

## **INTEGRATION OF MOODLE AND ONLINE TOOLS TO SUPPORT THE CONTINUITY OF THE EDUCATIONAL PROCESS**

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The war in Ukraine became a severe test for the higher education system, jeopardizing its main functions: ensuring access to knowledge, training specialists and supporting the country's scientific potential. In conditions of constant evacuations, anxiety and restrictions, traditional forms of education turned out to be unviable. Higher education institutions were forced to quickly adapt to new realities, looking for ways to preserve and continue the educational process.

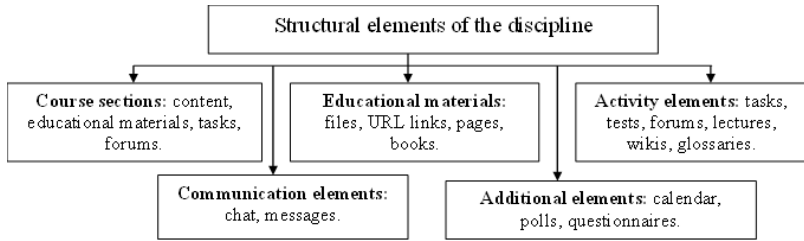
Distance learning became a key tool for ensuring the continuity of education [1]. It allowed students and teachers to continue their studies and work, regardless of their location. The transition to a distance format has revealed a number of problems related to the organization of the educational process, ensuring the quality of education and supporting the psychological state of participants in the educational process. However, despite the importance of distance learning, its effectiveness largely depends on the tools used by educators to organize the educational process. The simple transfer of materials is not always sufficient to ensure quality education, especially in conditions of stress and uncertainty. Therefore, in addition to access to knowledge, it is necessary to create a favorable environment for communication and support [2].

The use of online tools for organizing communication and support allows you to create a safe and comfortable space for students and teachers experiencing war-related stress. In this context, distance learning platforms such as Moodle, Microsoft Teams, Google Classroom and others have acquired special importance. They have become not just tools for transferring knowledge, but also platforms for organizing communication, support and cooperation. The use of platforms has allowed higher education institutions not only to preserve the educational process, but also to open up new opportunities for the development of distance learning. In addition to distance learning platforms, significant attention should be paid to such online tools as: Zoom and Google Meet, which are used for video conferencing and online

communication; Google Docs, Sheets, Slides, Canva and LearningApps, which are used for collaboration and content creation; Mentimeter and Padlet are useful for organizing interactive classes; Google Drive and Dropbox are convenient for storing and sharing files. These online tools can be integrated with distance learning platforms or used separately to support various aspects of distance learning. Therefore, they have become an integral part of the educational process in wartime, providing the opportunity not only to transfer knowledge, but also to maintain communication between participants in the educational process [3].

Today, Zoom is the most popular for video conferencing and online communication. This service allows you to organize online lectures, seminars, group discussions and individual consultations. Zoom supports high quality video and audio, which ensures comfortable communication. The screen sharing feature allows teachers to share presentations, documents, and other materials, and students to share their work. Breakout Rooms allow participants to divide into groups for collaborative work. The recording feature allows you to save a lecture for later viewing. In addition, Zoom has a built-in chat that allows participants to exchange messages and links. Zoom is available on various platforms, including computers, smartphones, and tablets, making it convenient to use anywhere. Among the variety of platforms and online tools used for distance learning, Moodle deserves special attention. The Moodle platform has a number of advantages that make it an effective tool for organizing distance learning. First of all, it is its open source code, which allows you to adapt the platform to the specific needs of the educational institution and ensures constant updating and development. Moodle provides a wide range of tools for creating courses, organizing communication, assessing knowledge, and managing the learning process. The platform's flexibility and scalability allow it to be used for both small groups and large educational institutions. Moodle supports various types of learning materials, including text, video, audio, interactive elements, which makes learning more diverse and interesting. In addition, the platform ensures data security and information confidentiality, which is an important aspect in distance learning.

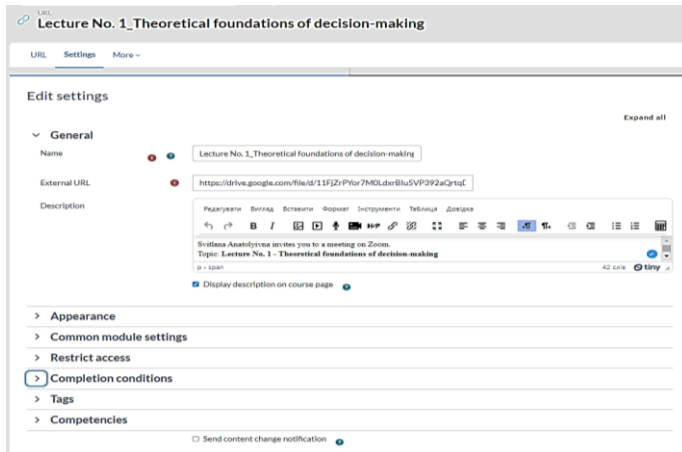
In the Moodle system, a discipline (course) consists of a number of structural elements that allow you to organize the learning process effectively and conveniently (Fig. 1). These structural elements allow the teacher to create a full-fledged and effective online course that meets the needs of students. Let's consider in more detail the settings of the main course elements.



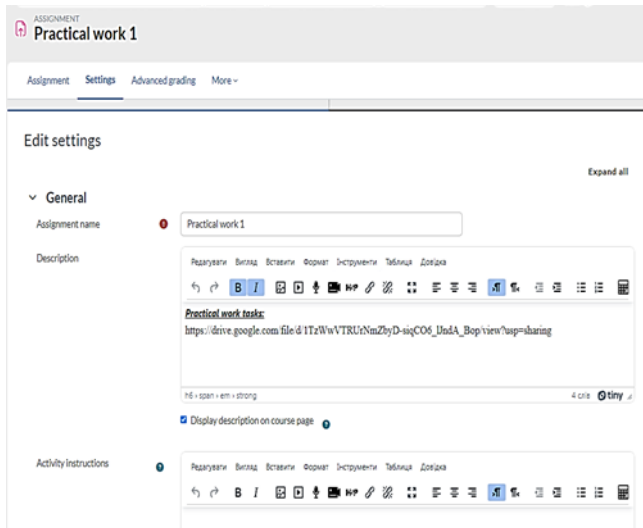
**Fig. 1. Structural elements of a discipline in the Moodle system**

When creating lectures in Moodle, you can set various parameters that affect the structure, content and accessibility of the lecture for students. The main lecture parameters include: lecture title, lecture description, appearance, accessibility, conditions for passing and completing (Fig. 2). In addition, when creating lecture parameters, you can apply formatting parameters, insert links, graphic objects, videos, which greatly enriches the presentation of the lecture in the course.

When forming practical tasks in Moodle, you can set various parameters that determine their conditions, requirements and assessment options. Namely, the task name, task description, additional files, availability, response submission types, maximum submission size, evaluation method, maximum score, conditional availability, deadline for timely submission of work or tasks, and other parameters (Fig. 3a, Fig. 3b).



**Fig. 2. Lecture appearance in the Moodle system**



**Fig. 3a. The appearance of practical work in the Moodle system**



**Fig. 3b. Type of submission and method of submission of answers**

Each topic or course in the Moodle system can have test questions that can be used to create a variety of effective tests. The types of test questions are as follows: multiple choice, one correct answer, short answer, numerical answer, matching, essay, nested answers, drag-and-drop, computational question, and

description. Each of these question types allows the teacher to create an effective and objective test that accurately reflects the level of knowledge of students and contributes to their educational progress.

The integration of Moodle to support the continuity of the educational process is also due to the fact that in addition to lecture classes, practical and test aspects, the Moodle system can: organize forums for discussing educational issues, exchanging ideas and communicating between students and teachers; create glossaries to collect and define key course terms; use wikis to collaborate on documents and projects; conduct surveys to collect feedback from students; organize seminars and webinars; provide the ability to upload and share files; create databases to store and share information; set up an event calendar to plan the learning process; organize chats for real-time communication; create learning journals and blogs.

Thus, the use of the Moodle platform with various online tools has become a key factor in ensuring the continuity of the educational process in martial law. This symbiosis has allowed not only to maintain access to knowledge, but also to create an effective and flexible educational environment. The use of tools for video conferencing, collaboration, content creation and organization of interactive classes has significantly expanded the possibilities of distance learning. Moodle, as a centralized platform, provided the structure and organization of the educational process, and external tools have added interactivity, flexibility and opportunities for communication. This integration has allowed teachers to adapt to changing conditions, providing quality education regardless of the location of students.

In the future, the experience gained during the war may become the basis for the further development of distance education in Ukraine. The integration of Moodle with other online tools opens up new opportunities for creating innovative curricula that meet the needs of modern society.

### **Literature**

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