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INNOVATIVE ACTIVITY AS A FACTOR IN THE PROFESSIONAL DEVELOPMENT OF PRESERVICE TEACHERS

The study analyses the concepts "innovative activity", "professional development of preservice teachers"; the essence of the concept "training of preschool teachers in innovative activities" is defined. The difficulties and challenges of organising teachers' innovative activities are identified. The article describes the main preservice preschool teacher training components in innovative activities. The article specifies the peculiarities of training would-be teachers of preschool education under conditions of a higher education institution. Some examples of digital tools used in the organisation of innovative activities for

preservice preschool teachers as well as the topics of innovative projects for higher school students are presented.

***Key Words**: innovative activity, professional development, training of preschool teachers in innovative activities*

Relevance. At present, the development of the education sector at the European level requires the training of qualified teachers capable of organising their own innovative activities, which contributes to the development of their professional competence, adaptation to modern educational requirements and ensuring its quality. Innovative training allows us to create an educational environment that meets the needs of society, the development of technology and the challenges of the modern world. Teachering innovation is one of the key components of the modernisation of education, aimed at ensuring its quality, relevance and compliance with modern social challenges. Due to global changes in education, technological progress and the integration of the latest approaches, the development of preservice teachers' readiness for innovation is becoming a priority task for the vocational education system.

Scientists (V. Andrushchenko, L. Burkova, L. Vashchenko, I. Hryshyn, V. Husev, V. Danevska, L. Danylenko, I. Dychkivska, V. Dovbyshchenko, M. Drobnokhod, H. Yevdoshenko, V. Kremin, V. Kuz, M. Ostrovska, O. Padalka, V. Palamarchuk, I. Parkhomenko, O. Pekhota, H. Sazonenko, I. Smoliuk, N. Sokolovska, O. Pometun, M. Talapkanych, N. Fedorova, T. Kheyk, V. Khymynets, V. Khlebnykova, O. Shpak, Y. Shukevych et al.) consider innovations from the perspective of the systemic, activity-based, technological, creative and competence-based approaches.

At the same time, in some studies (E. Byelkina, O. Bolotova, S. Boltivets, K. Bila, Y. Burakova, V. Vayner, O. Kozlenko, K. Krutiy, K. Kutsenko, H. Lavrentyeva, N. Lysenko, I. Lytovchenko, O. Linnyk, YE. Lipanova, L. Makarenko, S. Maksymenko, M. Maksymovych, V. Nesterenko,

M. Otroshchenko, D. Petlytska, T. Pirozhenko, O. Polyevikova, T. Ponimanska, N. Roshchyna, O. Rudik, V. Semyzorova, H. Syrotenko, O. Stoyko, I. Tymofyeyeva, O. Khmelnytskyy, L. Shvayka and others), scholars point to the need for a radical modernisation of the education sector and the existence of the problems related to innovative development of the education system, in particular preschool education, the readiness level of preschool teachers for innovative activities, including the use of digital tools and technologies.

According to L. Danylenko (Danylenko, 2004), V. Khymenets (Khymenets, 2009), the modern educational system faces the task of professional development of preservice teachers, formation of their innovative potential, ability to quickly transform the information received in the process of dynamic digital life, quickly solve global issues, select innovative technologies depending on the circumstances, strategically anticipate and think through activities, think outside the box and creatively. According to scientists, preschool teachers need to overcome conservatism in the educational environment of preschool education and existing stereotypes of pedagogical work in order to test and implement innovations and digital tools.

It should be noted that a number of studies (Berezyuk, 2017; Danylenko, 2004; Khymenets, 2009) indicate the lack of a holistic concept of training preservice preschool teachers in innovative activities as a factor in their professional development. Currently, traditional training in higher education is conservative, which affects the quality of educational services in general. However, the events of recent years, in particular military events and the global pandemic, have raised the issue of introducing innovative technologies into the educational process, organising online learning and using digital tools in the work of teachers, which has led to the need to improve their training in innovative activities. Innovation has become one of the ways to motivate higher education students, an important condition for their professional development, and, consequently, for the development of a modern specialist capable of undergoing

rapid and qualitative changes in the educational process in accordance with the requirements of the times.

The aim of the study is to analyse the peculiarities of training future preschool teachers in innovative activities.

Summary of the main material. The problem of training preservice preschool teachers in innovative activities within the educational environment of higher education institutions is due to the rapid development of innovative technologies, global digitalisation and digitalisation of the educational process as well as increased requirements for the quality of educational services.

In general, innovation is seen as the process of creating, implementing and disseminating new ideas, methods, technologies or products aimed at qualitatively updating a particular area of activity. In the field of education, innovation involves the search for and implementation of effective pedagogical, organisational, technological and methodological solutions that improve the educational process, the development of children and teachers, and the quality of education in general.

The main characteristics of teachers' innovative activity are: novelty (the use of approaches, ideas and technologies that have not been used before); relevance (compliance with the current needs of society, the educational system and participants in the educational process); creativity (involvement of new ideas and methods in solving current problems); practical orientation (focus on real results that improve the educational process); systematic (implementation of innovations as a holistic approach covering all levels of the educational system).

Based on studies (Berezyuk, 2017; Kaluska, 2013), we note that the introduction of innovations in the work of preschool teachers is a complex and multifaceted process associated with certain difficulties and challenges that affect the effectiveness of innovation, namely:

- lack of the necessary material and technical resources (e.g., certain equipment, including interactive whiteboards, tablets, computers, multimedia projectors, etc);

- insufficient funding for preschool education institutions to introduce innovative technologies;

- low level of training of preschool education teachers, lack of knowledge and skills in the use of innovative technologies in the work with children and pupils' parents, lack of systematic professional development of teachers in the implementation of innovative approaches, perception of innovations as an additional burden or threat to the usual way of working, reluctance of some teachers to leave their comfort zone and introduce new tools, and, therefore, innovative activities require a lot of energy and motivation, which can lead to professional burnout;

- insufficient methodological support, lack of instructions, programmes, guidelines and manuals adapted to introduce innovations in preschool education, lack of effective coordination between teachers and methodologists;

- lack of time culture, teachers' workload with their main duties, which leaves no time for implementation and development of innovations, difficulties with planning innovative activities in the context of daily employment;

- failure to take into account the age-specific characteristics of preschool children, as some innovative technologies and digital tools are not suitable for use when dealing with preschoolers due to their age characteristics, as well as the need to adapt complex techniques to the level of children's development;

- parents' unpreparedness and lack of desire to use innovations (they may not understand or support the use of innovative approaches in education), lack of systematic educational work with parents on the benefits of innovative methods;

- adapting to rapid changes in education, the constant development of new technologies requires preschool teachers to be flexible and ready for self-education, and updating the standard of preschool education requires a corresponding update of methods;

- integrating innovations into traditional methods, maintaining a balance between innovative and traditional approaches in the domain of children's

education, finding ways to harmoniously introduce innovations without losing the effectiveness of proven methods;

- ensuring an inclusive environment, innovative activities of preschool teachers should take into account the needs of children with different abilities and ensure equal access to education;
- attracting additional funding, participation of preschool teachers in grant programmes and projects aimed at developing education, cooperation with parents and the community to update the material and technical base, etc.

Thus, innovative activity is a factor in the professional development of preschool teachers. The professional development of would-be preschool teachers is a long and multifaceted process that includes the formation of personal, professional and pedagogical qualities necessary for the successful implementation of educational activities. Let us describe the main aspects of innovation as a factor in the professional development of preschool teachers: the formation of a creative approach to the educational process; innovations help teachers to adapt to a rapidly changing information environment; the use of modern methods and technologies improves the quality of educational activities; innovative activities contribute to the improvement of teachers' knowledge and skills in various fields, which allows integrating the latest ideas and approaches into the practice of preschool education, motivating them to continuous self-development, stimulating teachers to search for new ideas, training and professional development, promoting the formation of a new type of pedagogical thinking focused on the development of children in the modern world, etc.

The scientific analysis of studies (Danylenko, 2004; Khymenets, 2009) allows us to consider the innovative activity of a preservice preschool teacher as a conscious active interaction aimed at understanding, transformation and implementation of scientific achievements, didactic developments and digital products, which significantly improves the pedagogical skills of the teacher and the educational environment of the preschool educational institution.

Let us consider the main directions of innovative activity of preschool teachers in more detail: development of unique pedagogical methods and technologies in accordance with the needs and age characteristics of children; integration of digital technologies (use of multimedia products, educational applications and platforms in the work with children and parents, setting up and using digital equipment, developing own digital materials, etc); organisation of an inclusive environment, introduction of innovative methods of working with children with special educational needs; application of modern innovative pedagogical technologies (Montessori technologies, Roger Emily's methods, elements of neuropsychology, project method, etc).

In the context of training would-be preschool teachers, innovation is crucial for the formation of their professional competence, development of creativity and ability to adapt to changes in society and technology.

We consider the training of preservice preschool teachers in innovative activities as a systematic, multi-stage process that enables higher school students to master the ideas about the possibilities and the ways of finding new pedagogical achievements and introducing innovative tools, methods, technologies into the educational environment of the preschool education institution, teaching practical skills and abilities to implement computer and digital tools in the search, dissemination and implementation of the best pedagogical practices. The innovative activity of preschool teachers has features related to the specifics of working with preschool children, where the development of personality, emotional sphere and creative abilities are under focus.

The main components of training a would-be preschool teacher in innovative activities in a higher education institution are as follows:

1) formation of innovative culture and mentality: development of creative thinking of preschool teachers, creation of conditions under which preservice teachers will be able to generate new ideas and approaches to the educational process, awareness of preschool teachers of modern trends, methods and

technologies used in education, the ability to critically evaluate their own activities and apply new approaches to improve the quality of education, readiness for change (formation of would-be preschool teachers' understanding that continuous development and implementation of innovations are an integral part of modern education), ethical component, adherence to academic integrity (use of innovative approaches must comply with pedagogical, ethical and legal standards);

2) targeted methodological training: the knowledge of modern innovative technologies (digital tools, interactive teaching methods, the STEM approach, project activities, gaming technologies, sensor technologies, etc), modelling of pedagogical innovations (creation of models-situations in the educational process that help preschool teachers to master the skills to develop innovative teaching methods and tools, to select and adapt innovative methods in accordance with the age and individual characteristics of children), analysis of pedagogical experience (studying examples of successful implementation of various innovative technologies), application of an integrated approach that combines different fields of knowledge and activities;

3) training in managing own innovation activities and reflection: development of organisational skills (planning, coordination and evaluation of innovations in pedagogical activities, continuous improvement of his/her own pedagogical activities based on the results obtained), teamwork (learning to interact with colleagues, parents of students, children in the process of implementing innovations), change management (adaptation to new conditions);

4) integration of innovative technologies into the educational process: digitalisation of education (involvement of would-be preschool teachers in the use of digital tools, multimedia resources, online platforms for organising the educational process), the use of interactive teaching methods (application of various trainings, case method, role-playing games, brainstorming sessions, etc. in the training of preservice preschool teachers in innovative activities), organisation

of project activities (the use of design methods that allow would-be preschool teachers to implement ideas in practice);

5) psychological and pedagogical support, mentoring: motivating preschool teachers to innovate (promoting interest in innovation, demonstrating its effectiveness and significance in professional implementation), working against the resistance to change, conservatism (helping higher school students overcome their fear of innovation, developing confidence in their abilities and creativity);

6) practical training: pedagogical practice, participation in practical projects (involvement of preservice preschool teachers in real innovative projects in the context of preschool education), internships (practical activities in higher and preschool education institutions where the latest approaches and technologies are used), research work (implementation of educational projects, qualification (course/term, master's) works on the problems of introducing innovations into the educational process), continuous professional development (participation in trainings, seminars, master classes and other events to learn new methods of work);

7) implementation of a creative approach: developing the ability of preservice teachers to organise a creative educational environment that stimulates children to discover new things on their own through playing, experimentation and creativity, using and developing innovative forms of organising the educational process (games, workshops, trainings, video classes, art therapy, etc.), creating joint products (drawings, mini-performances, experiments);

8) pedagogical communication: teacher-student partnership (organisation of consultations and trainings), cooperation with other teachers and institutions (exchange of experience, participation in professional associations), involvement of parents in cooperation.

The training of would-be preschool teachers in innovative activities at the Faculty of Preschool Pedagogy and Psychology at the State Institution "South Ukrainian National Pedagogical University named after K. D. Ushynsky" at the first (bachelor's) and second (master's) levels of higher education is carried out

within the framework of the these comprehensive academic disciplines: EC (Educational Component) 09 “Information and Communication Technologies in Preschool Education”, EC 14 “Pedagogy and Psychology of Creativity”, EC “Computer Games in the Work with Children”, EC “Innovations in the Work of the Educator”, EC “Interactive Technologies in the Educational Process”. Preservice teachers of preschool education are introduced to Jackie Silberg’s game-based child development technologies and Makato Shichida’s child brain stimulation technologies, Cecile Lupan’s early childhood development technologies, George Kuisener’s “Coloured Counting Sticks” technology, Roger Emily’s project technologies, Roger Price’s “Drudley” technology, Carl Orff’s “Schulwerk” technology, the garland, incident and association method, J. Phillips’s “mass brainstorming”, and the pirate meeting method, the method “Dialogue between Don Quixote and Sancho Panza”, J. Rodari’s “Bin of Fantasies” technology, “Creative Problem Solving” technology (E. de Bono’s system), project technologies, G. Altshuller’s TOC (theory of constraints), etc.

As part of their theoretical and practical training, higher education students are introduced to the peculiarities of using digital tools in working with children, parents of students, learning and self-development. Their use in future innovative activities ensures the effectiveness of the educational process, expands opportunities for creativity and the development of professional competencies.

Digital tools greatly expand the possibilities for professional development of early childhood educators, allowing them to create interactive materials, organise distance learning and use modern methods. Some specific examples of these digital tools are given below:

1. Tools for creating educational materials (multimedia presentations, videos, e-books, posters, infographics, certificates, interactive electronic fairy tales, computer games, animation, creation of interactive exercises (puzzles, matches, tests): Microsoft PowerPoint, Prezi, Canva, StoryJumper, Scratch, LearningApps, H5P Minecraft: Education Edition, etc.

2. Tools for creating video and audio content (editing, recording and editing audio, creating audio stories or podcasts): Windows Movie Maker, Adobe Premiere Rush Audacity, Powtoon, etc.

3. Tools for organising interactive classes, game quizzes, knowledge testing, discussing ideas, group work, or creating projects: Kahoot!, Quizizz, Mentimeter, Padlet, etc.

4. Online learning tools (video conferencing, file sharing, group creating, assignment checking): Moodle, Google Classroom, Microsoft Teams, Zoom, etc

5. Tools for planning and organising work (planning tasks within project work, creating mind maps, online whiteboard): Trello, Miro, Google Keep, Notion, etc.

6. Tools for working with documents (collaborative development of texts, assignments, training materials, manuals, creation of interactive books): Google Docs, Microsoft Word, Adobe Acrobat, Book Creator, Flipsnack, etc

7. Tools for working with preschool children (platforms for interaction with children, communication with parents and management of the educational process, digital tools, interactive game resources): ClassDojo, ABCmouse, Starfall, Tiggly.

8. Tools for analysing and evaluating tasks (real-time responses, testing, surveys): Plickers, Formative, Google Forms, etc.

It is proved that the use of digital tools can make the innovative activity of preservice preschool teachers more effective, creative and interactive. They contribute to the development of professional competences, creative thinking and skills in working with modern technologies that meet the challenges of modern education.

Research activity, as a component of their professional training, is equally important in the training of would-be preschool teachers. Here are some examples of innovative projects focused on solving the current problems of preschool education, introducing modern technologies and methods, and creating a comfortable and safe educational environment for children: “Using interactive

games to develop the cognitive activity of preschool children", "Digital technologies as a means of improving the efficiency of the educational process in the preschool education institution", "Creating an educational and developmental environment using an interactive whiteboard", "Mobile applications for preschool education: analysis and integration into the work of a teacher", "Integration of STEM education into work with preschoolers", "Methods of teaching children the basics of digital literacy in a preschool institution", "Using animation as a tool for preschoolers' speech development", "Development of individual educational trajectories for children with special educational needs", "Creating a Sensory and Developmental Space in a Preschool Institution", "Development of preschoolers' creative abilities through project activities", "Multimedia corner: integration of digital technologies into the educational environment", "Play therapy methods for working with children who have experienced stressful situations", "Interactive forms of communication with parents to support the emotional well-being of children", "Adapting digital resources for working with children with special educational needs", "Using fairy tale therapy for socialisation of children from inclusive groups", "Using the LEGO-education methodology to develop children's creative thinking", "Development of a programme for the development of children's emotional intelligence", "Methods of early learning robotics in preschool", "Using the technology of mental maps for the development of preschoolers' logical thinking", "Analysis of the effectiveness of STEM methods in working with preschoolers", etc.

Conclusions. The analysis of the peculiarities of preparing preservice teachers for innovative activities as a factor of their professional development allows us to assert that modern conditions for education development require that teachers should not only master traditional methods, but also to be ready to introduce innovative technologies to improve the quality of the educational process. Today, innovation is one of the key competences of teachers, since the ability to implement innovative approaches in educational practice is an important

indicator of their professional competence. Innovative activities promote creativity, critical thinking, self-improvement and readiness to use modern digital tools. Innovative training is an important aspect of the professional growth and development of would-be preschool teachers, enabling them to work successfully within the modern educational environment and meet national and international standards.

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创新活动作为职前教师专业发展的重要因素

本研究系统分析了“创新活动”与“职前教师专业发展”的概念内涵，界定了“学前教育教师创新活动培养”这一概念的本质特征。研究识别了组织教师创新活动面临的主要困难与挑战，阐述了职前学前教育教师创新培养的核心要素，并特别探讨了高等教育机构培养未来学前教育教师的独特模式。

文中提供了职前幼儿教师创新活动中应用的数字化工具实例，以及高校学生创新项目的主题范例。

关键词：*创新活动，专业发展，学前教育教师创新培养*