development of an «innovation project» is a set of documents that determine the procedure and set of all necessary measures for the creation and implementation of an innovative invention. An «innovative product» in the field of education, according to G. Syrotynko, can be concepts, theories, systems, models, methods, technologies, methods, techniques, forms in educational activity and in ensuring the educational process» (Syrotynko, 2006).

V. Khymynets, the author of the study of innovation processes, presents pedagogical innovation as a diagram of the relationship between the main structural elements of the educational process (teaching, education, and management) with the forms, methods, and means of their

implementation. Regarding the content of pedagogical innovations, it is noted that they are entrusted with the mission of constructing an education strategy, that is, forecasting and determining the prospects for its development (Khimynets, 2007, p. 109).

H. Gunda and V. Sagarda interpret «pedagogical innovations as the activity of teachers, which refers to changes in the tasks, methods, and principles of education, forms of organization and management of the process of education and training. This activity is aimed at updating the pedagogical process, its rationalization and optimization» (Gunda, Sagarda, 2000).

Reforming the educational system of Ukraine in the direction of integration into the European educational space involves the development and implementation of innovative educational systems and technologies. The level of implementation of the technological approach is one of the most important criteria for determining the competitiveness and prestige of an educational institution since educational technologies ensure the systematicity, purposefulness, efficiency, and effectiveness of its activities. The need for an innovative orientation of pedagogical activity in the conditions of educational development is caused by certain circumstances, namely:

- development of a sovereign state, which is caused by the need for a fundamental change in the education system, methodology, and technology of the organization of the educational process in educational institutions of various types: lyceums, gymnasiums, author's schools, colleges, private schools, etc. Searches conducted by pedagogical teams of new-type educational institutions enrich not only pedagogical practice but also pedagogical science;

- fulfillment of the social order of the modern stage of the development of our state an individual capable of assimilating and creatively developing culture, which requires a constant search for new organizational forms, an individual approach to the individual, the implementation of modern innovative practices, new technologies of education and upbringing. In this situation, the importance and volume of pedagogical knowledge, which can become a theoretical basis for new searches and innovations, increase significantly;

- changing the attitude towards the fact of assimilation and application of pedagogical innovations. If the previously innovative activity was limited to the use of recommended innovations, today it acquires academic freedom of a research-search nature: the teacher chooses new programs, and textbooks, uses new techniques, methods, and methods of pedagogical activity;

- creation of real situations of competitiveness of educational institutions caused by their entry into market relations, and creation of new types of educational institutions, including non-state ones.

The educational process, learning through the implementation of modern innovative practices, and technologies involves the use of digital tools, such as laptops, tablets, and smartphones, to support and improve the teaching and learning process. In recent years, the use of the latest technologies in the classroom is becoming more and more popular, and as a result, the motivation of students and their involvement in the educational process increase. Collaborative learning, which emphasizes the

role of interaction in the learning process, is gaining popularity among students and teachers. This method encourages students to work together in groups, and share their knowledge, outlook, and experience with each other. Collaborative learning can improve students' critical thinking and problem-solving skills, as well as promote social and emotional development.

Thanks to the technology of education, the motivation of the participants in the educational process to study increases, and the connection of the educational material with the real challenges of today are monitored. The variety of directions of modern innovative practices is explained by the variability of their structure, the components of which are, in addition to the traditional ones, the newest means of the educational process, in particular interactive, information and communication technologies, as well as distance forms of the organization of education, which have now gained particular popularity in Ukraine, the countries of the European Union and the world in general.

Therefore, the implementation of modern innovative practices in the activities of educational institutions is a purposeful systematic set of techniques, and means of organizing educational activities, covering the entire learning process from defining the goal to obtaining results. Modern scientists S. Wedemeyer, H. Wellington, M. Woolman, M. Clark, and P. Mitchell believe that any pedagogical technology must meet the main methodological requirements (technological criteria), which includes:

- conceptuality – every pedagogical technology from modern innovative practices must be based on a certain scientific concept containing philosophical, psychological, didactic, and socio-pedagogical justification for achieving the educational goal;
- systemic, that is, modern innovative practices should have all the features of a system: the logic of the process, the interconnection of all its parts, integrity;
- the possibility of management, which includes diagnosis of goal setting, planning, designing the educational process, step-by-step diagnosis, variation of means and methods in order to correct results;
- efficiency, that is, modern innovative practices should be effective in terms of results and guarantee the achievement of a certain standard of education;
- reproducibility – the possibility of using (repetition, reproduction) pedagogical technology in other identical educational institutions, by other subjects;
- visualization (characteristic of certain technologies), which is based on the use of audiovisual and electronic computing technology, as well as the construction and application of various didactic materials and original visual aids.

The main directions of the implementation of modern innovative practices in the activities of educational institutions are the creation of a subject-oriented and educational and informational environment that makes it possible to use multimedia, hypermedia systems, electronic textbooks, etc.; mastering means of communication (computer network, television, satellite communication for information exchange); learning the rules and skills of «navigation» in the information space; development of distance education.

Summary. Modern innovative practices are the result of the innovative educational process, which is defined as the course of using innovations, which is connected with the acquisition, reproduction, and implementation of novelty. Innovative activity in the field of education is formed during pedagogical practice, accumulating all theoretical developments. Pedagogical innovative practices affecting the satisfaction of society's needs must be scientifically based and undergo practical testing.

Therefore, the use of modern technologies should be implemented by reforming the education system and developing new didactic and methodical conceptual foundations of education. An important condition for the use of information technologies is the reform of the education system and the development of new didactic and methodical conceptual foundations of education.

Prospects for further research. Under conditions of positive results, modern innovative practices and their implementation become attractive to other educational institutions. The result of their implementation can be considered the competitiveness of the educational institution, which inspires creative teachers with creative ideas, accumulates innovative potential, and develops innovative culture; innovations are constantly introduced, and the spirit of innovation is supported.

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ТЕХНОЛОГІЯ CASE-STUDY У ПРОДУКТИВНОМУ НАВЧАННІ МАТЕМАТИКИ В НОВІЙ УКРАЇНСЬКІЙ ШКОЛІ

Анотація. У статті здійснено аналіз технології case-study як сучасного методу навчання в освітньому процесі. Основну увагу зацентовано на методиці

застосування означеної технології у викладанні математики. Схарактеризовано суть методу, що полягає в можливості поєднувати теорію з практикою