

BLENDING LEARNING: A NECESSITY OR A PROSPECT DURING MARTIAL LAW IN UKRAINE

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Summary

In the article, the authors describe the introduction of blended learning into the educational process in Ukraine during martial law. The authors define the concept of "blended learning"; it is noted that in the process of blended learning, students spend part of their time in traditional classes with a teacher, and part of their time completing assignments online or at other times and remotely. The main risks that arise in the process of blended learning in higher education institutions in Ukraine are indicated. In the course of the study, a survey was conducted among students of higher education institutions located in different regions of Ukraine – at the State University of Intellectual Technologies and Communications and Uzhhorod National University.

The survey found that students of the State University of Intellectual Technologies and Communications experienced problems with the Internet; had limited access to computers, tablets, smartphones and problems with the organization of learning in the process of blended learning. It is worth noting that this university was in a zone of constant anxiety and shelling by the Russian Federation.

In turn, the students of Uzhhorod National University rated the educational process in the process of blended learning higher; relative problems were noted in the organization of learning, but according to the authors, this is not surprising, because blended learning requires students to be more independent and responsible for their learning, which is especially problematic during the war due to reduced motivation to learn, stress and reduced activity in learning.

Key words: blended learning, martial law, surveys, educational process, students, learning risks.

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1. Introduction

The development of digital technologies, cloud technologies, the COVID-19 pandemic, and the invasion of Ukraine by the Russian Federation in February 2022 have contributed to the rapid spread of digitalization in educational institutions and the transition to distance learning, and in some regions to blended learning. In the process of blended learning, students spend part of their time in traditional classes with a teacher, and part of their time completing assignments online or at other times and remotely. This approach allows students to work independently,

repeat and consolidate the material, and allows teachers to organize their time more efficiently and conduct more interactive classes. Today, students study in non-standard and special conditions for education. This is a challenge not only for students, educational institutions, but also for teachers, as stress and anxiety affect classroom performance, motivation, and the organization of the educational process in general. During the COVID-19 pandemic, researchers and teachers have already tested a number of educational platforms, teaching and testing methods, and quickly developed e-content and strategies to address the challenges faced in education, including virtualization, technological support, engagement, information sharing, assistance, integration, learning flexibility and diversification, monitoring, etc. (*Karimianet et al., 2022*).

2. Analysis of publications and the purpose of the study

Different scholars view blended learning with both positive and negative aspects, but today there is no clear definition of what blended learning is. The very first to use the term "blended learning" were researchers C. Bonk and C. Graham, who in their work "Handbook of Blended Learning: Global Perspectives, Models" were among the first to identify and characterize different models of blended learning, each of which has its own specifics, revealing their essence and experience of practical application (*Graham, 2006*). O. Spirin notes that blended learning is "a combination of face-to-face and online learning that allows teachers to use the technological advantages offered by the academic cloud to achieve learning goals (*Spirin, 2019*).

K. Bugaychuk notes that blended learning is "a purposeful process of acquiring knowledge, skills and abilities carried out by educational institutions of various types within the framework of formal education, part of which is implemented remotely with the help of information and communication technologies and technical learning tools used to store and deliver educational material, implement control measures, organize interaction between the subjects of the educational process (consultations, discussions)" (*Bugaychuk, 2016*).

The use of blended learning for the organization of education in educational institutions can be found in the works of V. Bykov, T. Bodnenko, Y. Trius, A. Kvyatkovska, S. Semerikova, O. Spirin, L. Kartashova, V. Kukharenko, A. Stryuk, N. Morse.

3. Challenges in education during martial law in Ukraine

The new school year 2022/2023 started in Ukraine on September 1. In terms of organizing the educational process, this was one of the most difficult years for education in Ukraine, as it took place in a time of war. Educational institutions could choose different forms of classes in accordance with the recommendations of the Ministry of Education and Science of Ukraine. Due to the threat of shelling and numerous sirens, the frontline areas mostly chose distance or blended learning. At the same time, there were no uniform recommendations on how to organize the educational process after the air raid, as each region of Ukraine has a different security situation.

Blended learning improved the educational process during the war, as it allowed for online and classroom learning in areas where it was possible.

Blended learning, also known as hybrid learning, is a teaching method that combines the traditional classroom approach with the use of technology, including online tools and e-platforms. In blended learning, students spend part of their time in traditional classrooms with a teacher, and part of their time completing assignments online or at other times and remotely. This approach allows students to work independently, repeat and consolidate the material, and

allows teachers to organize their time more efficiently and conduct more interactive classes. The main reasons for the lack of systematic implementation of blended learning in higher education institutions are the lack of electronic content, clearly regulated standards, ready-made materials, and the lack of knowledge and skills to use ICTs efficiently, which is necessary for the development of relevant courses. Lack of sufficient awareness of the blended learning system and the desire to change the traditional system of education, lack of time to develop new courses and motivation to do so

Blended learning can include various formats of traditional and online classes, from lectures and seminars to virtual laboratories and online group projects. This approach is becoming increasingly popular in higher education and corporate training, as it allows for an effective combination of the benefits of traditional and online learning.

However, the use of blended learning in times of war may also require additional attention to cybersecurity and student data privacy. Successful implementation of blended learning in such an environment requires careful consideration of all possible risks and the use of appropriate technical measures to ensure the security of students, teachers, and their sensitive data.

4. Risks of blended learning during the war in Ukraine

In today's context, the organization of blended learning during war is an urgent problem, as there are many risks that can cause a real collapse in the educational system. Preparation of online learning in the context of military conflict, development of teachers' competencies, adequate planning of training by the administration, use and development of learning platforms – all of this together plays a huge role for the further effective functioning of a particular institution and education in general. It is estimated that 3.7 million children in Ukraine and abroad used online and distance learning options in the spring of 2022. New factors of influence on the educational process are emerging: air raids and the need to hide in shelters; the loss of some educational institutions of their material and technical base; the unstable psychological state of a person (both teachers and students) during the war (hostilities, missing, wounded, dead, etc.); evacuation of some students and teachers, mobilization of stakeholders (*Horyachok, 2023*).

After analyzing the works of scientists (*Chykurova, 2022*), we can identify the main risks that arise in the process of blended learning in higher education institutions in Ukraine:

Cybersecurity: In blended learning, it is important to ensure reliable cybersecurity as learning takes place online. Cyberattacks can lead to data loss, reduced security, and problems with data recovery for students and teachers.

Internet access: In areas where active hostilities are taking place, the Internet may be limited or unavailable. This can be a problem for students who need access to online materials and blended learning platforms.

Lack of material and technical resources: limited access to computers, tablets, smartphones; equipment in educational institutions that are necessary for the organization of the educational process in blended learning.

Problems with the organization of learning: blended learning requires students to be more independent and responsible for their learning. However, in regions and cities where there are active hostilities, this can be a problem due to reduced access to education, lack of a supportive environment, fear and stress experienced by students.

Lack of direct contact with the teacher: in blended learning, students spend less time with teachers and receive fewer direct answers to their questions.

5. Results of the study

In preparing this article, the authors used a research and descriptive methodology. The academic analytics approach was applied, as the purpose of the study was to discuss and analyze students' perceptions of blended learning during martial law in Ukraine.

In this article, a survey was conducted among students of higher education institutions located in different regions of Ukraine – in State University of Intellectual Technologies and Communications and Uzhhorod National University. A total of 110 respondents participated (60 respondents from the State University of Intellectual Technologies and Communications and 50 respondents from Uzhhorod National University).

Students had to assess the risks of blended learning according to the above on a 3-point scale:

Cybersecurity Cybersecurity (1 point – not provided at all, 2 points – relatively provided, 3 points – provided at a high level);

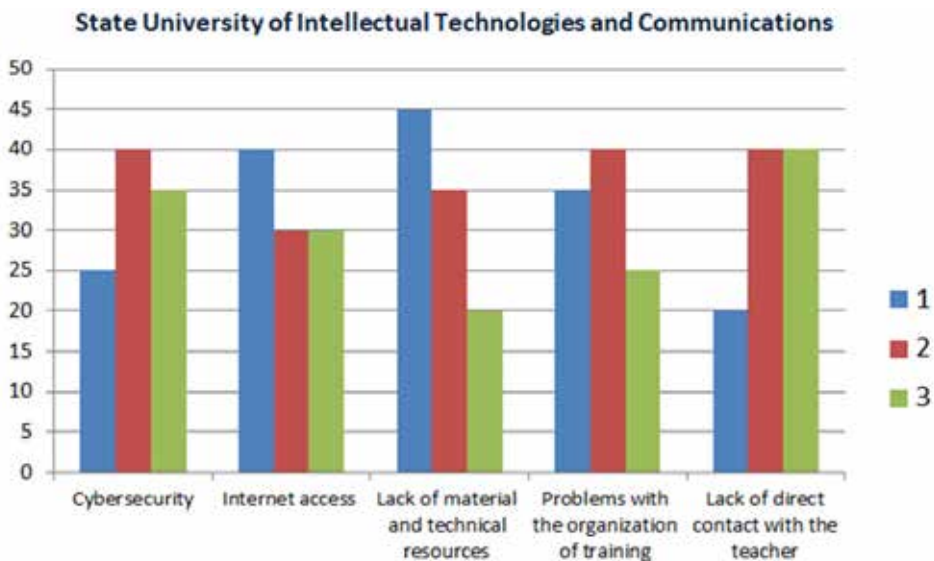
Internet access Internet access (1 point – no Internet at all, 2 points – periodic access, 3 points – high level access);

Lack of material and technical resources Lack of material and technical resources (1 point – no material and technical resources, 2 points – some material and technical resources, 3 points – fully provided with material and technical resources);

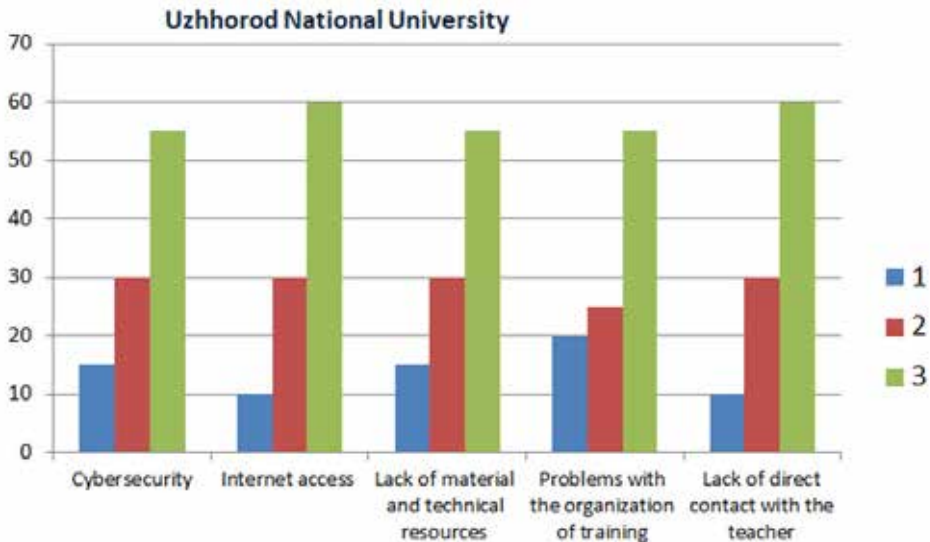
Problems with the organization of training Problems with the organization of training (1 point – there were problems, 2 points – there were periodic problems, 3 points – there were no problems);

Lack of direct contact with the teacher Lack of direct contact with the teacher (1 point – no contact, 2 points – teachers periodically contacted, 3 points – communication with the teacher at a high level).

The results of the survey of students of the State University of Intellectual Technologies are shown in Figure 1.



Picture 1. Results of the survey of students of the State University of Intellectual Technologies



Picture 2. Results of the survey of students of Uzhhorod National University

After analyzing the responses of respondents at the State University of Intelligent Technologies and Communications, it can be noted that the vast majority of students experienced problems with the Internet (40% of respondents rated 1 point and 30% rated 2 points); had limited access to computers, tablets, smartphones, equipment in educational institutions (45% rated 1 point and 35% rated 2 points) and had problems with the organization of learning in the process of blended learning. The results of the survey of students of Uzhhorod National University are shown in Figure 2.

After analyzing the responses of respondents at Uzhhorod National University, the authors noted that students rated the educational process in blended learning higher; relative problems were noted in the organization of learning (20% of students rated 1 point and 25% rated 2 points), but this is not surprising, because blended learning requires students to be more independent and responsible for their learning, which is especially problematic during the war. Students' motivation to learn decreases, they are stressed and less active in their studies.

Open-ended questions in the survey, where students could make comments and suggestions for the organization of the educational process with blended learning, showed that it was necessary to change teaching strategies under martial law. Teaching material should be presented using ICT, videos, and short but important information. Increase live communication with the teacher through various digital platforms.

6. Conclusions

The study showed that the introduction of martial law in Ukraine also affected the education sector. In the spring of 2022, all Ukrainian educational institutions switched to distance learning, except for military vocational education institutions, which continued blended learning (*Serhiienko, T., & Samoiloiva, 2022*), and the new academic year 2022/2023 allowed 60% of educational institutions to switch to blended learning (*Chykurova, 2022*).

During martial law in Ukraine, the organization of blended learning faced difficulties with access to the Internet due to the need to stay in shelters or obstacles in covering distances caused by the danger and hostilities. At the same time, respondents noted that blended learning helped them to feel the educational process, unlike distance learning at the beginning of the war.

This study can be useful for researchers and educators looking for effective learning strategies that support lifelong learning. Further research will be aimed at finding the best methods of teaching and assessing students in the process of blended learning.

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