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DEVELOPMENT OF FIRST EDUCATIONAL LEVEL 012 PRESCHOOL EDUCATION SPECIALTY STUDENTS' DIGITAL LITERACY SKILLS WITHIN A DISCIPLINE «MODERN TECHNOLOGIES OF TEACHING A FOREIGN LANGUAGE TO PRESCHOOL CHILDREN»

Abstract. The article is devoted to the issue of development of preschool education specialty students of the first education level (bachelor's) digital literacy skills within a discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children». The correlation between the content of the working curriculum of the discipline as well as the methods used and development of the preschool education specialty students' digital literacy skills has been stated. It was proven that the development of preschool education specialty student's digital literacy skills depends on the activities offered within the learnt content and their self-study that occurs due to the specifics of their distance learning. Sharing experience is pointed out as a necessary component in mastering various digital tools and improving the level of digital literacy. The article presents the experience of teaching a discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children» for preschool education specialty students of the first educational level on the Faculty of Pedagogical Education in Borys Grinchenko Kyiv University. It gives overview of the working curriculum of the discipline, content modules and specific activities offered within the study of preschool education specialty students from the second till the fourth courses. Also, the article presents an algorithm of the creation of digital content by preschool education specialty students within the discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children». Based on the described theoretical background of the way the digital literacy skills of the future preschool teachers are formed within the aforementioned discipline the necessity for further empirical testing of the level of digital skills development is underlined as well as analysis of their practical readiness to use digital tools in their future professional activities.

Keywords: digital literacy; first educational level; foreign language; modern technologies of teaching; preschool education specialty students

Introduction. The priority task in terms of the modern higher education is to train the professionals who are ready to meet the requirements that are expected in 21st century specifically in conditions of digitalization and the wide use of technologies within different education levels. Since modern English teaching in preschool education establishment is also based on the implementation of various innovative technologies the purpose of university training involves not only the formation of comprehensively developed personality, but a future teacher who is able to use digital tools in practice, solve problems in digital environment and therefore to possess digital literacy skills that are significantly prioritized nowadays.

Literature review. Researching the problem of the development of preschool student's digital literacy, first of all the official documents should be taken into account. Therefore, the «European Framework for the Digital Competence of Educators» (DigCompEdu 2017), «Digital agenda of Ukraine-2020», «UNESCO ICT competency framework for teachers» (2011) were the starting point for the further investigations.

Moreover, the description of digital competence of pedagogue has been a subject of the research of Nataliia Morze (Morze et al., 2019). Lyudmyla Khoruzha, Volodymyr Proshkin, Olga Kotenko focus on the assessment of digital competence of a modern teacher, specifically academic teacher (Khoruzha, et al., 2019). The various aspects of future training of professionals within pedagogical specialties to the use of digital and multimedia technologies were outlined by Natalia Kosharna, Angelika Solomakha, Lada Petryk, Liudmyla Hapon

(Solomakha & Kosharna, 2020; Kosharna et.al., 2022). Despite the presence of significant amount of research devoted to the diverse aspects of digital competence (E-competence, ICT competence), the aspect of development of preschool students' digital literacy skills requires specific attention and further research.

Purpose of the article is to analyze and summarize the way the content and activities offered in terms of future preschool teachers' training within the discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children» contribute to preschool students' digital skills development.

Research. To achieve the aforementioned purpose of the article theoretical methods were used. Theoretical methods were used to perform the scientific literature review on the problem of research particularly researching the theoretical bases of digital literacy skills development to find out the state of development of the studied problem and to define the apparatus of the study. The other theoretical methods used were synthesis, generalization and systematization for the theoretical justification of the development of the digital literacy skills of preschool students within «Modern Technologies of Teaching a Foreign Language to Preschool Children» discipline.

Results of the research. The modern world experiences the rapid digitalization, the process that was also forced by the COVID-19 pandemic, when the distance learning and electronic educational courses reinforced making digital reality the common phenomenon for the vast majority of people, specifically those from the education sphere. This significant shift from traditional face-to-face learning to distance learning emphasized the necessity to develop digital literacy skills. The urgency of the development the aforementioned skills is also intensified by the fact that digital literacy is recognized as one of the major drivers for achieving Sustainable Development Goals (Reddy et al., 2020). The digital tools are transforming the education sector and influence the whole education paradigm making the digital literacy skills development the essential aspect of professional training of future pedagogues.

In general, the notion of digital literacy encompasses set of skills, knowledge and attitudes that are necessary to access digital information effectively, efficiently, and ethically (Shittu & Adedokun-Shittu, 2015). Digital literacy that is also referred to as digital competence defined by European Training Foundation as set of basic digital skills, covering information and data literacy, online communication and collaboration, digital content creation, safety and problem solving (Martin, 2006, p. 25). The standard that is used in Ukraine in terms of digital competences and which is based on the guidelines of the EU4Digital programme provided by European Union is known as the Digital Competence Framework for the Citizens of Ukraine ("Digital competence: what skills do you need…", 2021). The major digital competences that are defined by the document are:

- the basics of computer literacy;
- information literacy and data-working ability;
- the creation of digital content;
- the exchange of information within digital society (communication & interaction), safety within the digital environment;
- problem solving and lifelong learning skills within the digital environment.

The basics of computer literacy include the use of computer and mobile devices, basic and application software, Internet and online applications as well as the management of digital identity. The information literacy and data-working ability involves review, search and data as well as information and digital content refinement, critical assessment, interpretation and management; sources reliability check; implementation of personal requests and needs through the use of digital technologies, self-actualization in digital society. The creation of digital content presupposes the design of digital content; editing and integration of digital content; copyright and licenses; the basic programming skills and creative use of digital tools and

technologies. Communication and interaction in digital society combines the communication, cooperation, spread and exchange of information via digital tools; the use of e-services, etc.; responsibility and netiquette. Finally, problem solving and lifelong learning skills within the digital environment comprises the identification and technological solution of problems, self-assessment of the personal level of digital competence with its further improvement; the solution of daily problems via digital technologies and lifelong learning within professional and personal spheres in digital environment ("The description of the Digital Competence Framework…", 2021). It is necessary to highlight that in terms of the professional training of future preschool teachers particularly their digital competence development the researchers most often ground on the European Framework for the Digital Competence of Educators (DigCompEdu) (Solomakha & Kosharna, 2020, p.109). It offers the description of 22 competences that are organized in six Areas, which represent the educator`s professional and pedagogic as well as learner`s competences, but in the current paper the digital literacy skills development would be represented via major digital competences that are defined by the aforementioned Digital Competence Framework for the Citizens of Ukraine. All of the components of digital competence of preschool education specialty students are developed within the discipline « Modern Technologies of Teaching a Foreign Language to Preschool Children». The degree to which they develop are defined by the specific course and module the preschool specialty students are study at.

According to the working curriculum the discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children» is taught during 12 credits that are equivalent to 360 hours. These 12 credits are divided among 3 years of study. Thus, students begin their acquaintance with the modern technologies of teaching a foreign language to preschool children at their second year of studying and continue this process up to 4th course, which constitutes mastering the content of the discipline within four semesters (4-7). The detailed description of the discipline is provided in the Table 1 below.

Table 1

The description of the discipline Modern Technologies of Teaching a Foreign Language to Preschool Children »

Name of indicators	Characteristics of the discipline by forms of education			
	Full-time education			
Type of discipline	Optional			
Language of teaching, learning and assessment	Ukrainian, English			
Total amount of credits/hours	12 / 360			
Course	2	3	3	4
Semester	4	5	6	7
Number of modules with distribution:	2	4	2	4
Number of credits	2	4	2	4
Number of hours, including:	60	120	60	120
Auditorium	28	56	28	56
Module tests	4	8	4	8
Semester control	-	-	-	30
Self-study	28	56	28	26
Form of semester control	-	-	-	exam

Although the main purpose of the discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children » is defined as the improvement of the methodological competence of students by familiarizing them with the theoretical and practical principles of using modern technologies and innovative means of teaching preschool children a foreign language the shift is made in favour of the demonstration of the development of their digital literacy skills. Thus, the offered content of the discipline allows to focus on the aforementioned aspect of their professional training. During their study students master 12 content modules: «Organizational and pedagogical conditions for the use of modern technologies of teaching a foreign language to preschool children», «Integration in the process of teaching preschool children a foreign language», «Theoretical and practical aspects of the organization of the foreign language education of preschool children with the use of modern technologies», «TPR in early learning of a foreign language», «Game technologies of teaching preschool children a foreign language», «Interactive technologies of teaching preschool children a foreign language», «Digital technologies of teaching preschool children a foreign language», «Media-based learning in teaching a foreign language in preschool educational institutions», «The use of Storytelling technology in teaching preschool children a foreign language», «Mobile learning technology in teaching preschool children a foreign language», «Project-based learning technology in teaching preschool children a foreign language», and «The use of European Language Portfolio technology in teaching preschool children a foreign language».

Starting from the mastering the first module of the discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children » the preschool education specialty students gradually improve their digital literacy skills while using the various digital tools to perform the tasks set within the specific themes. Thus, the second-year students are involved in two content modules «Organizational and pedagogical conditions for the use of modern technologies of teaching a foreign language to preschool children» and «Integration in the process of teaching preschool children a foreign language», which allow to get acquainted them with computer literary basics while working on the creation of their digital identity as a teacher as a portfolio /blog page/ or YouTube channel and their information literacy. They use computer and basic software (such as Microsoft Office, Google Chrome, etc.) to perform the practical tasks on the discipline and overview the application software that would be useful for further preschool children foreign language learning. Also, while preparing for seminars and practical classes they learn to work with data specifically to assess it and check the reliability based on the credibility of sources.

During their third and fourth years of studying preschool education specialty students not only deepen their knowledge of the aforementioned basics of computer and information literacy while constantly exchanging the information within the digital environment, but also predominantly focus on the creation of digital content of methodological character, which is predetermined by the discipline and its aim. While using various digital tools preschool education specialty students create the digital product in several steps that constitute the specific algorithm of creating the digital content represented in the Fig. 1. below. During the first phase of creating digital content, they research the topic, which is one of the modern technologies of teaching a foreign language and the digital tools that are best to use with the specific technology. After they decide with the application, they would like to use within the particular technology students start to create their exercises, didactic material or other defined products. Furthermore, student's practice the use of the developed digital content by integrating it into the lesson at preschool educational institution by writing the complex lesson plans. The next phase is the recording. Due to Covid-19 pandemic and the prevalence of distance classes students get-used to record the improvised lessons, which they share with their groupmates or larger auditoriums in terms of exchange of information, interaction and communication that occurs during the final

phrase of creating digital content via its share (most commonly via Google Disk). During the sharing phase different types of assessment occurs (formative, peer, etc.).

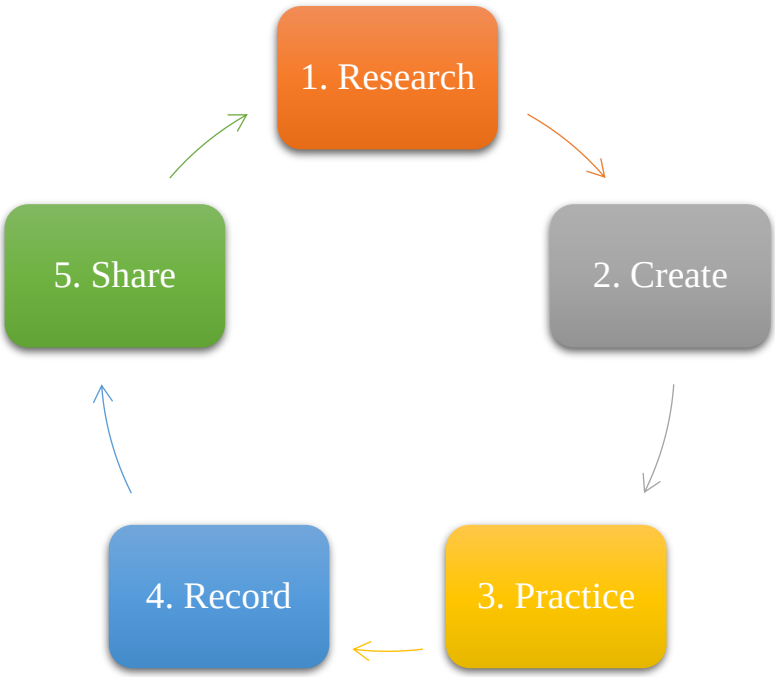

Fig. 1. The algorithm of the creation of digital content by preschool education specialty students within the discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children»
Developed by the author

Thus, while studying «TPR in early learning of a foreign language» module students research the theory to match it with the practical examples of the implementation of TPR with preschoolers on YouTube by creating the specific YouTube Playlists. They use Google Keep, Quizlet or digital tools for creating the infographics or posters to manage the data before creating the set of didactic material/exercises/stories to realize TPR-O, TPR-P, TPR-B, TPRS activities with preschool students during foreign language lessons. After they complete, they digital products they work on lesson plans and practice the use of the created digital content. To record their work, they most often use their cameras, but also such applications as InShot to edit the video before revealing it for the group, or Movavi, Bandicam as well as other screen recording tools if the task requires to work with the help of their mobile phones. Finally, they share their final product with the group mates, discuss and assess the work done. The similar algorithm is observed within the next modules «Game technologies of teaching preschool children a foreign language», «Interactive technologies of teaching preschool children a foreign language», «Digital technologies of teaching preschool children a foreign language», «Media-based learning in teaching a foreign language in preschool educational institution».

The content of the fourth year involves «The use of Storytelling technology in teaching preschool children a foreign language», «Mobile learning technology in teaching preschool children a foreign language», «Project-based learning technology in teaching preschool children a foreign language», and «The use of European Language Portfolio technology in teaching preschool children a foreign language» modules. In terms, of the aforementioned algorithm preschool education specialty students continue to research, create, practice, record and share digital content. For instance, during this period they observe and create YouTube playlists on the applications designed for implementation of the storytelling or mobile learning as well as applications for AR and VR technology. Specifically, they get acquainted and start to use Story jumper, Storybird, Book Creator, My Story Maker, My Storybook, Slide Story,

Animoto, Voice Thread, Voki for digital storytelling, AR Cards, Mondly, Catchy Words AR, AR FlashCards, Animal AR 3D Safari and others to realize the AR technology in teaching a foreign language. Moreover, one of the tasks, which is given to students is to create the explanation video (How-to video) to teach how to use specific digital tool within teaching preschool children foreign language. Also, they are asked to assess the used digital tools (digital storytelling applications and online platforms and mobile applications for kids) according to their own criteria, which allows to reveal their critical thinking skills and data-working ability.

Starting from their second-year preschool education specialty students' digital literacy skills is constantly improving and it achieves its zenith on their fourth year when they are ready to investigate the new technologies and continue, they lifelong learning. The discipline ends with exam, where students` prove the high level of their knowledge of teaching preschool foreign language methodology, specifically the y demonstrate the variety of modern technologies that could be implemented in the preschool educational institution, which is impossible without the use of digital tools and the sufficient level of digital literacy skills development that further could be proved empirically.

Conclusions. The rapid digitalization requires the development of new digital skills of the pedagogues who are not only qualified to use the modern technologies at their classes, but are able to share their knowledge and constantly self-improve to use the digital tools that appear on daily bases. The overview of the content of the discipline «Modern Technologies of Teaching a Foreign Language to Preschool Children» and activities offered within its content proved the development of the digital literacy skills of the first education level students of 012 Preschool education specialty within its working curriculum. Due to the knowledge and ability to create and share, assess digital content current preschool education specialty students demonstrate the acquired within the content of the discipline knowledge and digital literacy skills that require further empirical testing.

Prospects for further research development. The presented study on preschool education specialty students' digital literacy skills development does not cover all the components of future preschool teachers training for the use of ICT. So, further studies would highlight the role of AR and VR technologies in terms of the latest conditions and requirements to the preschool teacher as well as present the results of the experiment held to demonstrate the level of the digital literacy skills of the current students of the first education level 012 Preschool education specialty.

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РОЗВИТОК НАВИЧОК ЦИФРОВОЇ ГРАМОТНОСТІ СТУДЕНТІВ ПЕРШОГО ОСВІТНЬОГО РІВНЯ СПЕЦІАЛЬНОСТІ 012 ДОШКІЛЬНА ОСВІТА У МЕЖАХ ДИСЦИПЛІНИ «СУЧАСНІ ТЕХНОЛОГІЇ НАВЧАННЯ ДІТЕЙ ДОШКІЛЬНОГО ВІКУ ІНОЗЕМНОЇ МОВИ»

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Анотація. Стаття присвячена проблемі розвитку цифрової грамотності студентів першого освітнього рівня (бакалавр) спеціальності 012 Дошкільна освіта у межах дисципліни «Сучасні технології навчання дітей дошкільного віку іноземної мови». Встановлено взаємозв'язок між змістом робочої програми навчальної дисципліни, методами, що застосовуються та розвитком цифрової грамотності студентів спеціальності Дошкільна освіта. Доведено, що розвиток навичок цифрової грамотності студентів спеціальності Дошкільна освіта залежить від запропонованих форм у межах змісту дисципліни, а також самоосвіти, що стає можливим завдяки специфіці дистанційного навчання. Обмін досвідом зазначено як необхідну складову в оволодінні різними цифровими інструментами та підвищенні рівня цифрової грамотності. У статті представлено досвід викладання дисципліни «Сучасні технології навчання дітей дошкільного віку іноземної мови» для студентів спеціальності «Дошкільна освіта» першого освітнього рівня на Факультеті педагогічної освіти Київського університету імені Бориса Грінченка. Подано огляд робочої навчальної програми дисципліни, змістових модулів та окремих видів діяльності, які пропонуються в рамках навчання студентів спеціальності 012 «Дошкільна освіта» першого освітнього рівня з другого по четвертий курси. Також у статті представлено алгоритм створення студентами спеціальності 012 «Дошкільна освіта» цифрового контенту в рамках дисципліни «Сучасні технології навчання дітей дошкільного віку іноземної мови». На основі описаного теоретичного підґрунтя формування навичок цифрової грамотності майбутніх вчителів в межах зазначеної дисципліни наголошується на необхідності подальшого емпіричного тестування рівня розвитку їх цифрових навичок, а також аналізу їх практичної готовності до використання цифрових технологій та інструментів у своїй майбутній професійній діяльності.

Ключові слова: цифрова грамотність; перший освітній рівень; іноземна мова; сучасні технології навчання; студенти спеціальності дошкільна освіта