

THE USAGE OF LMS MOODLE IN THE PROCESS OF TEACHING FOREIGN LANGUAGES IN NON-LINGUISTIC HIGHER EDUCATIONAL INSTITUTIONS

ВИКОРИСТАННЯ MOODLE У ПРОЦЕСІ ВИКЛАДАННЯ ІНОЗЕМНИХ МОВ У НЕМОВНИХ ЗАКЛАДАХ ВИЩОЇ ОСВІТИ

The technology has been advancing rapidly recently and it has become necessary to use technology in the education sector. Because of this it has become necessary to re-organize the education sector. The system of teaching foreign languages is constantly changing, modern life is very dynamic and dictates the same high and at the same time effective pace of learning, so the use of information and communication technologies in teaching a foreign language is a very important issue of modern education. The number of hours for the study of a foreign language is insufficient for successful mastering.

The needs of both students and teachers are also changing. Teachers need to prepare their lecture notes in the most effective way and in the shortest time. For the students the requirement has been to remove the time and space concept and encourage them for self-study. The educational institutions on the other hand are seeking to provide the maximum level of education with minimum level of investment. The article covers the issues of learning a foreign language in a non-linguistic higher education institution. Currently, one of the effective tools for the organization of independent work of students in a foreign language is the use of LMS Moodle. Learning becomes personally oriented due to the variability and flexibility of learning the course material on the basis of individual pace. In addition, LMS Moodle allows for continuous qualitative control of the mastering of the material. Distance education is becoming more and more in demand in higher educational institutions all over the world.

The article considers the use of the Moodle platform as a virtual learning environment (VLE) for teaching and learning English. It shows the importance of using the author's distant Moodle-based student courses to increase the efficiency of control in teaching students a foreign language in a nonlinguistic higher education institution. Its main advantages are open and free access, user friendliness, a lot of activities that increase students' motivation and interest. The article pays much attention to peculiarities of using the platform as well as offers several solutions for reported issues.

Key words: Moodle, platform, course, virtual learning environment (VLE), blended learning (BL).

Останнім часом технології швидко розвиваються, і стало необхідним використання технологій в освітньому секторі. Система викладання іноземних мов постійно змінюється, сучасне життя дуже динамічне й диктує однаково високі та водночас ефективні темпи навчання, тому використання інформаційно-комунікаційних технологій під час викладання іноземної мови є дуже важливим питанням сучасної освіти.

Потреби як студентів, так і викладачів також змінюються. Учителі повинні підготувати свої конспекти лекцій найбільш ефективно та за найкоротший час. Вимога студентів полягала в тому, щоб зняти концепцію часу та простору та захопити їх до самостійного навчання. З іншого боку, навчальні заклади прагнуть забезпечити максимальний рівень освіти з мінімальним рівнем інвестицій. У статті висвітлено питання вивчення іноземної мови в нелінгвістичному вищому навчальному закладі. Нині одним із ефективних інструментів організації самостійної роботи студентів іноземною мовою є використання Moodle. Навчання стає особистісно орієнтованим завдяки мінливості та гнучкості вивчення навчального матеріалу на основі індивідуального темпу. Крім того, Moodle дає змогу здійснювати постійний якісний контроль засвоєння матеріалу. Дистанційна освіта стає все більш затребуваною у вищих навчальних закладах усього світу.

У статті розглядається використання платформи Moodle як віртуального навчального середовища для викладання та вивчення англійської мови. Це показує важливість використання віддалених авторських курсів на базі Moodle для підвищення ефективності контролю в навчанні студентів іноземної мови в нелінгвістичному вищому навчальному закладі. Основними його перевагами є відкритий і вільний доступ, зручність для користувачів, безліч заходів, що підвищують мотивацію та інтерес учнів. У статті приділяється велика увага особливостям використання платформи, а також пропонується кілька рішень щодо проблем, про які повідомляється.

Ключові слова: Moodle, платформа, курс, віртуальне навчальне середовище, змішане навчання.

UDC 378.14

DOI <https://doi.org/10.32843/2663-6085/2020/30-1.6>

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Introduction. Nowadays, we can see clearly rapid changes and developments in technology. Currently, e-learning system based on virtual learning environment Moodle (full name – Modular Object-Oriented Dynamic Learning Environment) is widely used in the universities. It is focused on learning technologies in cooperation and allows you to organize training in the process of joint solutions of educational problems, to exchange knowledge. The pedagogics, foreign philology and translation department of Simon Kuznets Kharkiv National University of Economics takes an

active part in creating electronic courses of the disciplines. We try to present our experience in creating electronic course. The intensive development of modern society requires the system of higher education to train independent, initiative, competent, mobile specialists who are ready to adapt quickly to new socioeconomic conditions. The modern trend in the educational standards of the new generation is to reduce the practice hours aimed at studying the majority of disciplines and to increase hours for independent work of students. Increasing role and the

student's independent work hours in the process of mastering a foreign language requires a significant increase in its productivity.

The purpose of higher education is not so much filling the student with a certain amount of information, as the formation of his cognitive strategies of self-learning and self-education as a basis and an integral part of future professional activities. Independent work of students is an important type of educational activity and plays a significant role in modern foreign language teaching of students of non-linguistic specialties. The state standard provides, as a rule, not less than 50% of hours from curriculum on independent work of students.

Statement of the goals and methods. The aim of the paper is scientific methodological grounding of the application of the author's Moodle-based distant educational courses for increasing the efficiency of a foreign language teaching control.

The teacher has a unique opportunity to manage the process, control it and adapt it to the individual characteristics of students. It is important that the use of information and communication technologies in the teaching of foreign languages must be systematic, because the process of formation of skills requires consistency.

Technological developments are forcing individuals, and consequently the institutions to become aware of the need to become part of the current era. It may also force them to re-organize themselves if necessary. Specially, a new era has started with the use of internet to reach any kind of knowledge instantly. With the fast developments in the knowledge technologies, new methods have emerged in the generation of knowledge, the presentation of knowledge, and the way we reach the knowledge. Technological developments have also affected teachers' instructional techniques, with technology providing different perspectives to the concept of education. Both foreign language teachers and non-linguistic higher education institution students face a number of issues demanding their urgent solution. Currently, internet has been preferred in education because of the technological possibilities it is providing, and its potential to reach much larger mass of people. The education system is perhaps at the top of the systems affected by technological changes, and is undergoing fundamental changes:

- The learning needs are increasing and becoming more varied, and at the same time it is becoming a service that the individuals may be seeking throughout their lives.
- The learners are demanding more flexible, personalized, and easy to reach learning methods.
- The learners do not want to be dependent upon a certain learning method.
- There is need for student centered education instead of the classical teacher centered education.

- The teacher has become the person who guides the students on how to reach the knowledge instead of giving the knowledge.

The learners are demanding more and more to learn at the time and place of their choice, and at their own learning speeds. The education technologies offer many advantages to students and teachers by helping them to learn using interactive and collaborative techniques. In particular, the internet nowadays is offering many tools and application packages to educators that can be used at all stages of teaching, and such tools increase the effectiveness and efficiency of teaching.

The analysis of the printed works showed that in the process of distant learning a great application there is found in the Moodle system that offers a wide range of opportunities for the valid support of the distance education process, also for students' progress control.

Moodle is the system of managing the site's contents specially developed for creating online courses by teachers. Such electronic teaching systems are often called learning management systems or virtual educational environments [4].

We have studied the possibilities of using the Moodle-based distant educational courses to control student's foreign languages skills as exemplified by the English language teaching. One of the most important functions realized by a teacher is the control function as a teacher's task is to check knowledge, competences and skills in the studied subject acquired by students both in and out of class [6; 9]. For this purpose there were created distant educational courses with the use of different forms, kinds and methods of control.

Results. The importance of the information support of students' independent work and increasing the efficiency of its control is conditioned by the fact that recently there have been introduced some great changes into the organization of the university academic work, namely there has been redistributed the academic load: the decrease in the number of classroom hours and correspondingly the increase in the students' independent work.

Modular Object Oriented Dynamic Learning Environment (Moodle) is one of the open source LMS systems that can compete with the commercially available LMS systems. A recent survey and investigation has shown that Moodle is the most efficient and most commonly used open source LMS system currently available.

- The most powerful properties of Moodle
- It is an open source learning management system.
 - Its installation is easy both local and on the network.
 - It enables educators to create online lessons.
 - It has a very wide user group. As a result of this new versions are announced very frequently.

- As of today Moodle is available in 75 different languages. All the languages or only a single language can be used in a given LMS session.

- Moodle is used in over 215 countries around the world, and it has over 1,176,162 registered members in its own web site (Moodle, 2012).

- There is no need to pay any license fee for Moodle. It is distributed free of charge as open source under the General Public License (GPL). The institution using Moodle only has to spend time (and money) for creating the lessons.

- Moodle has been developed with Social Constructionist Pedagogy approach. This is one of the properties that distinguish Moodle from other LMS systems.

- Teachers can easily load their lesson notes prepared in different formats (e.g. SCORM, flash, MP3, RSS, PowerPoint, PDF, word).

- Moodle can compete with the commercial packages (e.g. Blackboard, WebCT) and it has a big share in the education sector.

- New features are added constantly and these modifications are distributed free of charge (e.g. blog or module).

- Since Moodle is free of charge it has a large user base that can test the system.

- Moodle is a system that is user based.

As can be seen from the above list, Moodle can easily be used by any educational institution engaged in distant education, without having to pay any fee.

- It can be used for face to face (synchronous education) education and also for completely online education.

- As an interface it requires a simple, effective, compatible, low technology internet search engine (e.g. Internet Explorer, Firefox etc.).

- It sends the lesson lists to the internet over the service provider. The courses can be indexed by using the Google search engine as a guest person. The lesson can be divided into several categories and these categories can then be searched as required. Several thousand lessons can be loaded and controlled within the Moodle LMS. WYSIWYG HTML editor can be used to edit various items such resources, forums etc.

- Multimedia products such as video, Flash, PowerPoint, Excel, etc. can be used with the Moodle.

Moodle incorporates very reach modules and blocks. All the modules and blocks that are created are free of charge. Some of these modules are loaded automatically during the system installation and start-up. Because Moodle is an open source LMS system and because it is supported by many universities and user groups, new modules are created and added to the system continuously and these modules are distributed to users free of charge.

Some learning activities and modules in Moodle:

Lesson: Can be reached over the internet and can be saved and reused in later years. All lesson related

activities can be shown in weekly format, and a student can easily see and follow all activities that will take place in a semester.

Examination: The most important activity within Moodle is the developed examination module. Using this module it is easy to set-up multiple choice type examinations and also assess such examinations in no time. Thus, the missing points in the subjects taught using the theory can instantly be recognized, and the questions where students had the most difficulty can be examined and the related subjects can be delivered again. Different types of questions can be asked in the examination module. For example, multiple choice where only one answer is correct, multiple choice with more than one correct answer, filling gaps, pairing answers, and true-false type questions.

In addition, the system can change the order of the questions and answers randomly. Thus, in repeated examination conditions, answering by remembering the order of the questions can be eliminated. Students can learn their marks instantly, can see the correct answers, and then learn where they made mistakes instantly. These examinations can be turned into a learning activity as well. Because of this, students are given the chance of repeating the answers if their first answer happen to be wrong. As a result of this, students can review the questions for which they gave the wrong answers. If desired, a percentage factor can be setup such that for every wrong answer that the student gives, his or her mark can be reduced by the chosen factor.

In the process of developing training modules, we have adhered to the goal of organizing pedagogical conditions coordinated and managed by independent work. Therefore, it was decided to include both compulsory and additional sections of the training material in each module. Under the mandatory topics there are e-learning materials for students, training for audiovisual applications. The additional topics are glossary of terms; additional reading materials, guided by the materials for independent project work; additional online resources and reference materials.

Each topic of the e-learning course has a clear structure, having in its composition a set of exercises developed in accordance with the discipline program and the number of hours allocated for contact work and independent work on a particular topic of the course. A special training function in language learning should perform the interface of training programs. A text page with the following types of work – dictionary, text and dialogue, as well as various types of Quiz with exercises for self-study were the structural components of each module.

The main types of independent work in a foreign language used in our course are:

- work with lexical material: performing lexical exercises;

- work with text and dialogue;

- work with audio materials: listening to texts and situational dialogues;
- work with grammatical material: study of theoretical grammar materials and grammar exercises.

Thus, independent work covers all aspects of learning a foreign language and determines largely the results and quality of mastering the discipline. It is the organization of effective independent work using LMS Moodle that provides the necessary conditions for the formation and development of linguistic and communicative skills, taking into account the personal needs and characteristics of students.

Let's consider the possibility of using various tools of the course of electronic learning environment, created on the basis of LMS Moodle, for the organization of independent work and its control. In each topic of this course, we have divided all the material to work with vocabulary, text.

Almost all the exercises of our course are made using the tool Quiz, which allows you to carry out the testing procedure in the training mode. Systematic use of training tests in teaching a foreign language allows you to organize independent work of students, the purpose of which is the mastering and consolidation of the material, the deepening and improvement of knowledge.

It is important and necessary to use the tests not only in the control, but also in the training function in the process of mastering the language material, individual skills. Training tests in a foreign language in LMS Moodle is designed for understanding, fixing and repetition of theoretical material and improvement of students' skills. For example, a student passes a block of work with vocabulary and makes one exercise on it.

To work with the texts, two exercises with different levels of complexity were selected. This was done

taking into account the individual approach to the preparedness degree of students. The first test was done using such tool as "Drag and drop into text". In the first type of the vocabulary exercises the students have to read the texts below. Match choices (A – H) to (1–5) (Figure 1).

In the second text we made with the use of such tool as "Select missing words question type". This is very similar to the "Drag and drop into text" into text question type, but uses drop-down menus in the text instead of drag-boxes. This works well where the question text is very long and you would have to scroll a lot to do drag and drop (Figure 2).

To work with the vocabulary we selected such tool as "Multiple choice". Multiple choice questions now offer the learner the option to clear all answers, once they have made a selection. In the exercise students have to choose one right from 3 suggested variants for answering the questions (Figure 3).

Assignment: Students are asked questions based on the theory given to them in the classroom, using the assignment module. Students who have completed the applications can load the result files (.doc,.exl,.cpp,.java etc.) to Moodle. The assignments sent by students can either be marked automatically by the system, or the educator can mark the assignments. Students can be sent feedback for their assignments and so that they know how well they have done. It is also possible to send students their results automatically by the system, using e-mail. The hand-in dates of the assignments can be restricted using several criteria. It is possible to find out easily all the activities carried out by a student during a semester, such as which assignments completed, what grades has been given, and so on.

Survey: Using the survey module of the Moodle system it is possible to find out quickly and efficiently



Figure 1. Example of the exam paper "Drag and drop into text"

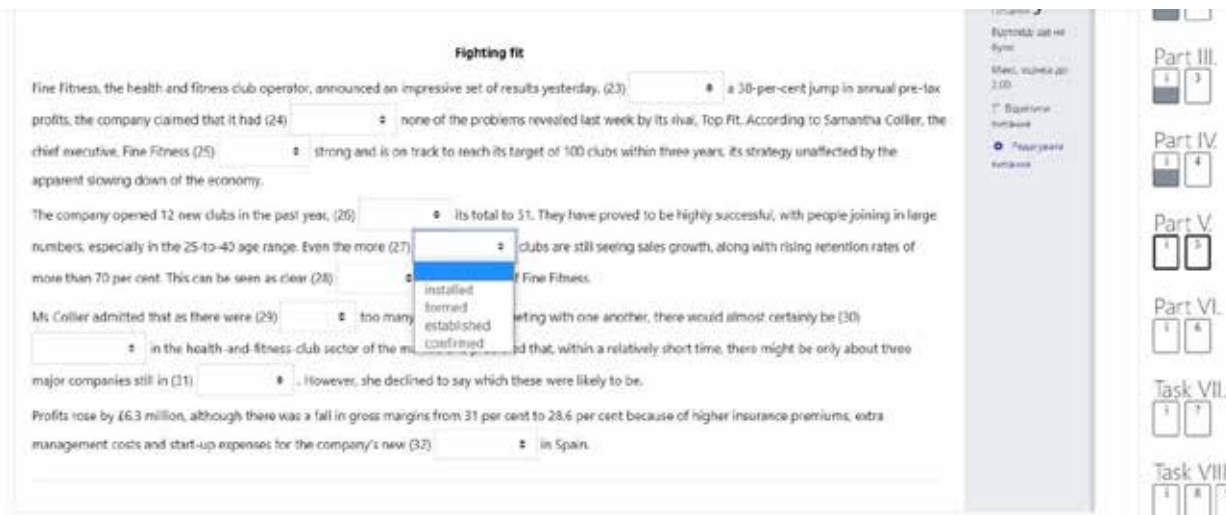


Figure 2. Example of the exam paper “Select missing words question type”

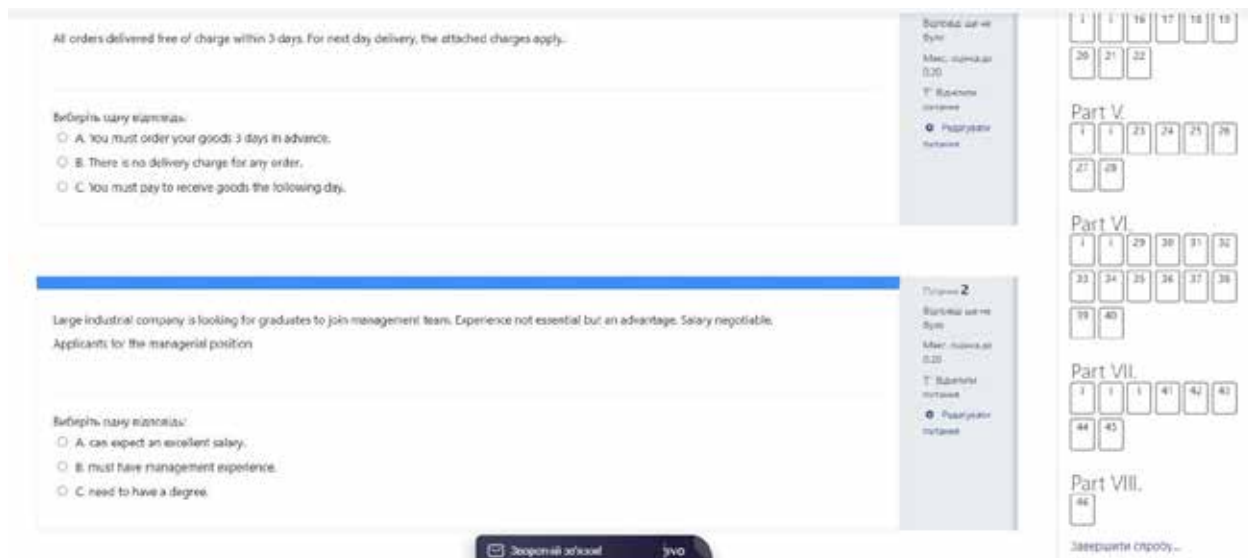


Figure 3. Example of the exam paper “Multiple choice”

what the students' opinions are on certain topics. For example, the way that a lecture was delivered, difficulty of assignments, quizzes and questions, and the ideas that emerged from the students can all be converted into a survey, and then this survey can become a Moodle survey module where all the students can participate and give their opinions. This will help the educator enormously as he or she will have feedback about the overall level and opinions of the class.

Some communications modules found within Moodle: Forum, wiki, e-mail, blog, chat, etc.

Forum Module: Using the forum module within Moodle, students can enter their questions on a pre-prepared forum. The fact that students can use these forms inside and outside lesson hours in order to ask questions and get answers, enable them to extend their learning activities outside normal lesson hours. In addition, the forum module can grade the mes-

sages. If desired, these grades can be converted into student marks and as a result, a more efficient monitored during a semester. Students who are shy to ask questions inside a classroom can easily use the forms to ask their questions. All the questions any answers sent to these forums can be collected and then compiled under a frequently asked questions heading, which then become an invaluable source of knowledge.

Wiki Module: Wiki is a collection of knowledge pages where everyone can have access and modify as they wish.

If the educator prepares the course notes using Wiki, then students have the chance to add or modify these notes as they wish. As a result of this, lecture notes can easily and very quickly be prepared, reviewed, and all the mistakes can be removed. All the modifications done by students can be moni-

tored, and if desired all these modifications can be removed. The pages to be used for each topic can be classified under different keywords. Thus, a link can be established to the pages in Wiki when that keyword is encountered anywhere in the course web site. Students can also be asked to form groups and work on Wiki pages on certain topics. As a result, collaborative study of the students as a team can easily be established. The pages prepared by a group of students can be modified, if desired, by other students. This way any mistakes can easily and quickly be removed and a knowledge environment can be created which can be used in later years as well.

Different people within the Moodle can have different authorities and responsibilities:

System Administrator: Prepares the server (installs the PHP, Appach, MySQL). Downloads Moodle and install it on the server, adds teacher(s), opens lesson(s); assigns teacher(s) to lesson(s), adds students to the system, can have backup of the system, can restore the system if needed, can attempt to solve problems related to system operation.

Teacher: Loads lesson syllabuses to the system, loads assignments to the system, prepares examinations, adds offline sources, prepares communications tools (e.g. chat, forum, blog), adds dictionary to the system, can backup his or her own lesson, can monitor his or her students' progresses and activities from the logs.

Student: Enters the system using his or her username and password, can access the lesson contents, prepares the assignments and uploads to the system, takes examinations; checks the results, can see the results of his or her examinations, can establish communication with friends or with the instructor, can download documents offline to his or her own computer or can print them; can see his or her own performance level in the class.

Guest: Can search inside the system using the limited areas assigned to them.

Conclusions. As a result of the increase in student numbers day by day in the education sector, or the need and importance to obtain knowledge whenever needed has made it necessary to use new technologies. Thus, the use of virtual learning environment Moodle for independent work of students provides a number of advantages over traditional forms and methods of organization of the independent work of students. Among these advantages are the implementation of the principle of individualization

of educational and professional activities; the ability to get quick feedback; the ability to visualize the educational material; the variability of independent work; independence and activity.

There is no doubt that the electronic environment Moodle contributes to the organization of active independent cognitive activity of students, its optimization, increase the amount of information and increase interest in learning. All of the above helps to get better results in teaching students in comparison with the traditional higher education system. And it is safe to say that the use of LMS Moodle for independent work of students contributes to the improvement of the process of training future professionals.

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