

**APPLICATION OF BLENDED EDUCATIONAL FORMAT FOR TEACHING GRAPHIC DISCIPLINES IN WAR CONDITIONS****Sydorova N. V.,**Candidate of Engineering Sci, Associate Professor,  
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**Abstract.** The full-scale war worsened access to education, deepened the existing educational inequalities, negatively affected the quality of the educational process and success, and also reflected on the psycho-emotional state of students. During the war, training has many features, there are also changes in the organization of the process itself, and usually they are of a negative nature.

The article examines and analyzes the peculiarities of training during war conditions. Examples of execution by students of the specialization "Architecture of Buildings and Structures" of the graphic tasks "Construction shadows of a building" and "Construction shadows of a vase" after the lecture material and an example of execution in remote mode are given.

**Keywords:** mixed form of education, quality of education, graphic disciplines, student motivation.

**Introduction.** The full-scale war worsened access to education, deepened existing educational inequalities, negatively affected the quality of the educational process and success, and also reflected on the psycho-emotional state of students. Education is an important public good and a right guaranteed by the Constitution of Ukraine. 20% of children do not have constant access to the educational process in the conditions of war, and its organization is most hindered by air raids and the lack of conditions for learning in shelters.

The educational process at the Odesa State Academy of Civil Engineering and Architecture during war conditions for first-year students is organized in face-to-face and distance learning (in a mixed format). In the conditions of martial law, the process of assimilation of the material should be oriented, first of all, to the creation of safe learning conditions.

Distance education may include training, including practical classes, independent work, consultations and other forms of organization of the educational process. Video, audio, graphic and text information is transferred between subjects of distance education during training classes and consultations held remotely in synchronous or asynchronous mode. The full-time form of education involves lectures and practical classes, consultations in the classrooms of the academy, which contributes to the positive attitude of first-year students to the study of graphic disciplines, especially at the beginning of their studies.

**Statement of the objective.** Currently, an urgent problem is to accept the existence of an educational process during war conditions, to understand the experience in order to understand its essence, to identify positive and negative aspects, to determine the optimal models of the use of educational technologies, to forecast possible prospects for the development of the educational system in modern conditions and all possible options its adjustment in situations of uncertainty.

**Analysis of the recent research and publications.** The study of theoretical and applied aspects of the organization in the traditional format of education counts for several centuries, in the distance format - ten years. However, the full-scale war worsened access to education, deepened the existing educational inequalities, negatively affected the quality of the educational process and success, and reflected on the psycho-emotional state of students. Education is an important public good and a right guaranteed by the Constitution of Ukraine. 20% of children do not have constant access to the educational process in the conditions of war, and its organization is most hindered by air raids and the lack of conditions for learning in shelters [1-3].

Setting the task. The teachers were given and fulfilled the task, as in the war conditions in a mixed format, when classes can be interrupted at any moment by anxiety, in the case of an unstable psycho-emotional state of students, to issue tasks from the discipline Descriptive geometry using the example of the task "Construction of shadows of a building". How should classes in a mixed format for studying graphics disciplines be conducted in general, what tools and skills should teachers possess and what skills should be developed in students to achieve the set goal?

**Main material and results.** Teachers and students of the higher school have been working in the online format for many years. But teaching the material in a remote format during martial law is a completely different vision of this problem. The war made adjustments to the education of students and continues to make adjustments. We will see the result only after the hostilities are over and we will be able to see in comparison how much the educational process changed during the war and after it. Now we can say that Ukrainians continue to live in the conditions they are in, despite the terrible events, they are studying in full force. Destruction of educational institutions, lack of shelters, shortage of personnel, impossibility to work under occupation - these are only some of the challenges faced by the Ukrainian educational system during the war.

Today, specific inconveniences characteristic of graphic disciplines are also observed. Issuing material on the graphic discipline for first-year students who do not have basic knowledge of drawing is something that requires high professional qualities, an individual approach and maximum endurance from the teacher. The degree of complexity of the published material can be seen in Fig. 1, 2. And if an alarm sounds during the release of the material, the process stops indefinitely, and then you have to start over.

It is necessary to explain the material in such a way that the student can cope with any variant of the task offered to him. It is a real challenge for a teacher to issue and explain tasks of this level. Some construction elements have to be explained up to three times [4,5].

It should be noted that the material is issued in stages. The teacher draws online in the remote mode in the graphic editor, accompanying his actions with explanations.

A significant disadvantage of teaching graphic disciplines remotely is checking the accuracy of constructions, as well as correcting works in various file formats on a computer, which requires a set of software packages for editing files. Therefore, face-to-face consultations were offered to all students. Students, having a different level of preparation for the graphic discipline, a different level of motivation for learning, different preparation for completing homework, received different results

Receiving an unsatisfactory result certainly has a psychological effect on the student. Any such work is separately consulted in any format, where in fact the material is first repeated only in personal communication.

It should be noted that the students also had problems of a different nature. The disciplines of the department of descriptive geometry and engineering graphics are taught to first-year students. Live communication between students and teachers has an important role, especially at the beginning of studies [6,7].



practical skills [4]. Therefore, it should be emphasized once again that the teaching of graphic disciplines for high-quality assimilation of the material by students is possible only when using a mixed teaching format. Analyzing the problems we encountered while teaching graphic subjects during war conditions, we can make an unambiguous conclusion that technically distance learning can be carried out at a fairly high level, but the psychological aspects of the students' condition and the consequences of completely distance work are poorly understood, but at the same time they have a significant impact on the educational process [9,10].

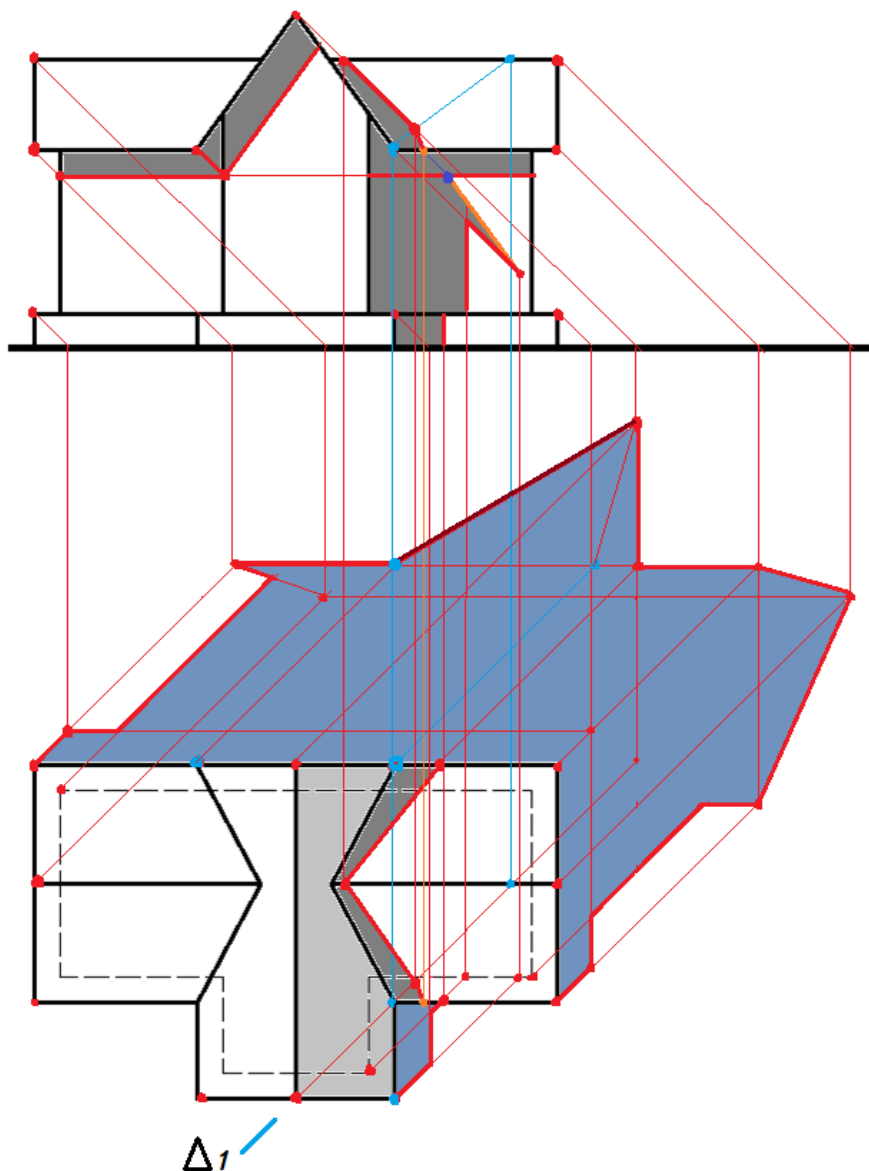


Fig.2. Construction of own and falling shadows of the building

**Conclusions.** The goal of education is the comprehensive development of a person as an individual and the highest value of society, his talents, intellectual, creative and physical abilities, the formation of values and competencies necessary for successful self-realization, the education of responsible citizens who are capable of conscious social choice. The necessary level of quality of higher education cannot be achieved only with the help of distance technologies, but must include, as before, direct communication between students and teachers to obtain the most effective results. The results show that there are risks of decreasing learning motivation, loss of unconditionality and uniqueness of knowledge and learning content.

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**ЗАСТОСУВАННЯ ЗМІШАНОГО ФОРМАТУ НАВЧАННЯ ДЛЯ ВИКЛАДАННЯ  
ГРАФІЧНИХ ДИСЦИПЛІН В УМОВАХ ВОЄННОГО СТАНУ****Сидорова Н. В.,**

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**Анотація.** Повномасштабна війна погіршила доступ до освіти, поглибила наявні освітні нерівності, негативно вплинула на якість освітнього процесу й успішність, а також відобразилася на психоемоційному стані студентів. Під час війни навчання має багато особливостей, відбуваються також зміни і в організації самого процесу, зазвичай вони мають негативний характер. Руйнування освітніх закладів, відсутність укриттів, нестача кадрів, неможливість працювати в окупації - це лише частина тих викликів, з якими стикається українська освітня система під час війни.

Викладання графічних дисциплін в онлайн форматі здійснюється вже не один рік. Але викладання матеріалу в дистанційному форматі під час воєнного стану - це зовсім інше бачення цієї проблеми. Війна внесла корективу в навчання студентів і продовжує вносити. Результат ми побачимо лише після завершення бойових дій і зможемо бачити в порівнянні наскільки змінювався освітній процес під час війни та після неї. Зараз можна сказати, що українці продовжують життя в тих умовах, в яких вони є, не дивлячись на страшні події, вони навчаються в повну силу. Руйнування освітніх закладів, відсутність укриттів, нестача кадрів, неможливість працювати в окупації - це лише частина тих викликів, з якими стикається українська освітня система під час війни.

У статті розглянуто та проаналізовано особливості навчання під час воєнного стану. Наведено приклади виконання студентами графічних завдань спеціалізації «Архітектура будівель і споруд» «Побудова тіней будівлі» та «Побудова тіней ваз» після видання лекційного матеріалу та прикладу виконання в дистанційному режимі.

**Ключові слова:** змішана форма навчання, якість навчання, графічні дисципліни, мотивація студентів.