Experience of Using LMS Moodle in the Organization of Independent Work of Bachelors in Teaching a Foreign Language

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Abstract. The article presents the experience of the organization of independent work of bachelor-students in a foreign language using LMS Moodle. 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. Currently, one of the effective tools for the organization of independent work of students in a foreign language at the Krasnoyarsk State Agrarian University is the use of LMS Moodle. The authors have developed an electronic course on discipline "Foreign language" with the use of LMS Moodle for independent students’ work, electronic platform LMS Moodle increases significantly the efficiency of learning a foreign language of students in non-linguistic universities as resources of the environment are quite diverse. 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.

1. Introduction
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 socio-economic 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.

Independent work is the work of students performed in extracurricular or classroom time on the instructions and methodological guidance of the teacher, but without his direct participation (with the partial direct participation of the teacher, leaving the leading role at the work of students). 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 [1-3].
Independent work is an important element in language learning, as the insufficient number of hours devoted to contact work requires a significant amount of independent work of students. Well-organized independent work contributes to the achievement of educational goals and forms students' skills and abilities to organize their own educational activities, which further gives them the opportunity to self-education and self-improvement.

In teaching foreign languages, independent work of students plays an exceptional role, since the ability to communicate orally and in writing in a foreign language to solve problems of interpersonal and intercultural interaction cannot be formed only in practical classes, without additional, independent study of a significant part of the educational material, without the ability to find information independently, to comprehend it critically.

One of the main reserves for ensuring the effectiveness of independent work is its intensification. Intensification of independent work as a component of the learning process is an increase in the productivity of the student's independent learning activity [4-6].

Due to the dual nature of independent work (as a means of organization and as a specific type of educational activity), its intensification supposes search for such forms of tasks that would ensure the maximum productivity of the student's independent learning work.

Among the latest technologies used in the university for the organization of independent work of students, we can distinguish information and communication technologies, which are implemented on the basis of electronic platforms. The introduction of information and communication technologies (ICT), including those implemented on the basis of electronic platforms, in the field of education has allowed teachers to change qualitatively the content, methods and organizational forms of education, to intensify and individualize the training of students. In recent years, the research work notes the great potential of modern technologies for more effective organization of independent work of students [7-20].

2. Object and method

The object of our research is the process of independent work of students in teaching foreign language using electronic platform LMS Moodle.

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.

3. Results and discussion

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 faculty of Foreign Language Department of KSAU takes an active part in creating electronic courses of the discipline. We try to present our experience in creating electronic course.

As an example, we have developed a distance course in LMS Moodle for independent work of students in the discipline "Foreign language" for students of the direction 35.03.06 «Electrification of agriculture». The course is designed for 4 semesters.

First of all, to enter the system, the student must enter his / her login and password, which is given to him / her by the teacher. It allows excluding non-fulfillment of independent work, as the system performs automatic accounting and control.

This course has a thematic structure and includes the following blocks:

– instructive block has organizational and methodical nature. This block has a news forum (in which the teacher informs students about all the events taking place in the learning process); an explanation of the course (which indicates the goals, objectives and educational results of the
development of the discipline); official documents with the working program of the discipline and the fund of evaluation tools;

– didactic block of the discipline consists of specially selected and well-structured didactic materials, which are a set of various teaching materials and tools to optimize the process of interaction between the teacher and students;

– information and reference block contains resources for the study of the course in the form of reference materials on grammar, vocabulary, etc.; educational and methodological and information support of the discipline; hyperlinks to open full-text editions of educational and scientific literature, periodicals, Internet resources and other electronic educational resources intended for self-education of the student;

– control block includes materials for the current control; and materials for the medium control of students (exam). Materials are presented as recommendations for preparation for the exam; control questions for the exam, where the list of questions is presented in a given sequence and in full accordance with the declared content of the electronic educational complex.

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. Since one of the methodological requirements for the interface is the use of the studied language, for maximum immersion in the language environment, for the obtaining skills of automatism in the use of the language, the start page is written in a foreign language (see Fig. 1).

![Figure 1. An example of the start page written in a foreign language.](image)

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 (choosing the right answers, finding equivalents of Russian words and expressions in a foreign text, filling in missing phrases from the text, etc.);
- work with **text and dialogue**: reading and translating professionally-oriented texts and dialogues using various dictionaries;
- 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, with text and dialogue.

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. If a student works with text or dialogue, we found it necessary to make 3 exercises for each block.

For training tests, the authors of the course see it as appropriate to specify in the settings that the time of passing the test is not limited, and provide students with several attempts to do the test. In this case, the average grade from both attempts will be placed in the gradebook setup. It will be possible for students after the first attempt to analyze the mistakes, to assess the depth of knowledge, to repeat and study more closely the theoretical material, and then take the test again. This helps to create a favorable learning environment and the conditions for greater learning effectiveness.

To work with the **vocabulary**, 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 tests were done using such tool as «Multiple choice». In the first type of the vocabulary exercises the students have to choose one right variant from 4 variants for the translation of a given foreign word. In the second type of the vocabulary exercises we made more difficult vocabulary exercises. The students have to choose the right variant for the definition in English. It’s more difficult, because the definition and the variants are both written in English (see Fig. 2).
To work with the text, three exercises were made. Figure 3 shows examples of different types of Quiz for the text exercises: question 1 – with the tool «Drag and drop into text»; question 2 – with the tool «True / False»; question 3 – with the tool «Short answer». The first exercise is done with such tool of Quiz as «Drag and drop into text». So the students have 4 different prepositions, but there are only 2 drop zones. They have to choose 2 right prepositions and drag and drop them into drop zones on a background image. The second exercise is done with such tool of Quiz as «True / False». So the students have the sentence from the text. And they try to understand according to the text if the sentence is true or false. The third exercise is done with such tool of Quiz as «Short answer». So the students have the first part of the sentence from the text and they have to find the second part of it (see Fig. 3).

To work with the dialogue, three exercises were made. Figure 4 shows examples of different types of Quiz for the dialogue exercises: questions 1 and 2 – with the tool «Drag and drop into text», question 3 – with the tool «Select missing words». The first exercise is also done with such tool of Quiz as «Drag and drop into text». So the students have 4 different words from the dialogue, and there are 4 drop zones. They have to put the words in the correct word order and then to drag and drop them into
drop zones on a background image. The second exercise is also done with the tool «Drag and drop into text». The students have 4 questions and 4 answers and they have to math them. The third exercise is done with such tool of Quiz as «Select missing words». The students have to choose one right word from 4 variants (see Fig. 4).

![Figure 4. An example of the dialogue exercises.](image)

For control tests, we have set up a rating scale, the number of attempts, deadlines, and a time limit. The final test students pass one time in a limited period of time 15-30 minutes. In the settings, we also made that the questions are selected by the computer system at random from all the exercises of the module. The system of final testing allows students to test their knowledge at the end of each topic study, and the tests developed by the teacher, allow you to check quickly the level of assimilation of the material. A significant advantage of using the tool "Quiz" for the teacher is the fast processing of the results, as most of the exercises are processed and evaluated automatically.

All results are stored in the gradebook setup, which allows you to give a fair assessment of the work of students to monitor their learning activities. In our course, we have built a gradebook setup in such a way that it reflects all types of work performed by students, the maximum number of points for each work and the number of points that the student scored. A gradebook setup is provided with a final grade for the each semester (max. 100 points). The instructor can also view the course participants' grades using “grader report” or “user report”. As this course is designed for 4 semesters, and the student was able to see the final grade not only for each semester, but for the entire course, it is necessary to divide all the points for semesters. Accordingly, for the course of 4 semesters the student can score a maximum of 400 points.

4. Conclusion
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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