

ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS OF USE OF INFORMATION TECHNOLOGIES IN BLENDED LEARNING OF FUTURE OFFICERS

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*The article examines the organizational and pedagogical conditions of using information technologies in blended learning of future officers. **The purpose of the study** is to justify the organizational and pedagogical conditions of using information technologies in blended training of future officers. **Methods of research** are analysis, synthesis and generalization of the development of scientific and legal sources in the context of the use of blended learning in the educational process of higher education institutions, in particular regarding the identification and justification of the organizational and pedagogical conditions for the use of information technologies in blended learning of future officers.*

The results of research. *It is noted that the educational sector is quite sensitive to modern social challenges and the emergence of digital technologies, because due to serious social problems, education of young people must continue taking into account traditional and modern practices of face-to-face (auditory), distance and, accordingly, blended learning. It is outlined that the blended system of learning in the system of higher military education is caused by the need to train future officers in a fairly short time, with an orientation to personal needs, requests of cadets, updating knowledge and skills, forming the necessary abilities for self-organization, self-improvement, the ability to use modern information technologies for rapid communication, and solving professional tasks. The analysis of scientific and pedagogical literature allowed us to note that blended learning is considered as an educational program that includes partially online learning (choice and use of information technologies) and offline learning (controlled by the teacher).*

In the context of the research, it is indicated that the combination of traditional pedagogy with modern information technologies contributes to the individualization of learning, increasing motivation and the development of cognitive interest, adaptability skills, independence, self-control of future officers, collaboration and group work; ensures flexibility of the training process, quick feedback between the subjects of educational activity, development of digital skills; improves the quality of education; provides access to the latest scientific and educational resources that are constantly updated; increases the level of readiness to perform combat tasks in real conditions; and prepares cadets for remote coordination and management of units.

Among the organizational and pedagogical conditions of the use of information technologies in the blended learning of future officers, the following ones are highlighted: infrastructural support of blended learning in the institution of higher military education; creating content with methodical materials; use of forms and methods of interactive learning; ensuring convenience and accessibility to educational materials; security and information protection in the institution of higher military education.

The blended system of education enables teachers of the higher education institutions to combine the best methods of traditional pedagogy with modern technological tools, which contributes to a more flexible, interactive and effective learning process that meets the requirements of the modern military environment. The use of online resources in the conditions of blended education has significant advantages, including: reducing costs for educational materials and organizing classes; increasing motivation to acquire knowledge; supplementing traditional teaching methods with information technologies, including the use of multimedia resources, virtual simulations and interactive educational materials in combination with lectures and practical classes; creation of adaptive training programs that take into account the individual needs and level of preparation of each student; involvement of students by means of forums, online discus-

sions, testing and group projects to acquire knowledge for performing functions in professional activities; stimulation of active participation of students in the educational process; development of critical thinking and teamwork; and providing feedback.

Conclusions. However, blended learning requires special training from institutions of higher military education: teachers must have appropriate knowledge and skills for the effective use of information technologies in the educational process, which includes regular refresher courses and exchange of experience with colleagues; provision of necessary technical resources and support, modern equipment, software and Internet access; constant evaluation of the effectiveness of the use of information technologies, which ensures timely identification and elimination of problems, improvement of training methods; consideration of information security issues, protecting student data and ensuring the confidentiality of educational materials. It is worth noting that the use of information technologies in blended learning of future officers requires a complex approach and compliance with certain organizational and pedagogical conditions, which ensures the training of highly qualified specialists capable of effectively performing their duties in modern conditions.

References

Allen, M., Bourhis, J., Burrell, N., Marby, E. Comparing student satisfaction with distance education to traditional classrooms in higher education: a meta-analysis. *The American Journal of Distance Education*, 2002, vol. 16, issue 2, pp. 83–97. doi: 10.1207/S15389286AJDE1602_3

Buhaichuk, K.L. (2016). Blended learning: theoretical analysis and implementation strategy in the educational process of higher educational institutions. *Information Technologies and Learning Tools*, 2016, vol. 54, no. 4, pp. 1–6. (In Ukrainian).

Bykov, V.Yu. (2008). *Modeli orhanizatsiinykh system vidkrytoi osvity* [Models of organizational systems of open education]. Kyiv, Atika Publ., 684 p. (In Ukrainian).

Castro, R. Blended learning in higher education: Trends and capabilities. *Education and Information Technologies*, 2019, vol. 24, pp. 2523–2546. doi: 10.1007/s10639-019-09886-3

Glenn, A. (2001). *A comparison of distance learning and traditional learning environment*. Available at: <https://files.eric.ed.gov/fulltext/ED457778.pdf> (Accessed 10 April 2024).

Kruchek, V.A. (Ed.). (2023). *Zmishane navchannia maibutnikh kvalifikovanykh robitnykiv u zakladakh profesiinoi (profesiino-tekhnichnoi) osvity u voiennyi ta povoiennyi chas* [Blended learning of future skilled workers in vocational (vocational and technical) education institutions in wartime and postwar times]. Kyiv, Institute of Professional Education of the NAPS of Ukraine Publ., 186 p.

Kukhareno, V. Systemnyi pidkhid do zmishanoho navchannia [Systematic approach to blended learning]. *Journal of Information Technologies in Education*, 2015, no. 24, pp. 53–67. (In Ukrainian).

Ministry of Defence of Ukraine (2015). “On the Approval of the Distance Learning Concept”, available at: https://www.mil.gov.ua/content/mou_orders/mou_2020/nmou_744_21122015.pdf (Accessed 10 April 2024). (In Ukrainian).

Osadcha, K., Osadchyi, V., Kruhlyk, V. The role of information and communication technologies in epidemics: an attempt at analysis. *Ukrainian Journal of Educational Studies and Information Technology*, 2020, vol. 8, no. 1, pp. 62–82. doi: 10.32919/uesit.2020.01.06 (In Ukrainian).

Pinchuk, O. P., Prokopenko, A. A. (2022). *Osoblyvosti vprovadzhennia vilnoho prohramnoho zabezpechennia v robotu zakladiv vyshchoi viiskovoi osvity* [Peculiarities of the implementation of free software in the work of institutions of higher military education]. Available at: https://lib.iitta.gov.ua/id/eprint/733500/1/%D1%81_90_93.pdf (Accessed 10 April 2024). (In Ukrainian).

Pylypchuk, A.Yu. Education system of Ukraine as object of informatization: kinds of activity in an education system. *Information Technologies and Learning Tools*, 2009, vol. 9, no. 1. Available at: <http://journal.iitta.gov.ua/index.php/itlt/article/view/12/4> (Accessed 10 April 2024). (In Ukrainian).

Rashevskaya, N.V. (2010). *Zmishane navchannia yak psykholoho-pedahohichna problema* [Blended learning as a psychological and pedagogical problem]. *Bulletin of Cherkasy Bohdan Khmelnytsky National University. Series “Pedagogical Science”*, 2010, no. 191, part IV, pp. 89–96. (In Ukrainian).

Shunevych, B. I. Tendentsii rozvytku skladovykh chastyn orhanizatsii dystantsiinoho navchannia [Trends in the development of the constituent parts of the distance learning organization]. *Visnyk Natsionalnoho universytetu «Lvivska politekhnika» [Bulletin of Lviv Polytechnic National University]*, 2009, vol. 653, no. 1, pp. 231–239. (In Ukrainian).

Sobchenko, T. M. Blended learning: concepts and tasks. *Pedagogy of creative personality formation in higher and general academic schools*, 2021, issue 75, part 3, pp. 73–76. doi: 10.32840/1992-5786.2021.75-3.14 (In Ukrainian).

Spirin, O.M. Criteria and quality indicators of information and communication technologies of learning. *Information Technologies and Learning Tools*, 2013, vol. 33, no. 1. doi: 10.33407/itlt.v33i1.788 (In Ukrainian).

Striuk, A. M. (2015). Teoriia ta metodyka elektronnoho navchannia [Theory and methods of e-learning]. *Teoretyko-metodychni zasady kombinovanoho navchannia systemnoho prohramuvannia maibutnikh fakhivtsiv z prohramnoi inzhenerii. Monohrafiia* [Theoretical and methodological bases of combined training of system programming for future specialists in software engineering. Monograph]. Kryvyi Rih, SHEI “Kryvyi Rih National University” Publ., 269 p. (In Ukrainian).

Tkachuk, H.V. Zmishane navchannia ta osoblyvosti vykorystannia rotatsiinoi modeli u navchalnomu protsesi [Blended learning and features of the use of the rotational model in the educational process]. *Journal of Information Technologies in Education*, 2017, no. 4(33), pp. 143–156. doi: 10.14308/ite000655 (In Ukrainian).

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