Distance education in the conditions of martial law in institutions of higher education: development and practice

Educación a distancia en las condiciones de la ley marcial en instituciones de educación superior: desarrollo y práctica

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Abstract

The aim of the article is to establish the peculiarities of existing obstacles and promising directions of online education system d evelopment in the context of military conflicts of the present. The research is based on the results of the study of scientific literature in the field of online education during war and the study of practical aspects of this issue. The

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analytical and bibliographic method was used to conduct the study by studying the scientific literature on the issues of online education in higher education during martial law. An online questionnaire survey of the heads of departments of higher education institutions working with students during military conflicts in the territory of the HEIs was also used. As the heads of departments of higher education noted in their responses, the main obstacles to the development of online education are the lack of development and implementation of educational online platforms, the low rate and quality of creation or adaptation of information technology and e-learning tools.

The participants of the survey identified promising areas of development of online learning in higher education during military operations: updating of software and hardware, providing higher education institutions with quality Internet access and distance learning, taking into account current trends in information and educational technologies.

Key words: online education, learning process during military conflicts, obstacles to online education, perspectives on online education, education during wartime, learning process in higher education institutions.

Resumen

La tarea de organizar el proceso educativo en línea no es nueva para la sociedad actual, pero la necesidad de un aprendizaje en línea efectivo tiene más sentido y se vuelve especialmente relevante para los países que se encuentran en una zona de conflicto militar u ocupación relacionada. Bajo la ley marcial, la comunidad educativa está particularmente preocupada por la adecuada organización de la instrucción y la calidad de la educación. Esto incluye un apoyo integral para todos los participantes en el proceso educativo, dado que la capacidad de satisfacer las necesidades humanas básicas, incluso en un nivel elemental, se ve interrumpida en particular por factores externos. Estos factores están relacionados con la imprevisibilidad de los factores de seguridad debido al agravamiento de la política de relaciones interestatales (Olugbenga, 2020). Garantizar el derecho de los niños y jóvenes a la educación en el contexto de la guerra se convierte en un desafío tanto para los educadores como para la sociedad. como un todo. Un aspecto importante del estudio de este tema es determinar las perspectivas para el desarrollo del soporte de información, la calidad del contenido digital y los recursos educativos para su uso en el aprendizaje a distancia durante la guerra. El objetivo del artículo es establecer las peculiaridades de los obstáculos existentes y las direcciones prometedoras del desarrollo del sistema de educación en línea en el contexto de los conflictos militares del presente. La investigación se basa en los resultados del estudio de la literatura científica en el campo de la educación en línea durante la guerra y el estudio de los aspectos prácticos de este tema. Se utilizó el método analítico y bibliográfico para realizar el estudio mediante el estudio de la literatura científica sobre los temas de la educación en línea en la educación superior durante la ley marcial. También se utilizó una encuesta de cuestionario en línea de los jefes de departamentos de instituciones de educación superior que trabajan con estudiantes durante conflictos militares en el territorio de las IES. De acuerdo con los resultados del trabajo, se analizaron los principales tipos de obstáculos y se delinearon las posibles perspectivas

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para el desarrollo de la educación en línea en las instituciones de educación superior que operan durante los conflictos militares.

Palabras clave: educación en línea, proceso de aprendizaje durante conflictos militares, obstáculos a la educación en línea, perspectivas de la educación en línea, educación en tiempo de guerra, proceso de aprendizaje en instituciones de educación superior.

1. Introduction

Society is experiencing a profound social crisis in a country where military conflict is taking place. Military actions force civilians to leave their homes and property and flee to peaceful regions.

Not only does higher education not lose its significance for residents of the territories where military operations are taking place, but it also makes the issue more relevant, since it is a prerequisite for successful employment in the future.

The task of organizing the educational process online is not new to society today, but the need for effective online learning makes more sense and becomes especially relevant for countries that find themselves in a zone of military conflict or related occupation. Under martial law, the educational community is particularly concerned with the proper organization of instruction and the quality of education. This includes comprehensive support for all participants in the educational process, given that the ability to provide basic human needs, even at an elementary level, is disrupted in particular by external factors. These factors are related to the unpredictability of security factors due to the aggravation of the politics of inter-state relations. Ensuring the right of children and youth to education in the context of warfare becomes a challenge for both educators and society as a whole. An important aspect of the study of this issue is to determine the prospects for the development of information support, the quality of digital content and educational resources for use in distance learning during the war.

It is worth noting that online learning has already become commonplace all over the world. It became possible due to the partial transfer of secondary and higher education to this format in 2020, the year of the widespread coronavirus infection COVID-19 and the threatening epidemiological situation. Distance learning has become an affordable way for students to get a quality higher education (Shehab & Khalifa, 2021).

Therefore, at the present stage of society development there is an urgent need to create and develop a clear system of distance online education, the results of which are officially confirmed by diplomas and certificates of state standard. The development of online distance education for young people and adults is a prerequisite for the sustainable development of society around the world.

The theoretical part of this research presents the views of scholars on the advantages of online learning in HEIs, the challenges of this type of educational process organization related to military conflicts, possible reasons for the suspension of the educational process during military operations, the peculiarities of the training organization in the online system.

The practical part of the paper includes an assessment of the success criteria of online education in higher education institutions, the features of the educational process, which should be taken into account when planning prospective directions of development of online education in wartime. In addition, it shows the main aspects of online education that are given insufficient attention in higher education institutions in wartime regions, obstacles to the development of online education, as well as promising areas of development of online education in higher education during wartime.

The research found that most of the criteria for the quality of the educational process relate to the issue of the educational process safety as well as providing access to high-speed Internet and equipment that supports the appropriate technical requirements for acquiring/transferring information. In addition, the study has demonstrated that when planning the educational process development in the online system, one should primarily take into account the qualification of personnel, compliance with additional security measures and regime restrictions, as well as specific requirements in the field of education. The results of the analysis revealed that insufficient attention is paid to such aspects of online education as monitoring the safety situation in the work of educational institutions and training of educational managers regarding actions in case of danger alongside educational and informational activities on online provision of educational process during military operations.

The aim of the study is to determine the position of the heads of departments of higher education institutions working with students in higher education concerning the particularities of online learning, namely to establish the advantages and promising directions of online education during military conflicts in the country where the educational process is organized.

Based on the results of this analysis, the problems associated with the implementation of new strategies for teaching students during the war are highlighted.

2. Literature review

Despite the obvious advantages of online learning in higher education institutions, the introduction of the educational process in electronic format involves solving a number of issues for both students and for academic staff of educational institutions (Riera Guasp, Ardid, Vidaurre & Dueñas, 2018), (Rajab, 2018).

For academic staff, the real challenge of online learning was the significant increase in the time required to provide a quality learning process. In particular, the time for preparing

lecture classes, checking homework, and maintaining electronic and hardcopy records of attendance and success of education applicants has doubled (Ali, Khalil & El-Sharkawy, 2020).

The major reasons for the suspension of the educational process during warfare are considered to be the lack of a clear plan of action for the use of online learning for all participants in the educational process and the lack of adequate facilities of institutions of higher education that could ensure the proper quality of online education (O'Doherty, Dromey, Lougheed, Hannigan, Last & McGrath, 2018), (Nikadambaeva, 2020), (Morin, 2020).

Considering the challenges of online learning organization, scientists pay attention to the issues of qualified support of the student by the educator or other authorized persons during online learning. Such qualified support should begin at the stage of searching for proposals of distance learning programs and accompany the student during the entire learning process (Langegard, Kiani, Nielsen & Svensson, 2021)

However, a review of the literature on the development of online education in times of war has shown that the issue of developing special strategies for working with higher education applicants during military conflicts remains unresolved. This is due to the lack of specialized software and information developments for working with students that take into account the specifics of receiving education specifically during military conflict (during its exacerbation especially) in the territory where the educational institution or students studying at such institutions are located.

3. Materials and methods

A case study of obstacles and prospects of online education in contemporary military conflicts in higher education institutions was conducted by interviewing 812 people, namely heads of departments of higher education institutions in Zhytomyr, Lviv, Kyiv and Ternopil regions of Ukraine. The survey was organized by means of a questionnaire survey through the Alchemer service.

In the survey, respondents were asked a series of questions about the major aspects of the use of online education strategies in wartime. Survey participants were asked to express their position on each question as a percentage between 0 and 100%.

4. Results and Discussion

An essential part of the research questions concerned ascertaining the primary success criteria for online learning in higher education institutions (Figure 1):
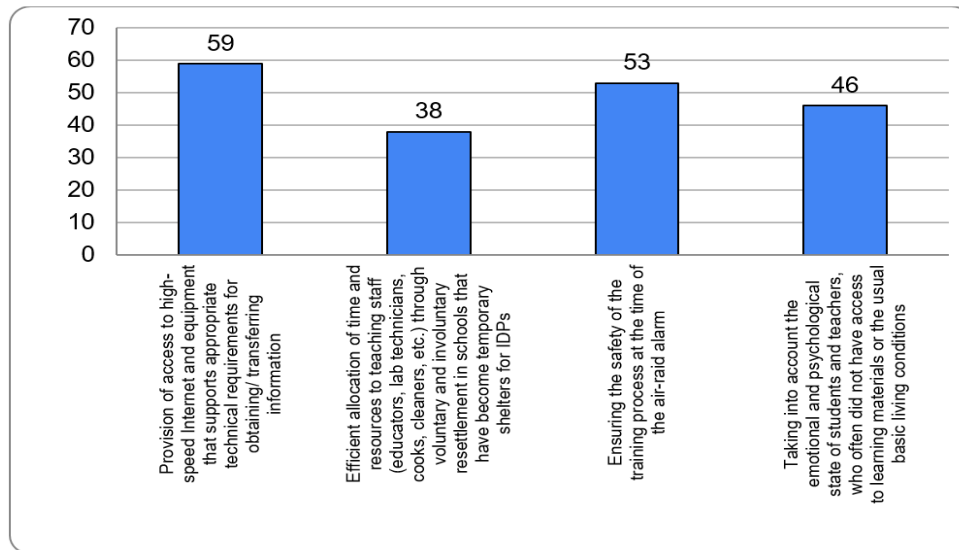
Figure 1. Criteria for the success assessment of online learning in higher education institutions
Source: built by the authors.

As shown in Figure 1, most of the quality criteria for the educational process relate to the issue of providing access to high-speed Internet and equipment that supports the relevant technical requirements for obtaining/transferring information, as well as to the security of the educational process.

When organizing the online education process in higher education, the following features of wartime educational activities should be taken into account, according to the respondents:
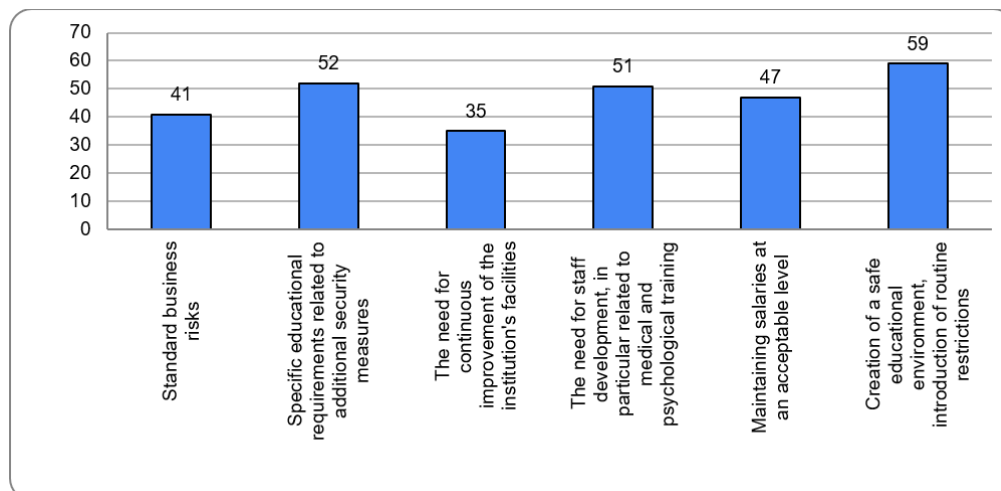

Figure 2. Features of the educational process that need to be taken into account when planning the future direction of online education in wartime, %
Source: built by the authors.

Respondents believe that when planning the development of the educational process in an online system, staff development, additional security measures and regime restrictions as well as specific requirements in the field of education should be taken into account first.

The analysis has identified the following critical aspects of online education that are insufficiently addressed in HEIs in war zones, according to respondents (Figure 3):
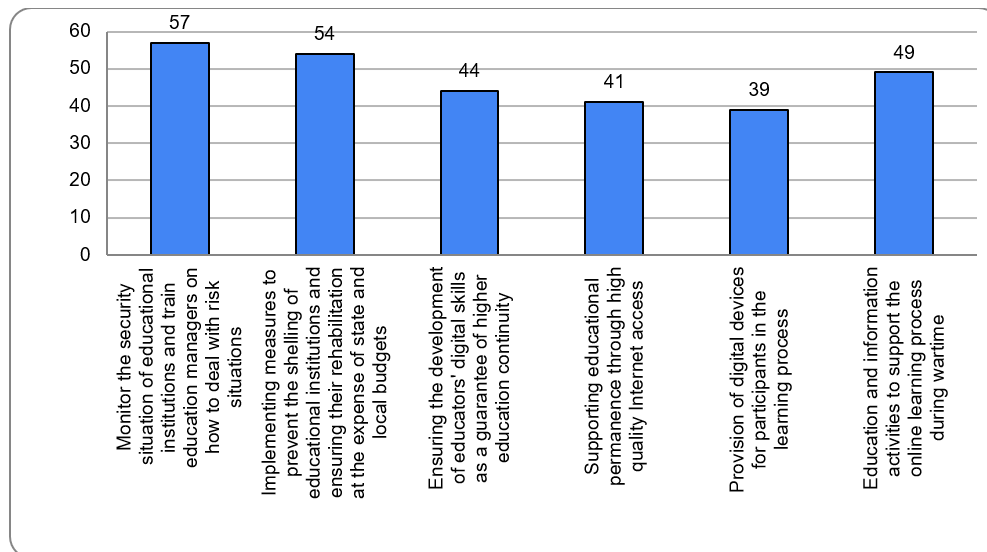

Figure 3. Critical aspects of online education that have not been sufficiently addressed by higher education institutions in war zones, %
Source: built by the authors.

- monitoring the safety situation of educational institutions and training educational managers on actions to be taken in the event of danger;
- implementing measures to prevent the shelling of educational institutions and ensuring their rehabilitation at the expense of state and local budgets;
- education and information activities on online education during wartime.

As the heads of higher education departments pointed out in their responses, the main obstacles to the development of online education are (Figure 4):
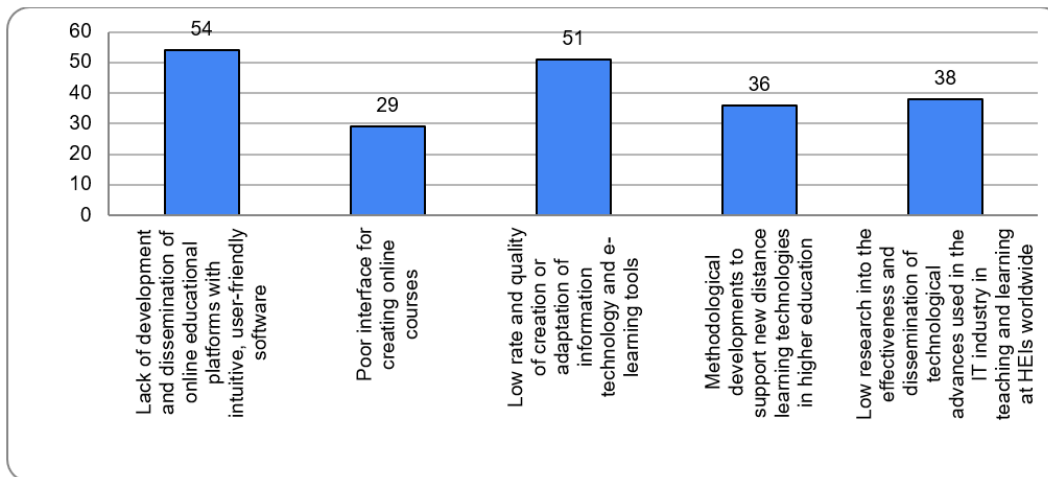
Figure 4. Key obstacles in the development of online education, %
Source: built by the authors.

– lack of development and dissemination of online educational platforms with intuitive, user-friendly software;
– low pace and creating quality or adaptation of information technology and e-learning tools.

Survey participants identified the following forward-looking areas for the development of online learning in higher education during wartime:
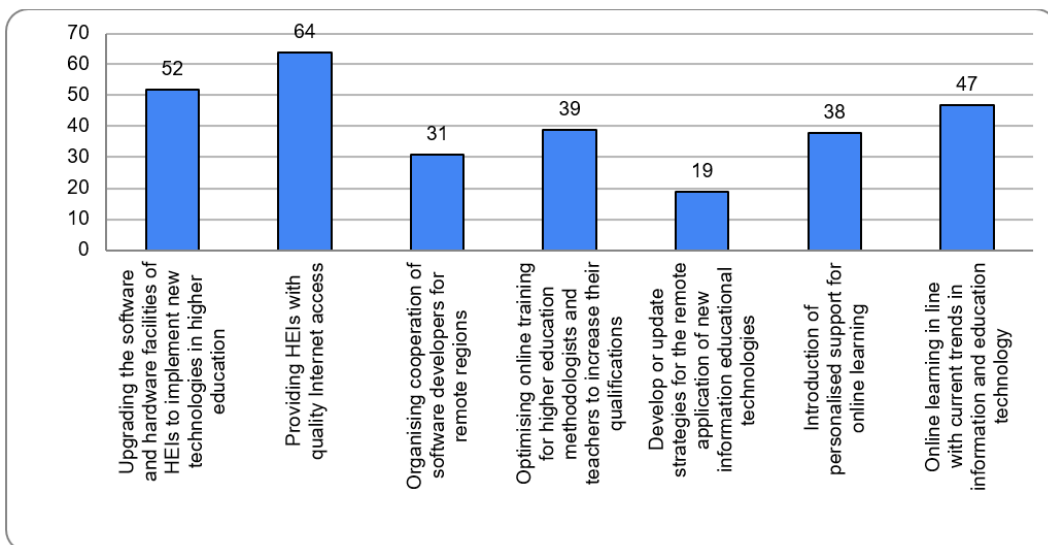

Figure 5. Perspectives on the development of online learning in higher education during wartime, %
Source: built by the authors.

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- upgrading the software and hardware facilities of HEIs to incorporate new technologies in higher education;
- providing higher education institutions with quality Internet access;
- distance learning based on current trends in the development of information and education technology.

In the most difficult time for society as a whole and for the education system, which is the period of military conflict, educators mobilize and exhibit a high level of professionalism to provide online learning (Gao, 2021).

Experience shows that, as a rule, humanitarian headquarters and accommodation facilities for internally displaced persons have been established on the basis of educational institutions and, at the same time, higher education institutions have successfully continued online education. A number of socio-humanitarian and methodological problems related to the organization of the training process are addressed by the education authorities with the support of law enforcement agencies and local self-government. Among the priority tasks of training provision are the provision of information support for teaching staff and students, organizing the transfer of the institution to other regions of the country if necessary, and methodological and methodological support for the educators' work (Atieku-Boateng, 2021), (Shoufan, 2019).

Effective online learning is the outcome of planning learning using systematized databases, quality online teaching models, and organizing classes using the latest online platforms (Palvia, S. et al., 2018).

The study of the different types of interaction between participants in the learning process, which involve organizational and informational support for student-information content links, student-student and student-teacher links, is one of the most robust studies of online learning. It also demonstrates that the presence of each of these types of interaction, if significantly integrated into the learning process, contributes to achieving the desired learning outcomes (Hillier, 2018).

As mentioned by M. Mohammed and N. Ja'ashan (2020), planning for online learning involves not only identifying the content to be covered, but also carefully tracking how the different types of interaction that are critical for high learning outcomes will be supported.

This approach is also supported by S. Zarei and S. Mohammadi (2021), who recognise online learning as an effective social and cognitive process rather than simply a matter of transferring information according to the curriculum. Professionals who have developed online programmes for higher education institutions over the years indicate that effective online learning should be the basis for organizing the learning process and support students not only academically, but also through cross-curricular and other social support (Alqahtani & Rajkhan, 2020).

Usually, the planning, preparation and development period for a full online course at a university is six to nine months before the beginning of the course. Thus, an important difference between the conventional way of learning process and online learning is the increased speed of preparation of standard educational sessions and the limited software resources used by methodologists and educators (Serdyukov, 2017).

Thus, developing the sphere of education and science, supporting its ability to ensure the realization of the country's intellectual potential, ensuring the creation and use of the achievements of national and world science and technology, and ensuring security and social safety during military conflicts is only possible by organizing an effective online education system (Ratheeswari, 2018).

As the results of the research by scholars indicate, in order to meet the economic, social, cultural and other needs of society, to continue to shape the innovation vector of the economy especially during times of military conflict, it is necessary to focus on the following aspects of higher education development, namely its online sphere:

− creating appropriate conditions for scientists and innovators to continue their scientific, scientific-technical and innovative activities online;
− developing programmes for the return of scientists and innovators who have been forced to leave the country because of martial law;
− restoring and upgrading the science and innovation infrastructure network in the e-sector (Shehab & Khalifa, 2021).

5. Conclusions

Consequently, an examination of the literature on the topic under study leads to the conclusion that the issue of protecting the right to safe quality education for higher children and youth is an important issue not only of the historical past, but also of the present. The restructuring of the education system of modern society in the context of military conflicts is evidence of its ability to transform itself through online space, mainly through the mobilization of managerial, intellectual, human and technical resources in the organization of the learning process.

Nonetheless, an effective educational process is only possible if the safety standards of the participants in higher education and a comprehensive approach to its rational organization are respected, which is possible by implementing a number of effective educational strategies to address the various challenges of building online education in times of military conflict.

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