

УДК 37.013.42:004:[376–056.26]
DOI: 10.33989/2226-4051.2022.25.256673

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THE USE OF DIGITAL TECHNOLOGIES IN THE TRAINING OF SOCIONOMIC SPECIALTIES FOR WORK IN INCLUSIVE EDUCATIONAL CONDITIONS

The article considers and analyzes the problem of using digital technologies in the preparation of specialists in socionomic specialties to work in an inclusive educational environment. The essences of inclusive education, the regulatory framework of inclusive education in Ukraine, and socio-pedagogical and correctional work with children with special educational needs are revealed. The role of a social pedagogue, speech pathologist, and speech therapist in working with children with special educational needs in inclusive education is determined. The article considers the possibilities of using digital technologies in the work of specialists in socionomic specialties in the context of inclusive education and ways to improve the system of their training.

The authors present an analysis of experimental research to determine the readiness of future specialists in socionomic specialties to use digital technologies in educational and professional activities. Positive and negative factors of digital technology use are determined.

Keywords: *inclusive education; a social pedagogue; a defectologist; a speech therapist; a child with special educational needs; a specialists; digital technologies.*

Introduction. Today it is determined that the main goal of social development is to create a “society for all”. It opens the way to the realization of rights and opportunities for every member of society, as well as provides equal access to quality education. The concept of modernization of Ukrainian education states the principle of equal access of children and young people to full life and education in accordance with their interests and preferences, regardless of family wealth, place of residence, and health.

The development and functioning of both special and inclusive education in modern conditions is considered a reflection of progressive change and a manifestation of care for children with special educational needs. Thus, the introduction of inclusive education as a modern model that provides quality education for children with psychophysical development and opens the way to the rights and opportunities of everyone, provides not only equal access to education, upbringing, and rehabilitation, but also requires qualified teachers.

The main tasks of inclusive education, which should be solved by educational institutions are the following: to ensure the diverse development of children and the realization of their abilities; to create an educational-correctional and rehabilitation environment to meet the educational needs of students with special needs; to create positive microclimate in an institution with inclusive education; to form active interpersonal communication of children in an inclusive educational space; to provide differentiated psychological and pedagogical, medical, social and correctional support for such children; to provide counseling and educational assistance to families raising children with special needs (psychological, pedagogical, medical, social and legal aspects), involving parents in the development of individual plans and programs for development, training, and social adaptation, etc.

In the context of the complex challenges of the modern world, which have taken place in our country (pandemic, war), the training of socionomic specialties, namely social educators, social workers, correctional educators, speech therapists, teacher assistants to work in an inclusive educational environment becomes relevant possession of not only innovative pedagogical, but also modern digital technologies, which is a consequence (result) of scientific and technological progress.

Therefore, there is a necessity for the formation of digital competence, which involves the possession of theoretical knowledge and practical skills in the use of specific digital technologies as a means of communication and providing content and procedural side of learning, education, and personal development in limited interpersonal interaction.

Analysis of recent research and publications. The problem of life of children with special educational needs is the subject of

research by theorists and practitioners of many branches of science: medicine, special (correctional) pedagogy, psychology, sociology, social work, social pedagogy and others. Problems of attracting children with special educational needs to study in secondary schools, their rehabilitation and adaptation to social norms are thoroughly considered in the works of scientists in social pedagogy I. Zvereva, A. Kapska, M. Reynolds, N. Sabat, O. Kholostova, etc. The basics and principles of implementing inclusive education in Ukraine are revealed by scientists S. Yefimova, A. Kolupaeva, A. Krykun, O. Martynchuk, O. Taranchenko and others. The issues of professional training on the basis of the competence approach of social and correctional teachers and their readiness to work in an inclusive educational space are the subject of research V. Berezan, V. Bondar, M. Galaguzova, A. Kapska, L. Mishchyk, S. Mironova, N. Pakhomova, V. Polishchuk, V. Synyova, E. Sinyova, D. Suprun, M. Sheremet and others. However, the issues of the possibility of using digital technologies in the work of socio-economic specialists in inclusive education, and the conditions and forms of training future professionals for such activities are studied, in our opinion, insufficiently, and some aspects were not the subject of scientific research.

Therefore, **the purpose of the article** is to highlight the legal framework and main areas of work of specialists in socio-economic specialties in an inclusive educational space; to determine the main advantages and disadvantages of using digital technologies in working with children with special educational needs in an inclusive educational environment; to outline the possibilities of using digital technologies in the work of specialists and ways to improve the preparation of students of socio-economic specialties to work in an institution with inclusive education.

Presenting main material. Modern science uses the term “inclusion” to describe the process of education of children and young people with special needs. In the general sense, inclusion is the process of increasing the degree of participation of all citizens in society, especially those with developmental disabilities. In foreign countries (Belgium, Great Britain, Denmark, Canada, Cyprus, Spain, USA, Sweden, South Africa), which have more than 30-40 years of

experience in the social integration of atypical children, the concept of “inclusion” replaces the concept of “integration”. Uniting (integrating) children with special educational needs and normal development in one class does not mean their full participation in the life of the team. “The purpose of an inclusive school is to give all children the opportunity for a full social life, active participation in the team, thus ensuring the fullest interaction and care for each other as members of society” (Сабат, 2008, p. 43).

Since the 1990s, the concept of “integration” in our country has been replaced by the term “inclusion”, which has a broader context, namely integration reflects an attempt to attract students with special educational needs to secondary schools, and inclusion involves adapting schools, their general philosophy to needs of all students. Inclusion needs to change at all levels of education, as it is a special system of education that covers the entire diverse contingent of students and differentiates the educational process, taking into account the needs of children of all groups and categories.

Most scholars and educators (N. Kvitka, L. Koval, A. Kolupaeva, N. Kompanets, A. Lapin, I. Lutsenko, O. Martynchuk, N. Sofiy, O. Taranchenko, etc.) note that inclusive education is an approach that helps to adapt the educational program, the learning environment to the needs of students with special educational needs that differ in their capabilities. Thus, one of the main tasks of inclusive education is to meet the educational needs in the school environment and beyond. Therefore, in order to implement the task, there is a need for professional training to work in an inclusive educational environment.

In order to prepare future pedagogues to work in an inclusive space, by Order of the Ministry of Education and Science of Ukraine “On creating conditions for ensuring the right to education of persons with disabilities” from 02.12.2005 № 691, introduced the discipline “Fundamentals of Correctional Pedagogy” (from 01.09.2006) in higher education institutions, which trained specialists in the direction of “Pedagogical Education”.

During 2009–2022, there were active positive changes in the implementation and realization of inclusive education in our country. It is reflected in the relevant legal documents and guidelines (Order of

the Cabinet of Ministers of Ukraine “On approval of the action plan for the introduction of inclusive and integrated education in secondary schools for the period up to 2012” from 03.12.2009 № 1482-r, Law of Ukraine “On Amendments to Legislative Acts on General Secondary and Preschool Education on the Organization of the Educational Process” from 06.07.2010 № 2442-VI, Resolution of the Cabinet of Ministers of Ukraine “On approval of the Procedure for the organization of inclusive education in secondary schools” from 15.08.2011 № 872, Resolution of the Cabinet of Ministers of Ukraine “On approval of the Procedure for the organization of inclusive education in general secondary education” from 15.09.2021 № 957 etc.).

In order to implement the state policy on ensuring the rights of children with special educational needs to receive a quality education, their integration into society in Ukraine, the Concept for the Development of Inclusive Education has been developed and approved (Order of the Ministry of Education and Science of Ukraine “On approval of the concept of inclusive education” from 01.10.2010 № 912). This document defines the legal and methodological basis for the implementation of inclusive education.

According to these changes, educational institutions could fully create special and inclusive classes and groups for education and upbringing of children with special educational needs; the government approved the “Procedure for organizing inclusive education in secondary schools”.

Therefore, in order to improve the system of teacher training and ensure quality education of children with special educational needs in general educational institutions, the Ministry of Education and Science of Ukraine recommended from 2012–2013 academic year to introduce higher education institutions that train teachers in areas (specialties) “Preschool education”, “Primary education”, “Social pedagogy” academic discipline “Fundamentals of Inclusive Education” in accordance with the program “Fundamentals of Inclusive Education”, developed by the Institute of Special Pedagogy of the National Academy of Pedagogical Sciences of Ukraine.

The inclusive environment provides psychological and pedagogical support for children with special educational needs. The

importance and functioning of the educational process for them have changed due to changes in the paradigm of learning and the introduction of a functional approach to social and educational services in Ukraine.

If until recently psychological and pedagogical support was considered as a systematic activity of a practical psychologist and correctional pedagogue (defectologist), and the work of a social pedagogue as a separate aid, today in accordance with the Model Statute on the team of psychological and pedagogical support of a child with special educational needs in the institution of general secondary and preschool education (Order of the Ministry of Education and Science from 08.06.2018 № 609), psychological and pedagogical support is a comprehensive system of measures for the organization of the educational process and child development, provided by the individual development program. It provides for the provision of psychological, pedagogical and correctional, and developmental services.

Accordingly, psychological and pedagogical services are a complex system of measures for the organization of the educational process and development of a person with special educational needs, provided by the individual development program and provided by the support team, which includes (taking into account the educational needs of the child with special educational needs) regular participants (employees of the educational institution) and involved specialists (medical worker of the educational institution, doctor, child assistant, specialists of the social protection system, children's services, etc.).

A social pedagogue in an inclusive environment provides social and pedagogical patronage of a child with special educational needs and his parents; identifies social problems that need to be addressed immediately, if necessary, sent to the appropriate specialists for assistance; studies the social conditions of development of a child with special educational needs; promotes the process of socialization of the child with special educational needs, its adaptation in the new team; informs the child with special educational needs and its parents about the network of out-of-school educational institutions, involves the child in clubs, sections, taking

into account its capabilities; provides recommendations to participants in the educational process on ways to effectively integrate a child with special educational needs into peers, the formation of a positive microclimate in the children's team, overcoming personal, interpersonal conflicts; protects the rights of the child with special educational needs, on behalf of the relevant authority may represent its interests in relevant bodies and services.

Besides, the social pedagogue promotes the development of social skills of students, as well as provides appropriate moral support to children's families, their relatives and teachers, helps to overcome difficult life situations. Today, a social pedagogue is a leading specialist in social education, a specialist in educational work with children and youth with special educational needs, designed to create favorable social, educational and educational conditions for their development and socialization.

A teacher-speech therapist and a teacher-defectologist in an inclusive environment provide correctional and developmental services to a child with special educational needs in accordance with an individual development program; monitors achievements in the relevant field of child development in accordance with the individual development program; provide recommendations to pedagogues on the peculiarities of the organization of the educational process, the implementation of correctional and developmental goals in the learning process, technology to achieve the ultimate goals of learning, defined in the individual program of development and application of adaptations (modifications); conducts consultative work with the parents of such children.

It should be remembered that each child is unique; it has a certain speed of socialization and adaptation, and it has its own characteristics of speech and intellectual development, its own learning style, and its strengths and weaknesses.

Thus, the complexity and versatility of educational activities in an inclusive education require specialists in socionomic specialties with strong integrative theoretical knowledge and practical skills to analyze pathological phenomena of psychophysical development, psychological and pedagogical features of mental and speech

development, to conduct correctional and developmental classes taking into account the potential of a particular child, a participant in the inclusive space, which will increase the efficiency and effectiveness of diagnostic, rehabilitation, propaedeutic, corrective and advisory and educational work (Пахомова, 2013, p. 45; Pakhomova, N., Baranets, Pakhomova, V., Scherban, & Boryak, 2021, p. 126). Therefore, there is a necessity to find innovative forms and methods of training to ensure the successful learning and socialization of such a child.

Achievements of scientific and technological progress require the transformation of the educational process in the direction of digital technology. The use of distance learning technologies has become extremely important during the COVID-19 pandemic and martial law. The implementation of the educational process became possible only with the use of digital technologies in education. Today's realities have made it possible to assess the importance and effectiveness of digital technologies as a basis for ensuring the education system at its various levels, in particular: for the educational process in educational institutions at different levels of education (preschool, primary, etc.) and training competitive staff for various fields and activities. At the same time, it highlighted the necessity to rethink and reorient all areas of activity to the use of advanced technologies, educational programs, methods, tools and forms of educational activities, evaluation procedures, etc. Despite the complexity and multifaceted nature of the correctional educational process for children with special educational needs, the use of digital technologies has become one of the main means of supporting such children and their parents. Thus, one of the ways to ensure the correctional educational process in the context of inclusion at the present stage is the use of digital technologies in working with children with special educational needs, their families, and the staff of the educational institution.

The study of the problem of application of computer innovative technologies and appropriate teaching methods in the correctional and pedagogical process is not new. In the initial stages of the introduction of information and communication technologies in the educational process, correctional and social educators, and speech therapists began to actively use them as an auxiliary and alternative means of teaching,

education and communication when working with children with mental and physical disabilities. During this time, a significant database of theoretical and empirical data has been accumulated, which became the basis for the study of the process of digitalization of the modern system of special education. In order to ensure comprehensive rehabilitation, create preconditions for the socialization of children in the conditions of inclusion, computer programs of correctional and developmental direction are developed and implemented in the educational environment (Мартиненко, Базима, Качуровська, Коломієць, 2018, р. 41).

But the experience gained in the analysis of digitalization of education still needs to be generalized, the positive and negative consequences of this process need to be highlighted, and the most promising areas of digital technology need to be clarified.

During 2020–2022, we conducted an experimental study with 140 students of socioeconomic specialties (future correctional pedagogues, social pedagogues, social workers, speech therapists) studying at the Faculty of Psychology and Pedagogy of Poltava V. G. Korolenko National Pedagogical University to determine the place and importance of digital technologies in the structure of professional training and in future professional activities, the attitude of future professionals to understand the need for such knowledge in professional activities and their willingness to actively use such knowledge and skills.

To find out the importance of digital technologies in educational and professional activities, indicating the strengths and weaknesses of digital technologies, respondents were asked to answer the questionnaire.

Analysis of the results of the survey revealed that 126 (90 %) respondents before the COVID-19 pandemic were not ready to use digital technologies in education and professional activities. Respondents listed the positive features of the introduction of digital technologies in the educational process, among which the majority noted: individual approach to each student (pupil), taking into account his abilities; student (pupil) can take an active part in the learning process regardless of location; mobility in the learning process; devotion of considerable time to independent cognitive activity, etc.

Among the main shortcomings, almost all respondents noted: the lack of direct “live” communication, which is a key component of the success of the correctional educational process in interaction with a child with special educational needs; low digital competence of students and specialists in socio-economic specialties; possible technical risks associated with failures in the operation of programs and equipment; a large number of computer programs and various services, which requires appropriate knowledge and awareness of their technical capabilities, etc.

In this regard, teachers of the Department of Special Education and Social Work of Poltava V. G. Korolenko National Pedagogical University together with students, who are majoring in 231 “Social Work” and 016.1 “Special Education (Speech Therapy)”, have created and constantly update the catalog of webliographic and bibliographic materials. They call for resources that allow students, pedagogues, practitioners of socio-economic specialties to get acquainted with the latest regulations on inclusive education, correctional and socio-pedagogical work with children with special educational needs, enrich knowledge in relevant disciplines, and improve their professional competencies within network pedagogical societies, etc. (Berezan, 2019).

Thus, it should be noted that the digitalization of education helps to improve its quality, as today there is a trend to increase the number of virtual educational platforms, digital tools, and electronic resources for online and offline learning (especially in the pandemic of March 2020 and martial law in February 2022). It significantly facilitates the process of socialization and access to the educational process of children with special needs, people with disabilities, people with musculo-skeletal problems, etc. Digital technologies allow such people to develop their abilities and talents, acquire a profession, and communicate with like-minded people, etc. (Lyons, Thompson, Timmons, 2016). Thanks to digital technologies, they overcome socio-psychological barriers in communication, learning, gain access to a variety of informational, legislative, didactic materials in an acceptable format, as well as have the opportunity to demonstrate their educational achievements in other fields (Запорожченко, 2013; Морзе, Барна, Вембер, 2013).

Depending on the task of psychological and pedagogical support of a child with special educational needs, specialists in socio-economic specialties use universal or special digital technologies. Universal digital educational technologies include: electronic social networks, multimedia presentations, educational and game platforms, video and computer games, video conferencing, digital narratives (storytelling), chat, guest books, blogs, forums, e-mail, text, photos-, audio-, video editors, resources for creating crosswords, puzzles, augmented reality, spreadsheets, databases, tools for online search, analysis and data collection, online tools and applications that design digital or printed graphics of time intervals (time tapes), etc.

Thus, these are general-purpose technologies for socio-economic specialists working with the Internet resources to communicate with colleagues, medical and rehabilitation centers, etc., communicate and cooperate with parents, specialists, and like-minded people, prepare and maintain documentation, and create interactive exercises, educational work, etc.).

Special digital technologies include:

diagnostic computer programs that allow multi-level diagnostics, fill out electronic diagnostic cards, get an individual development profile, make a support route or develop an individual development program, track development dynamics, generate reporting documentation in the form of summary tables, charts, protocols, maintain a database;

correctional and pedagogical digital technologies represented by computer software complexes, professional simulators, therapeutic, multimedia programs, design programs, computer, video, and audio games;

digital reference and information technologies – special websites that provide professional information, where you can get special advice online and offline, find the necessary professional materials, participate in chat discussions, etc.

The impact of digital technology on a child's development is determined by the content of a particular program. However, there are some common features, namely: increase motivation; quick establishment of emotional contact with the child; effective interactive communication; involvement of the emotional sphere; activation of

cognitive activity; increasing the child's ability to work; creating a favorable psychological climate (Ткачук, 2015, р. 91).

Therefore, today it is impossible to imagine the educational space without digital technologies that open fundamentally different opportunities for socialization, education, and communication of children with special educational needs and have significant pedagogical potential.

Conclusions. Inclusive education in Ukraine is actively developing and improving its regulatory framework. Thus, the specifics of the activities of specialists in secondary schools with inclusive education require them to continuous self-improvement, broad awareness of innovative methods and forms of teaching and education, and organization of the educational environment, awareness, erudition, deep specific knowledge, and practical skills in various fields of knowledge.

Digital transformation in the field of education should begin with teachers, because only a teacher who has digital educational technologies and “digital” thinking, is able to provide quality training for future specialists in socio-economic specialties. The teacher and future specialist must have not only general technical and technological competence but also modern digital technologies that are necessary for the technical implementation of the distance form of education when working with children with special educational needs.

The future specialist must be able to use in their professional activity not only special software and hardware for working with children with mental and physical disabilities, but also have skills in working in an electronic environment, learning programs for audio and video conferencing, and programs for creating electronic educational materials. It determines their readiness to provide correctional and pedagogical, and socio-pedagogical assistance in the distance educational and correctional-rehabilitation process (design of graphic, audio, and video information for diagnostic and correctional work). These requirements must be taken into account in the training of future professionals and in advanced training courses for specialists in socio-economic specialties.

References

- Запорожченко, Ю. Г. (2013). Використання засобів ІКТ для підвищення якості інклюзивної освіти. *Інформаційні технології в освіті*, 15, 138-135.
- Мартиненко, І. В., Базима, Н. В., Качуровська, О. Б., & Коломієць, Ю. В. (2018). Особливості психолого-педагогічного супроводу дитини з труднощами в навчанні в інклюзивному освітньому просторі. *Науковий часопис НПУ імені М. П. Драгоманова. Корекційна педагогіка*, 36, 38-41.
- Морзе, Н. В., Барна, О. В., & Вембер, В. П. (2013). Формувальне оцінювання: від теорії до практики. *Інформатика та інформаційні технології в навчальних закладах*, 6, 45-57.
- Пахомова, Н. Г. (2013). *Теорія і практика професійної підготовки логопедів у ВНЗ*. Полтава: ПНПУ імені В. Г. Короленка.
- Сабат, Н. (2008). Соціально-педагогічний аспект інклюзивного навчання. *Соціальний педагог*, 3, 42-46.
- Ткачук, Г. В. (2015). Особливості підготовки мультимедійного навчального матеріалу засобами середовища Prezi. *Проблеми підготовки сучасного вчителя: Зб. наук. праць УДПУ*, 11(1), 87-92.
- Berezan, V. (2019). The impact of information and communication technologies on professional formation and development of social educator. In *GLOBALNE I REGIONALNE: konteksty w edukacji wczesnoszkolnej*, (p. 69-76). Piotrków Trybunalski: Wydawnictwo Uniwersytetu Jana Kochanowskiego w Kielcach Filia w Piotrkowie Trybunalskim.
- Lyons, W. E., Thompson, S. A., & Timmons, V. (2016). We are inclusive. We are a team. Let's just do it : commitment, collective efficacy, and agency in four inclusive schools. *International Journal of Inclusive Education*, 20 (8), 889-907.
- Pakhomova, N. G., Baranets, I. V., Pakhomova, V. A., Scherban, O. A., & Boryak O. V. (2021). Comprehensive approach to the treatment of motor alalia in preschool children. *Svit Medytsyny ta Biolohiyi*, 1(75), 125-129. DOI: 10.26724/2079-8334-2021-1-75-125-129.000000

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ВИКОРИСТАННЯ ЦИФРОВИХ ТЕХНОЛОГІЙ У ПІДГОТОВЦІ ФАХІВЦІВ СОЦІОНОМІЧНИХ СПЕЦІАЛЬНОСТЕЙ ДО РОБОТИ В УМОВАХ ІНКЛЮЗИВНОГО ОСВІТНЬОГО ПРОСТОРУ

У статті розглянуто та проаналізовано проблему використання цифрових технологій при підготовці фахівців соціономічних спеціальностей до роботи в умовах інклюзивного освітнього середовища. Розкрито сутність інклюзивної освіти, нормативно-правова база інклюзивної освіти в Україні та соціально-педагогічної та корекційно-виховної роботи з дітьми з особливими освітніми потребами, визначається роль соціального педагога, дефектолога і логопеда в роботі з дітьми з особливими освітніми потребами в умовах інклюзивної освіти. Розглядаються можливості використання цифрових технологій у роботі фахівців соціономічних спеціальностей в умовах інклюзивної освіти та шляхи вдосконалення системи їхньої професійної підготовки.

Представлено аналіз експериментального дослідження з метою визначення готовності майбутніх фахівців соціономічних спеціальностей до використання цифрових технологій у навчальній та професійній діяльності, визначено позитивні та негативні фактори використання цифрових технологій. Встановлено, що майбутній фахівець має вміти використовувати у своїй професійній діяльності не лише

спеціальне програмне забезпечення та технічні засоби для роботи з дітьми з порушеннями психофізичного розвитку, але й володіти навичками роботи в електронному середовищі навчання, програмами для здійснення аудіо- та відео-конференцій, а також програмами для створення електронних навчальних матеріалів, що визначає його готовність до надання корекційно-педагогічної та соціально-педагогічної допомоги в дистанційному освітньому та корекційно-реабілітаційному процесах.

Ключові слова: інклюзивна освіта; соціальний педагог; дефектолог; логопед; дитина з особливими освітніми потребами; фахівці; цифрові технології.

References

- Berezan, V. (2019). The impact of information and communication technologies on professional formation and development of social educator. *GLOBALNE I REGIONALNE: konteksty w edukacji wczesnoszkolnej*, (p. 69-76). Piotrków Trybunalski: Wydawnictwo Uniwersytetu Jana Kochanowskiego w Kielcach Filia w Piotrkowie Trybunalskim.
- Lyons, W. E., Thompson, S. A., & Timmons, V. (2016). We are inclusive. We are a team. Let's just do it: commitment, collective efficacy, and agency in four inclusive schools. *International Journal of Inclusive Education*, 20 (8), 889-907.
- Martynenko, I. V., Bazyma, N. V., Kachurovska, O. B., & Kolomiets, Yu. V. (2018). Osoblyvosti psykholoho-pedahohichnoho suprovodu dytyny z trudnoshchamy v navchanni v inkliuzyvnomu osvitnomu prostori [Features of psychological and pedagogical support of a child with learning difficulties in an inclusive educational space]. *Naukovyi chasopys NPU imeni M. P. Drahomanova. Korektsiina pedahohika*, 36, 38-41 [in Ukrainian].
- Morze, N. V., Barna, O. V., & Vember, V. P. (2013). Formuvalne otsiniuvannia: vid teorii do praktyky [Formative assessment: from theory to practice]. *Informatyka ta informatsiini tekhnologii v navchalnykh zakladakh*, 6, 45-57 [in Ukrainian].
- Pakhomova, N. G., Baranets, I. V., Pakhomova, V. A., Scherban, O. A., & Boryak, O. V. (2021). Comprehensive approach to the treatment of motor alalia in preschool children. *World of Medicine and Biology*, 1(75), 125-129. DOI: 10.26724/2079-8334-2021-1-75-125-129.000000
- Pakhomova, N. H. (2013). *Teoriia i praktyka profesiinoi pidhotovky lohopediv u VNZ [Theory and practice of professional training of speech therapists in universities]*. Poltava: PNPU imeni V. H. Korolenka [in Ukrainian].
- Sabat, N. (2008). Sotsialno-pedahohichnyi aspekt inkliuzyvnoho navchannia [Socio-pedagogical aspect of inclusive education]. *Sotsialnyi pedahoh*, 3, 42-46 [in Ukrainian].
- Tkachuk, H. V. (2015). Osoblyvosti pidhotovky multymediinoho navchalnoho materialu zasobamy seredovyscha Prezi [Features of preparation of multimedia educational material by means of Prezi environment]. *Problemy pidhotovky suchasnoho vchytelia: zbirnyk naukovykh prats UDPU*, 11(1), 87-92 [in Ukrainian].
- Zaporozhchenko, Yu. H. (2013). Vykorystannia zasobiv IKT dlia pidvyshchennia yakosti inkliuzyvnoi osvity [Use of information and communication technologies to improve the quality of inclusive education]. *Informatsiini tekhnologii v osviti*, 15, 138-135 [in Ukrainian].

Received 19.02.2022 r.