

Секція проблем цифровізації освіти

DIGITAL ECOSYSTEM OF PEDAGOGICAL EDUCATION: PROFESSIONAL DEVELOPMENT, SOCIAL AND PSYCHOLOGICAL REHABILITATION OF SPECIALISTS WHO LOST THEIR JOB DUE TO WAR

Sorochan T.¹, Kartashova L.², Kyrychenko M.³, Slyusarenko O.⁴

*¹⁻³Central Institute of Postgraduate Education of the UEM,
the National Academy of Educational Sciences of Ukraine,
Kyiv, 52a, Sichovyh Streltsiv STR*

*⁴Institute of Higher Education, the National Academy of Educational Sciences
of Ukraine, Kyiv, 9, Bastionna STR*

*E-mail: ¹anprof@ukr.net, ²lkartashova@ua.fm,
³kmoumo@gmail.com, ⁴o.slyusarenko@ihed.org.ua*

When the war in Ukraine will be finished and the country will enter the transition period of post-war development of state economy, there will be required a significant renewal of personnel potential in education field. In particular, there will be actualized the challenges related to shortage of personnel and creation of large number of vacancies for teaching staff in education institutions of various types, as well as to transformation of professional development of teachers in accordance with labor market demands and digitalization of all spheres of social life [5]. At the same time, even now we can observe a need for social and psychological adaptation and retraining (based on inclusive approach) of specialists with higher education in various fields, who got partially disability or lost their previous profession job due to the war. First of all, this concerns the military staff or displaced persons.

It is important to note that the relevance of issue under consideration lies in introduction of European approaches to provision of quality pedagogical education based on inclusion and digitalization, as well as in creation of new perspectives in process of inclusive education used for employment and social and psychological adaptation of specialists, both military personnel and civilians, who got partially disability due to the war; the implementation of new approaches to the employability development of specified target groups should be based on the Laws of Ukraine "On Education", "On Secondary Education", "On Higher Education", as well as on the National Qualifications Framework, the Strategy for Higher Education

Development in Ukraine for 2022–2032, the Decrees of the President of Ukraine on the Goals of Sustainable Development of Ukraine 2030 and the Human Development Strategy, the draft Ukraine Recovery Plan (in spheres of education and science), in particular related to provision of inclusive, comprehensive and fair quality education and promotion of lifelong learning opportunities for all categories of population. Special accent must be made on the fact that the study of the EU countries experience also shows the shortage of teachers and trainers with the appropriate level of professional training. That is why the document "Council conclusions of 26 of May, 2020 on European teachers and trainers for the future" (OJ C 193, 9.6.2020, p. C 193/12) became important for Ukrainians; it offers a strategy for involvement of professionals without pedagogical qualification. According to the document, they should be provided with high-quality scientific and methodical support and training.

Over the past twenty years, the European Commission has already initiated a large number of actions, projects, studies, recommendations and tools aimed to introduce openness and continuity of education; there were also made steps to ensure the ability of education system to quickly respond to changing social and economic conditions, as well as to individual and group educational needs and requests of citizens. In particular, these measures were aimed at increasing the opportunities for professional development or retraining via open education. Open education contributes to modernization of education systems in Europe, as it is implemented mostly with the help of digital technologies (Cape Town Open Education Declaration (2018). Unlocking the promise of open educational resources). The tendency for spread of open education is typical for Ukraine also, therefore, the studies mentioned above open up new opportunities for improvement of toolkit used in open education and for its usage for solving current educational problems during post-war recovery period. In process of solving the outlined problem there was highlighted the main goal consisting in overcoming cultural differences alongside with social, geographic and economic barriers and problems related to education access and discrimination.

The main effort for achievement of positive results in this sphere lies in keeping the focus on improvement of pedagogical higher education, retraining, professional development and social and psychological adaptation of persons, who are capable and willing to master the teaching profession, with further employment in education institutions.

All above mentioned shows, in particular, that there is a need to develop a digital measures complex for selection, professional orientation, social and psychological adaptation, retraining and professional development of specialists with higher education, first of all, affected military personnel and

civilians, in order to ensure their access to teaching profession. That is, the usage of digital technologies, which provide access to open education for all participants in educational process, become priorities in solving the outlined problem and achieving the goal [4; 3].

The main factor to ensure the availability of education for specified category of personnel consists in formation and introduction of digital ecosystem of pedagogical education and professional development; this ecosystem is based on a measures complex using digital technologies for selection, professional orientation, social and psychological adaptation, training, advanced training and retraining for pedagogical professions of specialists with higher education, who got partially disability or lost their previous profession job due to the war [3; 6]. The educational process will be conducted with application of EdTech toolkit, which is designed to determine the level of psychological readiness and motivation of individuals for learning, and also to create a digital learning environment with access for academic staff and students, regardless of their location and at any time [2].

It is possible to start the realization of this concept just now on the basis of resources integrated in Ukrainian Open University of Postgraduate Education (UOUPE). There has been created a web portal (<http://uvu.org.ua>), where EdTech (combination of digital and educational technologies) is being implemented; EdTech includes hardware, software and teaching-methodical support and digital aids for management of virtual institution (learners registration, schedules, communication), storage of electronic documents, training with usage of updated methods, assessment of learning outcomes. The EdTech digital toolkit helps students and teachers to interact remotely. The EdTech functioning is organized on the Adult Learning platform (proprietary development of Central Institute of Postgraduate Education CIPE), available 24/7 for independent work of learners); the Adult Learning platform incorporates such structural components as digital educational environment, six virtual departments (with team of teachers involved from various institutions and schools of Ukraine), experience hub (highlights the best pedagogical practices of education institutions of Ukraine), electronic Dean's office and other components.

Accordingly, the digital educational environment accomodates teachers' electronic offices and digital library containing training materials and aids for remote communication between students and teachers. Teachers from various institutions and regions of Ukraine may work in UOUPE virtual departments on volunteer basis; teachers from other countries may also be involved in the activities of virtual departments in future [5].

Adult Learning is a system developed for management and organization of educational process, work with students and demonstration

of learning achievements. UOUPE as a modern educational resource can be considered a digital twin of education institution. The digital twin, in case of need and necessity (crisis conditions, war, pandemic, etc.), can not only complement the functionality of real education institution, but also provide organization and maintain support of educational process of this institution [6]. In general, at present UOUPE already operates as digital educational system for distance learning, professional and personal development. Actually, UOUPE has the characteristics of digital ecosystem, it provides for safe and friendly coexistence of people, technologies and digital software products.

Further solving the outlined problem will contribute to increasing the teaching profession prestige, overcoming the problem of staff shortages in education institutions, the development of inclusion and digitalization in postgraduate pedagogical education, as well as the social adaptation of persons, who got partially disability or lost their previous profession job due to the war. Continuous improvement of pedagogical higher education and provision of retraining of representatives of the specified target groups for pedagogical work in education institutions will contribute to creating new life prospects for them, opening up employment opportunities, and overcoming the shortage of pedagogical personnel in Ukraine.

References

1. Gurzhii A. M., Bakhmat N. V., Zaichuk V. O., Kartashova L. A., Rozman I. I. and Sorochan T. M. 2021. Organizational principles for the development of digital infrastructure of education and pedagogical science in Ukraine (LATE 80'S OF THE XX CENTURY – BEGINNING OF THE XXI CENTURY). *Information technologies and teaching aids*. 83, 3 (June 2021), 26–48. DOI: <https://doi.org/10.33407/itlt.v83i3.4219>.
2. Kartashova L. Digital educational environment of new generation: an ecosystem for subjects of educational process / Kartashova L., Gurzhii A., Sorochan T. – *Modern achievements in science and education: collection of XVI International science conference, November 1–8, 2021, Netanya (Israel)*. – Khmelnytskyi : KhNU, 2021. – P. 63–66 (126 p.)
3. Sorochan T. M. Anti-crisis management of professional development / Kartashova, L. A., Kyrychenko, M. O., & Sorochan, T. M. (2020). *Bulletin of the National Academy of Pedagogical Sciences of Ukraine*, 2 (1). <https://doi.org/10.37472/2707-305X-2020-2-1-7-9>
4. Sorochan, T. M. Educational technology park: innovations for quality of education. *Bulletin of the National Academy of Pedagogical Sciences of Ukraine*, 4 (1) (2022). <https://doi.org/10.37472/v.naes.2022.4148>

5. Status, trends and prospects of activity of Central Institute of Postgraduate Education "University of Education Management" of the National Academy of Sciences of Ukraine (2018–2022). Analytical report. T. Sorochan, L. Kartashova, L. Olifira, N. Gordienko, T. Sheremet, O. Godorozh. Ukraine, 2022. 107 p.

6. Kartashova L., Gurzhii A., Zaichuk V., Sorochan T. and Zhuravlev F. (2020). Digital Twin of an Educational Institution: An Innovative Concept of Blended Learning. In Proceedings of the 1st Symposium on Advances in Educational Technology – Vol. 2: AET, ISBN 978-989-758-558-6, p. 300-310. DOI: 10.5220/0010931100003364

ПОЗИТИВНІ І НЕГАТИВНІ НАСЛІДКИ ІНФОРМАТИЗАЦІЇ

*Ключник О. А. Хмельницький національний університет
E-mail: klyuhnik.sasha@icloud.com*

Інформатизація істотно вплинула на процес придбання знань. Нові інформаційно-комунікаційні технології (ІКТ) навчання дозволяють інтенсифікувати освітній процес, збільшити швидкість сприйняття, розуміння та глибину засвоєння величезних масивів знань.

Перехід до інформаційного суспільства збігся з гострою фазою інформаційної кризи – найболючішою, яка заважає подальшому розвитку цивілізації проблеми. Суспільство зіткнулося з протиріччям між обмеженими можливостями людини по сприйняттю та переробці інформації та існуючими величезними потоками та масивами інформації, що зберігається.

Необхідно узгодити інформаційний «голод» та інформаційну «лавину». Тому головним та найбільш очікуваним позитивним наслідком інформатизації має стати подолання цієї проблеми. Одним з початкових кроків вирішення цього складного завдання є розробка сучасних інформаційних технологій. Вони повинні дозволити формулювати запит на виконання будь-яких операцій з інформацією мовами, близькими до природного, ефективно відсікати інформаційний шум, доставляти потрібні відомості у зручній для користувача формі.

Іншим важливим завданням інформатизації є реалізація вільного доступу кожної людини до інформаційних ресурсів усієї цивілізації. Зараз цей доступ значною мірою обмежений адміністративними, міждержавними і економічними бар'єрами. Держава, міжнародні організації через законодавчі акти, угоди, цільові програми повинні