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APPLICATION OF INNOVATIVE TECHNOLOGIES IN THE PROCESS OF THEORETICAL AND PRACTICAL TRAINING OF FUTURE TEACHERS FOR PROFESSIONAL ACTIVITY IN AN INCLUSIVE EDUCATIONAL ENVIRONMENT

ЗАСТОСУВАННЯ ІННОВАЦІЙНИХ ТЕХНОЛОГІЙ У ПРОЦЕСІ ТЕОРЕТИЧНОЇ ТА ПРАКТИЧНОЇ ПІДГОТОВКИ МАЙБУТНІХ ПЕДАГОГІВ ДО ПРОФЕСІЙНОЇ ДІЯЛЬНОСТІ В ІНКЛЮЗИВНОМУ ОСВІТЬОМУ СЕРЕДОВИЩІ

The article substantiates that the formation of future teachers' readiness for inclusive education should take place in an organized educational process, subject to rethinking the technology of conducting all types of classes and the systematic use of innovative technologies. It is proved that the modern educational process is not only to provide knowledge, form professional skills and abilities of future specialists, develop their thinking, but also to teach them the forms, methods and means of independent knowledge acquisition. The professional training of higher education students becomes more realistic and purposeful when innovative rather than reproductive technologies are used. The content of technologies such as «case coaching», «e-coaching», «brainstorming», «online discussion», «master class» is revealed, the basis for which is the modeling of educational, quasi-professional, research and socially significant situations of professional activity in an inclusive educational environment, their discussion, analysis and evaluation, which allows future teachers to master the subject and social aspects of inclusive education, the system of relations and problems that are characteristic of the inclusive educational environment of an educational institution. The study focuses on the results of training future teachers for inclusive education, which depends on the environment of the educational institution, and the variety of pedagogical technologies (for example, technology strategy, modeling of pedagogical situations, technology for designing an individual correctional educational route, group work technologies, etc.), which are interrelated, can be revealed and combined in the hands of an experienced teacher, because the conditions for their use depend on many factors, and the constructive combination of Examples of the implementation of innovative technologies in the process of training future specialists for inclusive education in an educational institution are considered in detail.

Key words: future teachers, innovative technologies, training, inclusive educational environment, children with special educational needs.

У статті обґрунтовано, що формування готовності майбутніх педагогів до інклюзивного навчання повинно відбуватися в умовах організованого освітнього процесу, за умови переосмислення технології проведення усіх видів занять та систематичного застосування інноваційних технологій. Доведено, що сучасний освітній процес полягає не тільки в тому, щоб дати знання, сформувати професійні вміння та навички майбутніх фахівців, розвивати в них мислення, а й навчити їх формам, методам і засобам самостійного здобуття знань.

Професійна підготовка здобувачів вищої освіти стає більш реальною і цілеспрямованою, коли застосовуються не репродуктивні, а інноваційні технології. Розкрито зміст технологій «кейс-коучинг», «електронний коучинг», «мозковий штурм», «онлайн-дискусія», «майстер-клас», основою для яких слугує моделювання освітніх, квазіпрофесійних, науково-дослідницьких та соціально-значимих ситуацій професійної діяльності в інклюзивному освітньому середовищі, їхнє обговорення, аналіз та оцінювання, що дозволяє майбутнім педагогам засвоїти предметні та соціальні аспекти інклюзивного навчання, ту систему відносин і проблем, які характерні для інклюзивного освітнього середовища закладу освіти. У дослідженні особлива увага зосереджується на результатах підготовки майбутніх педагогів до інклюзивного навчання, яка залежить від середовища закладу освіти, а різноманітність педагогічних технологій (наприклад: технoстратегія, моделювання педагогічних ситуацій, технологія проєктування індивідуального корекційно освітнього маршруту, технології групової роботи та ін.), які пов'язані між собою, можуть розкриватися і поєднуватися в руках досвідченого педагога, тому що умови їх використання залежать від багатьох чинників, а конструктивне поєднання традиційно використовуваних у навчанні засобів є оптимальним під час проєктування та розроблення конкретної технології навчання. Детально розглянуто приклади реалізації інноваційних технологій в процесі підготовки майбутніх фахівців до інклюзивного навчання в закладі освіти.

Ключові слова: майбутні педагоги, інноваційні технології, підготовка, інклюзивне освітнє середовище, діти з особливими освітніми потребами.

Statement of the problem. Building the educational space of an educational institution in accordance with the values of human-centered philosophy and pedagogy involves the formation of humanistic values of future teachers, personal maturity, broad outlook, high level of education, as well as the practical ability to create an educational environment that is consistent with these values, in particular inclusive, to build relationships with children on the basis of equal opportunities, equality, trust and honesty.

The modern educational process is not only about imparting knowledge, forming professional skills and abilities of future specialists, developing their thinking, but also teaching them forms, methods and means of independent knowledge acquisition, which is facilitated by innovative teaching technologies and the development of research skills. According to I. Zyazyun, an important trend in innovative didactic research is «a combination of different types of over-subject learning activities not only in procedural manifestations, as ways of building learning, but also in content, that is, as objects of learning, mastering (from research learning to research learning, from learning through discussion to discussion learning, etc.» [11, c. 5].

Therefore, the desire to improve the quality of training makes educational institutions constantly improve the content and technology of the educational process. The development of new methods and techniques of teaching, forms of organizing the educational process, and the use of fundamentally new teaching aids open up wide opportunities for introducing the achievements of science and practice into the process of professional training.

Analysis of recent research and publications. Studying the scientific works of I. Dychkivska [9]; L. Shevchenko [18]; E. Shmatkova, D. Kovalenko [20]; P. Mitchell [4]; T. Sakamoto [7], etc. allowed us

to conclude that the pedagogical system is ultimately determined by educational technology, which should be mobile and, accordingly, capable of rapid change, adaptive to the requirements of students, teachers and, in general, to the realities of life. Many technologies have similarities in their goals, content, methods, and tools and are classified according to certain features and properties, and the process of developing a particular innovative pedagogical technology is called design. This is explained by the fact that the system design process is carried out by ensuring that a particular technology is consistent with the existing organization of the pedagogical process. Thus, at the stage of system design, the issues of organization and technique of the pedagogical process merge with technology, the project of the pedagogical system as a whole becomes technological in its content, and the organization and methodology of the educational process in it act as aspects of a single education technology.

Researchers (M. Berehova [8]; K. Hirsh-Pasek et al. [2]; R. Gurukkal [1]), who study the problems of optimal selection of innovative and digital learning technologies in accordance with the content of learning, including correctional and developmental in an inclusive educational environment, propose various schemes for the integration of educational technology products and digital technologies. For example, M. Berehova proposes to implement didactic and practical training of «future correctional teachers to work in an inclusive educational space» [8] through the use of passive, active and interactive methods, techniques and forms of methodological work; K. Hirsh-Pasek et al. (K. Hirsh-Pasek et al.) [2] implement a scheme for training future teachers to identify and apply potentially effective educational programs based on four factors: active, engaged, content and socially interactive learning. Other schemes

for the development and identification of alternative technologies for combining educational digital applications and methods of using educational programs that are consistent with the known processes of inclusive education and development of children with special educational needs can be proposed.

It should be noted that «the overall positive effect is achieved by combining different groups of innovations that take into account the problems of professional training and solve promising tasks in the field of education» [19, p. 159].

We agree with K. Hirsh-Pasek et al. who believe that students learn best when they are actively involved in the educational process, work with educational materials and are not distracted by «peripheral» elements, have meaningful experiences that relate to their lives, and socially interact with others in the process of learning new material [2]. «In general, innovative pedagogical technologies can represent completely new ways of learning; repeat the known ones with minor changes; clarify, specify the known ones with essential elements, or they can reflect the best way to use existing learning tools» [19, p. 174].

The purpose of the article. To reveal the peculiarities of the use of innovative technologies in the training of future teachers during their studies at a higher education institution.

Summary of the main material. The result of preparing future teachers for inclusive education depends on the environment of the educational institution, and the variety of pedagogical technologies (for example, technology strategy, modeling of pedagogical situations, technology for designing an individual corrective educational route, group work technologies, etc.), which are interrelated, can be revealed and combined in the hands of an experienced teacher, because the conditions for their use depend on many factors, and the constructive combination of traditionally used teaching tools is optimal when designing and developing a specific learning technology.

It should be noted that technology and tools have always been an integral part of teaching. With the onset of the COVID-19 pandemic and, especially, Russia's military aggression, which turned online learning into the only alternative, digital learning has become the norm not only in higher and secondary education institutions, but also in preschool education institutions. Researchers agree that digital technologies cannot improve educational processes as such, but their use can launch and enable the use of innovative technologies that make learning more effective and attractive. Thus, it is especially important to prepare future teachers for the effective and pedagogically balanced

use of modern learning technologies, since the simple introduction of digital technologies in the educational process is not enough [6, p. 509].

It is important to develop in the future teacher the ability to recognize the need for new knowledge, quickly and effectively, independently or in collaboration with others, to learn new material, solve problem situations, etc., which can be achieved through the implementation of a competency-based approach, which is the basis of modern approaches to shaping the content of education and developing readiness for future professional activities. The constant support and motivation of students, the creation of social presence and activity are extremely important, especially in the context of online learning. Military aggression has emphasized the value of human connection and clearly demonstrated the need for individual support for each participant in the educational process.

Therefore, the introduction of such technologies as experience exchange, modeling of pedagogical situations and professional activities; the use of online technologies in the process of group work, coaching is extremely important for motivating students, as well as for organizing cooperation, during which students form and expand basic concepts, experience and understanding in the process of discussion and exchange. Let us consider examples of their implementation in the process of preparing future teachers for inclusive education in educational institutions in more detail.

Master classes, online discussions

«A master class is an effective form of transferring knowledge and skills, sharing teaching and learning experience, the central link of which is the demonstration of original methods of mastering certain content with the active role of all participants in the class. A master class is a special form of training based on practical actions of showing and demonstrating creative solutions to certain cognitive and problematic pedagogical tasks» [14].

An online discussion is «a discussion of an urgent problem about which there are several points of view, aimed at finding ways to solve it» [15] using online technologies. Holding discussions involves arguing the positions of participants, consistency and clarity of statements and views.

Conducting master classes and online discussions is of particular value for the formation of students' communicative competence, as it provides an opportunity to freely exchange thoughts and ideas on a given topic (problem situation) through modeling pedagogical situations and professional activities; technologies of group work, integrated and contextual

learning, development of critical thinking, designing an individual correctional and educational route, online exchange of experience between students and teachers, and with the participation of invited guests.

The advantage of these methods is the motivation and activation of students' cognitive activity through clarifying and comparing different points of view, analyzing statements, and studying innovative experience.

In the process of discussion, students can better understand the material being studied, familiarize themselves with and agree/disagree with other points of view, use the knowledge gained during the discussion, present their ideas reasonably, argue and persuade. It is very important to develop and follow a plan for such online activities in order to avoid unexpected results and help students strengthen their own (correct) opinion, try to accept and understand other points of view.

The introduction of such methods into the educational process involves its transfer from the level of pedagogical influence on students to the level of personal interaction with them, i.e., their adoption of a subjective position in joint activities with the teacher. The indicators of the formed subjective readiness for cooperation, co-creation, readiness to implement inclusive education are: organization, awareness, cognitive activity, development of imagination, analysis and synthesis of new material, emotional attitude to work, readiness to jointly solve the task, positionality to solve it through replaying different situations, development of generalization skills, highlighting the most important.

Brainstorming sessions

This is a method that involves participants expressing ideas, thoughts, and suggestions to find a solution to a problem. As a rule, brainstorming includes exercises aimed at developing as many ideas or more creative solutions as possible. There are three basic rules to follow when conducting it:

1. The more participants generate new ideas, the better. The task of the facilitator is to encourage participants to share what is hidden in their subconscious, to organize the creative process on an intuitive level, to translate quantity into quality through modeling pedagogical situations and professional activities; application of technologies of group work, integrated and contextual learning, development of critical thinking, support for research learning (IBL); SMART technologies; online exchange of experience; technology strategy.

2. No criticism. The purpose of brainstorming is to create a pool of ideas, so all ideas, even fantastic

ones, are welcome. During brainstorming, all restrictions are removed, which helps to unleash the creativity and creativity of future educators. In the process of organizing a brainstorming session, participants can not only generate new ideas, but also share and develop them through teamwork.

3. Sticking to the plan. During a brainstorming session, participants generate different ideas and solutions, and then begin to discuss and narrow them down to the best options. It should be remembered that only purposeful and time-limited activities are productive, while uncontrolled outbursts of creativity tend to fail. For example, participants analyze a topic from different angles, come up with ideas, write down their thoughts, and then can either sort or prioritize them. Exploring different points of view, moving away from stereotypical forms of decision-making, can give the team the opportunity to continue developing these ideas and make them more realistic.

Both during brainstorming sessions and other types of activities, it is necessary to ensure technological integration, starting with the selection of the appropriate technology and ending with its implementation in the educational process. Future educators should know how to effectively use digital technologies, pedagogy, psychology, methodology, and subject matter content in inclusive education in an educational institution. The formation of such knowledge and skills is facilitated by the use of an innovative technology – a technology strategy – in the educational process. At the same time, Kirschner P. et al. classify teacher support as metacognitive, procedural, contextual, and technical. Scientists point out that although unguided or minimally guided learning approaches are very popular and intuitively attractive, these approaches ignore both the structures that make up the human cognitive architecture and the empirical research data over the past half century, which consistently indicate that minimally guided learning is less effective than learning approaches that emphasize guiding the student's learning process [3].

Here is an example of a brainstorming session in the classroom in the discipline «Psychological and Pedagogical Support of Children with Special Educational Needs» that would combine technology strategy, modeling of pedagogical situations, technology for designing an individual correctional educational route, and group work technologies.

Objective: using brainstorming ideas, create a technology strategy for creating a universal (inclusive) design in an educational institution.

Progress of work: Information message. Creating a modern universal design in preschool education

(accessible, safe, developmental, most suitable environment) allows to effectively use the potential of different models of organizing the educational process with the use of modern technologies, educational programs and services that meet the developmental characteristics of all preschool children, including those with special educational needs or belonging to indigenous peoples, national minorities of Ukraine, and also create the prerequisites for ensuring continuity between preschool and primary education [12].

Stage I. The instructor emphasizes that before starting work, it is necessary to understand the peculiarities of barrier-free human space.

Participants are asked to answer the following questions using brainstorming and an open microphone.

- «What physical devices help us move around with heavy luggage on the street and in buildings?»
- «What physical aids help us navigate in unfamiliar environments?»
- «How do physical aids help people with special needs?»
- «Do we need to change the conditions and adaptations in cities and towns? Where is it needed more?»
- «Who needs universal design?» (parents with small children; children in schools; patients in hospitals; children under 7 years old; elderly people; people with disabilities; pregnant women; people with a large body weight; people of short or tall height; any person who is less attentive or less mobile at a certain period of time, etc.).

The students come to the conclusion that universal design is important not only for people with disabilities, but also for most people in our society.

The teacher announces the main idea: «Universal design is a strategy to ensure that the design and components of any environment, product, communication, information technology, or service are equally accessible or understandable to all and meet the requirements of shared use».

Stage II. The teacher announces the main idea: «Universal design in education is the design of objects, environments, educational programs, and services to maximize their suitability for use by all individuals without the need for adaptation or special design» [10].

Participants brainstorm ideas by answering the question: «How can the educational environment support the success of all children, regardless of their individual characteristics?» (The group environment should provide opportunities for children with different learning styles, life experiences, cultures,

languages, preferences, etc. The environment has a huge impact on children's cognitive, social, emotional and physical development. By creating a physically and psychologically safe and stimulating environment, the teacher contributes to the development of children. Exploration and play, independent and group activities, and a variety of resources promote interaction between children and children and adults. «If the preschool environment is comfortable, well-organized and attractive, it is conducive to the child's learning and development. When the environment reflects children's interests, they enjoy being there, and this increases their ability to learn. Well-organized environments promote play, independence, socialization, and problem solving. In this case, the physical environment empowers children, allowing them to develop self-regulation and self-discipline. In this case, it is not the teacher who controls children, but the environment that creates the conditions for this to happen naturally» [5].

The third stage. Making an interactive poster using the Fishbone method. The purpose of the task: in small groups to discuss and identify the special needs of children and ways to organize the educational environment using universal design strategies. Provide opportunities for participants to demonstrate their own understanding of the use of universal design strategies in education and hear the opinions of other participants (Fig. 1).

Creation of a virtual methodological manual.

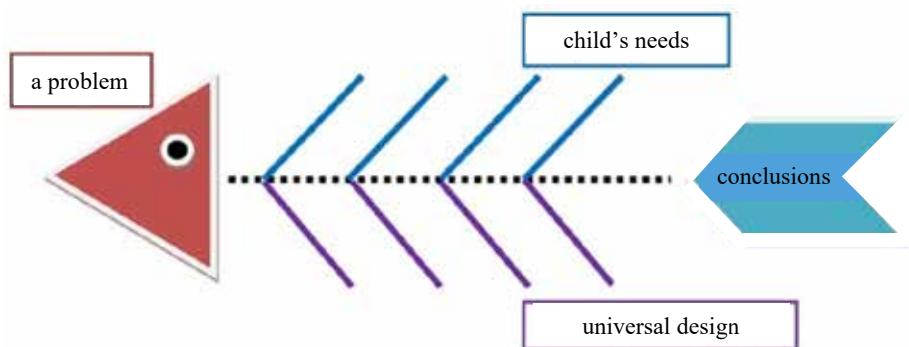
The purpose of the task is for students to design a resource room and media library, taking into account the necessary areas, equipment and tools for working with children with special educational needs.

The advantage of the integrated use of such technologies is that it gives students the opportunity to freely express non-standard solutions, which contributes to the development of creative and critical thinking. This method can also be used in the educational process as a separate form of organizing learning activities and as an auxiliary tool in other types of classes.

Forming the readiness of future teachers for professional activity involves a significant practice-oriented focus of training. Practical training is a link between theoretical learning and future independent work of specialists, a significant component of the formation of readiness for professional activity, the most important means of ensuring the competitiveness of a future specialist.

Coaching (case coaching, e-coaching)

«Coaching is a modern technology created to develop the potential of people and teams, to achieve pre-agreed goals and radically change behavioral



**Fig. 1. Presentation of group works «Gallery of Thoughts», discussion
The fourth stage**

patterns, which leads to the disclosure of the inner potential of the individual» [16].

The use of case coaching in the educational process of preparing future teachers for inclusive education is effective and appropriate, as it combines the implementation of learning situations or cases and coaching to achieve a specific goal [17, p. 49]. This combination allows to create an atmosphere of both cooperation and competition in the classroom, to eliminate conflicts, to develop professional and moral standards, rules of ethical communication, to establish continuous interaction between the teacher and students, as well as between students during group work, which provides each participant with a thorough and comprehensive understanding of themselves, the interlocutor and the studied fragment (inclusive learning), creating conditions for a multifaceted and multilevel understanding of knowledge and skills through their practical application. The main task of the coach is to reveal the hidden potential of the participants, free them from restrictions and negative attitudes through the development of self-awareness and a sense of responsibility, and consolidate knowledge, skills and behavior in certain situations.

In her research, O. Negrivoda suggests using the ABC technique to compile a coach's case, which consists of three steps: understanding the situation (A), developing ideas (B), and options for resolving the situation (C). At the first step of «working with the situation, students must realize it, feel the truth, give it a name to reflect its essence, find contradictions, if any, and determine the amount of information provided. Step B requires realizing what could be better or what idea could be used to achieve the desired in this situation, or whether the previous truth helped to achieve the desired result.

Also at this step, you need to give a name to this situation after such a review. And, as a rule, from the

problematic nature of the situation, students should come to a neutral view, which is necessary to understand how to do better in step C» [13], where it is necessary to offer specific options for resolving the situation.

Let's look at the case study «Self-confidence».

Situation. While observing a new boy in the classroom, the teacher notices that he avoids emotional contact, does not communicate with other children, and withdraws.

A. Questions for students (to understand the situation)

- What do you think about this situation?
- How do you feel in this situation?
- What additional information do you need to understand the situation?

Students' answers: «This situation is typical for children with autism spectrum disorders». «It is necessary to clarify whether the diagnosis of ASD has been made». «We need to find out how the child behaves and communicates at home with family members».

B. Questions for students (to develop ideas)

- What could help you to solve this situation?
- What quality, ability, feeling do you need in this case?

Students' answers: «A teacher should have the following skills: to be an effective verbal and non-verbal communicator, able to respond to the diverse communication needs of children, parents and other professionals». «To know child psychology, the specifics of working with children with special educational needs, and simply to love and respect children». «To learn to be tolerant of children's peculiarities».

C. Questions to the students (the best way to solve the situation)

What conditions are needed to make inclusive work successful and increase self-confidence?

Students' answer: «To increase the level of psychological and pedagogical knowledge in the field of

inclusion: to develop an understanding of the peculiarities of psychophysical development of children with special needs, the psychology of pedagogical communication with such children, etc». «To raise awareness of correctional and developmental methods, peculiarities of communication with this category of children». «Ensure an individual approach to children with autism spectrum disorders, create favorable conditions for their stay in an educational institution». «To ensure easy adaptation to the educational institution, gradual establishment of contact with adults. Let them get used to the new conditions, environment, social environment». «Ensure interaction with different specialists». «Involve the child in work in a micro group of children with normative development, during which the child's interaction with peers is promoted in every possible way. This is best done in an inclusive group with a small number of children». «Establish interaction with the child's parents. Provide them with emotional support, conduct educational work».

It should be noted that such situations should be visual and detailed. Case studies should reflect situations of professional activity as much as possible. Despite the artificial environment of the situations, their problem or plot becomes practical, i.e., as close as possible to real professional activity. The case serves as a means of gaining new knowledge about the situation and behavior in it and can become the basis for the formation of a portfolio (personal website) of a teacher of an educational institution.

Today, the use of online experience and tools to support coaching relationships is particularly widespread. E-coaching transfers the learning process online and expands the possibilities of organizing communication and learning by supplementing it with resources and tools using digital technologies. This type of coaching may also be called «distance coaching», «remote mentoring» or even «telementoring».

The advantage of using e-coaching is that participants do not depend on time and space constraints,

and (if necessary, or due to unfavorable conditions (alarms, power outages, etc.) may not even meet with their coach in person. In addition, a comprehensive combination of different methods and tools (tests, online questionnaires, modules, podcasts, exercises, interactive exercises, mind maps, and other tools) create a special active environment that makes participants think and work actively; ensures the formation of analytical thinking, teamwork skills, development of creative abilities, and interest in future professional activities in inclusive education.

The use of innovative technologies as a means and mechanism for the formation of inclusive competence of future teachers creates additional opportunities in the performance of tasks focused on the development of motivational, operational, design, and moral and ethical components.

Conclusions and Prospects for Further Research. Thus, the study suggests that the appropriate combination of innovative and digital technologies creates significant potential for preparing future teachers for inclusive education, stimulating their psychological readiness to work in an inclusive educational environment, promoting integration and developing inclusive competence.

Technological innovations, globalization, coaching, the use of measurable results and practices, as well as the growing need for ethical standards are some of the trends that determine the specifics of inclusive education.

The features of the use of innovative technologies in the training of future specialists are revealed and it is found that the content of technologies based on personality-oriented learning provides a high level of mastery of professional competence. Prospects for further research are seen in determining the organizational and pedagogical conditions for the effective implementation of innovative teaching technologies in the practice of higher education institutions.

REFERENCES:

1. Gurukkal R. Techno-Pedagogy Needs Mavericks. *Higher Education for the Future*. 8(1). 2021. P. 7–19. DOI: <https://doi.org/10.1177/2347631121989478>.
2. Hirsh-Pasek K., Zosh J.M., Golinkoff R.M., Gray J.H., Robb M.B., & Kaufman J. Putting education in «educational» apps: Lessons from the science of learning. *Psychological Science in the Public Interest*. 2015, 16 (1). P. 3–34. DOI: <https://doi.org/10.1177/1529100615569>.
3. Kirschner P.A., Sweller J., & Clark R. E. Why minimal guidance during instruction does not work: An analysis of the failure of constructivist discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*. 2006. 41(2). C. 75–86.
4. Mitchell P. D. *Educational Technology : Panacea or Placebo* II Bajpai A. C. and Leedham. (Edc.) *Aspects of Educational Technology*, 4. London : Pitham, 1970. 233 p.

5. Northern Illinois University Center for Innovative Teaching and Learning. Role playing. In Instructional guide for university faculty and teaching assistants. URL: <https://www.niu.edu/citl/resources/guides/instructional-guide/role-playing.shtml> (date of access: 20.04.2024).

6. Oseredchuk O., & Sorochan M. ats. Application of Information Technologies is a Necessary Condition for Qualitative Monitoring of Higher Education and Modernization of Educational Process . IJCSNS International Journal of Computer Science and Network Security, 2022. VOL. 22 No. 3. P. 501–510. DOI: <https://doi.org/10.22937/IJCSNS.2022.22.3.64>

7. Sakamoto T. The Roles of Educational Technology in Curriculum Development. Curriculum Development by Means of Educational Technology. Paris, Centre for Educational Research and Innovation Publ., OECD, 1974, 218 p.

8. Берегова М. І. Дидактико-практична підготовка майбутніх корекційних педагогів до роботи в умовах інклюзивного освітнього простору: дис. ... канд. пед. наук : 13.00.03. Київ, 2019. 235 с.

9. Дичківська І. М. Інноваційні педагогічні технології : підручник. 3-тє видання, виправлене. К. : Академвидав, 2015. 304 с.

10. Закон України «Про освіту». URL: <https://zakon.rada.gov.ua/laws/show/2145-19#Text> (дата звернення: 20.04.2024) Середовище, що належить дітям. Порадник для педагогів закладів дошкільної освіти. Упоряд. Н. Софій, Ю. Найда. Київ 2019. 68 с.

11. Зязюн І. А. Сучасні дидактичні моделі і логіка учіння. Сучасні інформаційні технології та інноваційні методики у підготовці фахівців : методологія, теорія, досвід, проблеми : зб. наук. пр. Київ-Вінниця : ДОВ «Вінниця», 2000. С. 4–7.

12. Інклюзивне навчання у закладах загальної середньої освіти: керівництво для тренера : навч.-метод. посібн. URL: http://posibnyk.nus.org.ua/wp-content/uploads/HANDOUT-for-trainers_TOT-Sept-2018_corrected-final1-new.pdf (дата звернення: 26.04.2024).

13. Негривода О. О. Використання навчальних ситуацій (кейсів) у контексті професійно орієнтаційної роботи. URL: https://scienceandeducation.pdpu.edu.ua/doc/2011/2_2011/26.pdf (дата звернення: 20.04.2024).

14. Організація та проведення майстер-класів : метод. рекомендації. URL: <https://naurok.com.ua/scho-take-master-klas-metodichni-rekomendaci-160297.html> (дата звернення: 17.04.2024).

15. Основи дискусії: як зробити уроки цікавими. URL: <https://naurok.com.ua/post/osnovi-diskusi-yak-zrobiti-uroki-cikavimi> (дата звернення: 20.04.2024).

16. Основи коучингу : навч. посібн. О. О. Нежинська, В. М. Тищенко. Київ; Харків : ТОВ «ДІСА ПЛЮС», 2017. 220 с.

17. Сорочан М. П. Використання кейс-технології у контексті підготовки майбутніх вихователів до професійної діяльності в умовах інклюзивного навчання в закладах дошкільної освіти. Збірник тез доповідей Міжнародної науково-практичної конференції «Наука, освіта, технології і суспільство: світові тенденції та регіональний аспект», Рівне : ЦФЕНД, 2023. Ч. 1. С. 49–50. URL: <http://www.economics.in.ua/2023/01/11-1.html>

18. Шевченко Л. С. Підготовка майбутніх учителів технологій до інноваційної педагогічної діяльності : монографія. Вінниця : ТОВ «Друк», 2018. 392 с.

19. Шевченко Л. С. Теоретичні і методичні засади підготовки майбутніх учителів технологій до інноваційної педагогічної діяльності : дис. ... докт. пед. наук : 13.00.04. Вінниця, 2019. 703 с.

20. Шматков Є. В., Коваленко Д. В. Інноваційні технології навчання : навч. посіб. для студентів вищих навчальних закладів інженерно-педагогічних спеціальностей. Харків : ВПП «Контраст», 2008. 172 с.