TEACHER PREPARATION FOR THE DEVELOPMENT OF DIGITAL LITERACY SKILLS OF NEW UKRAINIAN SCHOOL STUDENTS

The article highlights the relevance of the problem of teacher preparation for the use of information and communication technologies (ICT) in the educational process in the context of implementation of the New Ukrainian School reform. The importance of digital technologies in the organization of distance learning in educational institutions in quarantine conditions is substantiated. The need for introducing open access repositories with educational and scientific content is emphasized, which will allow alternative ways of gaining knowledge despite time or space constraints. The advantages and disadvantages of using ICT in the process of teaching children with special educational needs are highlighted. The features of creating an effective computer-integrated educational environment for an educational institution are identified.

The article covers the essence of such concepts as: digital competence, digital communication, digital environment, digital technologies, personalized computer integrated learning environment, computer integrated learning environment in an inclusive process, and others.

The results of the empirical study on identifying the attitudes of future teachers to the problems of digital literacy development in the following directions are presented: information, data and media literacy; digital communication and collaboration; responsible use and doing tasks with the help of ICT. The results of Vasyl Stefanyk Precarpathian National University students ranking positions important for digital literacy of teachers are also presented, such as: digital society; e-governance; e-education; distance learning; security in a digital society.

Keywords: digital literacy, digital environment, teacher training, distance education, e-learning.

Purpose of the article: to substantiate theoretical aspects of teacher preparation for the formation and development of digital literacy skills of the New Ukrainian School students, to present the results of the empirical study to assess the relevance and attitude of future educators to the identified problem.

In modern conditions of digitization of all aspects of public life and introduction of conceptual principles of the reform “New Ukrainian School” (New Ukrainian School, 2016) the problem of development of digital literacy
skills of all participants of the educational process is actualized. This is especially true for educators who need to be ready to use ICT professionally when working with students (Budnyk, 2019), have the skills for staying safe online; use digital educational resources to share and disseminate educational information; to ensure effective implementation of online learning methods, to implement audience feedback and so on.

Because of the epidemiological situation in Ukraine and for prevention of spreading of coronavirus disease (SOVID-19), all educational institutions of Ukraine were quarantined, and accordingly the organization of work was carried out in real time via the Internet. Thus, each participant of the educational process felt the value and importance of ICT in learning. Future societies will increasingly rely on ICT: web technologies, cloud computing, smartphones, the Internet, and other gadgets.

Problems of development of digital competence, digital literacy, digital culture of all participants of educational process in educational institutions of different types are reflected in the scientific researches of such foreign and Ukrainian scientists as: V. Bykov, M. Leshchenko, A. Lytvyn, V. Kovalenko, M. Kozyar, Yu. Nosenko, O. Spirin, O. Pinchuk, A. Yatsysyn, R. Vuorikari, Y. Punie, S. Carretero Gomez and others. The availability of ICT for educators and students facilitates the widespread use of their tools in the educational process, which makes it possible to intensify, improve the quality of perception, understanding and assimilation of knowledge, diversification of the learning process, etc. At the same time, the problem of the development of digital competence skills of teachers and students has arisen.

To identify the level of digital literacy of future teachers in the framework of the Erasmus+ project “MoPED – Modernization of Pedagogical Higher Education by Innovative Teaching Instruments” (No. 586098-EPP-1-2017-1-UA-EPPKA2-CBHE-JP) a survey was conducted. The study involved 498 students studying at Vasyl Stefanyk Precarpathian National University (specialties 013 Elementary Education and 014 Secondary Education). When asked about the most important components of a teacher’s professional competence in order to develop students’ digital literacy skills, the following important areas were offered to students: information, data and media literacy; digital communication and collaboration; responsible use of ICT; doing tasks with the help of ICT.

Most students consider media literacy, the skills needed to work in the online environment, critical evaluation of information resources, etc. to be the most important among digital literacy skills (30.36% of respondents). 299 respondents out of 498 chose the sphere “information, data and media literacy”. The second position among the necessary components of teacher professional competence for the formation of digital competence of students belong to “digital communication and cooperation” – 268 persons (27.21%). According to future educators, a significant place in the hierarchy of teacher digital skills belongs to the creation
of their own digital content (160 persons, 16.24%) and responsible use of ICT (152 persons, 15.43%).

As you can see, most prospective teachers are progressively minded regarding the use of digital resources and tools in education, therefore, they consider it necessary to increase their digital literacy. They consider digital society values to be of great priority (429 students out of 498 who have chosen the 8-10th positions in the ranking scale); security in the digital environment (430 persons, respectively); 417 respondents opted for e-education.

Thus, the analysis of international and national documents on the problems of digitalization of education confirms the relevance of the topic of teacher preparation for the development of digital literacy skills of modern students. Accordingly, the powerful development of digital technologies requires the teacher’s continuous professional development and self-development in this direction.

The results of the study revealed that the most popular digital skills of teachers of the New Ukrainian School are: use of ICT for the development of critical thinking, creativity; establishing communication, collaboration and organization of educational activities with students online; use of software for data visualization; use of digital educational resources to exchange and share educational information; use of ICT to create educational content; skills of Internet safety; organizing online lessons using appropriate digital tools, using ICT to evaluate learning outcomes, etc.

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