

Культура. Наука. Образование: проблемы и перспективы IX Международная научно-практическая конференция

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ONLINE COURSES FOR STUDENTS INDEPENDENT LEARNING

- **Abstract**. The article deals with designing a foreign language online course to organize the independent learning of students in the Moodle platform at the University. The paper presents the educational process organization based on blended learning; the paper highlights the stages of course development and its structure. The authors offer an effective method of independent learning organization in the Moodle platform based on the principles of reverse course design, professional orientation, communication, transparency and mobility.
- Key words: online course; independent learning; language skills; course development; graded event; blended learning.

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ОНЛАЙН КУРС ДЛЯ ОРГАНИЗАЦИИ САМОСТОЯТЕЛЬНОЙ РАБОТЫ СТУДЕНТА

Аннотация. В статье рассматривается технология проектирования онлайн-курса для организации самостоятельной работы студентов по иностранному языку на платформе



Moodle в университете. В статье представлена организация учебного процесса на основе принципов смешанного обучения, выделены этапы разработки курса и продемонстрирована структура курса. Авторы предлагают эффективный метод организации самостоятельной работы на платформе Moodle, основанный на принципах обратного проектирования курса, профессиональной ориентации, коммуникации, прозрачности и мобильности.

Ключевые слова: онлайн-курс; самостоятельная работа; языковые навыки; разработка курса; оценочное мероприятие; смешанное обучение.

Introduction

The introduction of a three-level system of education at the university has significantly reduced the number of classroom work time and increased independent learning time and pose a challenge for teachers – to teach students to work independently and to teach a foreign language in short terms. In our opinion, the Moodle platform effectively helps to ensure the acquisition of the necessary skills, as well as to form the skills of self-education activity. The Moodle platform allows a fundamentally new approach of learning foreign languages based on the Blended Learning system [3].

The purpose of the paper is to consider independent learning in a foreign language by means of online course, developed on the basic principles of blended learning.

The blended learning model is based on the following principles:

- 1) the principle of reverse course design;
- 2) the principle of professional orientation;
- 3) the principle of communication;
- 4) the principle of transparency, universality and accessibility;
- 5) the principle of mobility [2; 7].

The experimental part

The course development begins with planning the desired result of the subject, forecasting the required final product quality – skills, that a student must possess at the end of the course. Thus, the development of the course is carried out in reverse way – from result to content (fig. 1).

Figure 1 shows that the final result of the course is designed (skills determine this result) at the first stage of the course development. For example, in the curriculum plan application of educational program 'Energy and resource-saving processes in chemical technology, petro chemistry and biotechnology' and 'Machines and devices of chemical production' and 'Processes and equipment of oil refineries' the following competencies were indicated: the ability to communicate and write in Russian and a foreign language to solve problems of interpersonal and intercultural interaction, self-organization and self-education ability.

Therefore, a graduate of this educational program should have communication skills in Russian and a foreign language, and be able to improve his education independently; he will gain these skills by working independently in the Moodle platform.





Культура. Наука. Образование: проблемы и перспективы IX Международная научно-практическая конференция

Successful mastering subject results / planned results Development of methods / techniques, control events and the avaluation criteria in accordance with the planned result

Development of weekly evaluation events for a term

Development of a course structure

Fig. 1. Online course development stages

At the next stage of course development, it is necessary to create a system of graded events, i.e. to determine how it will be possible to evaluate this necessary final result and by what criteria. Based on the skills from the curriculum plan, graded events should check and evaluate the following skills: speaking skills (monologue / dialogue), listening skills, writing skills (letters, essays, presentations, annotations /summary, abstracts, etc.).

Speaking skills (monologue / dialogue) can be checked in classroom and final classes on the topic in presentations or debates. Writing skills should be checked systematically in the form of comments, the final written assignments and classmates work reviews.

As future engineers are to determine the causes of the problems and find ways to solve them effectively, develop and improve production, work as a team, so cases (not only lexical and grammatical tests) where students have to describe the problem, the causes and suggest ways to solve it, can be evaluated. For example, students are offered such problem as 'Combustion in the laboratory' (you can use your own ideas) and a reference algorithm / problem-solving plan.

A student can present the problem solving task in the form of a presentation, report or an essay in the classroom. Thus, students develop analysis skills, by identifying the causes of problems, developing possible solutions based on the data obtained, and form team operating skills as they will have to work in a team in professional world. This corresponds to the second principle.

The third stage of course development is aimed to design the course structure in accordance with the curriculum plan, i.e. ways, methods to achieve goals and the assessment criteria. At this stage it is necessary to distribute the types of activity between classroom and independent work, to be specific which activities should be done in the electronic environment, and which in the classroom with the teacher. A teacher forming the structure of the course should not forget about flexibility [4]. The course structure (see Fig. 2) is developed taking into account these principles.





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	Course description Instructions Timetable
Introductory	•Evaluation criteria
Module	•Teacher's portfolio
	•Forum
Course Module	•Classroom tasks •Use of English •Electronic materials (library, video, texts) •Tests

Fig. 2. The course structure and content of the introduction and other course modules

The professional orientation principle is realized through the introduction of the lexical material necessary in professional communication and reading professional texts. Foreign language course would include a number of topics related to future professional activities: Engineering, Professional Competences of a Future Engineer, Engineering Education, Engineer Specialization, Innovations in Engineering, etc. The texts are selected in accordance with the subject of the course (topics studied within the course), on the basis of which a vocabulary is drawn up, tasks and cases are developed to develop and consolidate necessary skills.

In our opinion, the most difficult thing in the course creation and working in online courses are to implement the third principle – the communicative principle, since there is no direct communication with the instructor in the electronic environment, communication is intermediated with a delay in time.

We consider that a course teacher's video presentations can make the teacher closer to his/her students and create an atmosphere of real "lively" communication in your online course. We recommend to begin your work with a real face to face meeting in a classroom when a teacher gets acquainted with his/her students, gives them necessary instructions how to deal with the course [1].

One more important thing is that during this class the students also have a chance to get acquainted with each other. After that real meeting the teacher registers his/her students in an online course where they can again listen to the instructions how to communicate with participants (their tutor and group mates). It is realized with the help of video messages (filmed by students themselves) on the forums / chats specially created in each part of a course. Our course starts with a part called 'Meet your teacher and fellow students' where the video presentation of the teacher is uploaded. In the video presentation the tutor tells students about herself/ himself, personal qualities, achievements, interests and asks students to make the first creative task – their own video presentations.

To help students with the first assignment the questionnaire (the questions they have to answer in their presentation) is provided. Each student (participant) of the group can also suggest their own question/questions if they want to know more about other participants or specify the information

given. We think that assignments like this can help students to do their best and overcome possible psychological difficulties to speak a foreign language because they are afraid of making a mistakes (because they have insufficient knowledge of grammar and vocabulary) and finding themselves in an awkward situation in the presence of the teacher and other students of the group. For the same reason students are also offered basic clichés for their self-presentation. All presentations are uploaded to a proper course forum, thus the teacher and other students of the group can get a grasp of each other.

The students mark (like) the presentations they enjoyed, but do not grade them from the point of view of correctness. Each participant is asked to put two-three specifying questions in the forum about hobbies, favorite movies, the Internet, websites, etc. to the teacher and the student of the group appointed by the teacher so that each participant can take part in asking questions and also answer to the other students questions and to avoid a situation when some students have to answer a lot of questions, and the others remain without any additional questions. This task helps to create friendly working environment and the teacher will have an opportunity to estimate language level of the group before he/she starts the online course work. The teacher should also organize online review sessions to keep in touch with students.

When students have questions they will write them to a specially created forum in the proper part of the course. When questions are relevant for more than 20% students of the group, the teacher/tutor downloads an answer / video answer / lecture on the subject on a forum. When a question is relevant for less than 20% students, the teacher/ tutor chooses an expert from the students of the group from those who have understood the material to help those who have not. When the problem is solved successfully, expert students get additional 10 points to their assessment/grade for an online course work.

This interaction takes place on a proper forum / a chat of each part of the e-course called FAQ (Frequently Asked Questions) which is an essential component of each part of an e-learning course, allowing students to keep in touch like in a real classroom, discuss urgent issues/problems, and successfully perform their assignments under the teacher's tutorial. All completed assignments by students are downloaded to a forum / chat of each block / module of the online course where they are discussed and specifying questions can be asked [6].

It is reasonable to complete your online course with a final forum where all students of the group upload their final course papers. The teacher analyzes all the course work results (what was a success and what was not). The students are also given an opportunity to analyze their work themselves, to speak about their results (what they learned), suggest their ideas on the online course improvements to make it more learner-friendly and thank the teacher / tutor and the group mates for their online course team work.

Works of all students are available on a forum where they are checked by the teacher, and can be seen by all students of the group. Ask your students to make an assessment of the group mates works on the basis of the criteria offered. It is vitally important to set clear criteria of each task assessment. Your students should also know how their work in the e-learning course will be assessed.





The students' work in the online course is graded in the following way (your students should be informed about it before they start their work):

1) meeting time limits – an assignment / task is fulfilled in the set by the teacher time (on the schedule) (max. 10 points), if your student can't be in time and the reason is sufficient he/she is given some extra time, which is also limited;

2) quality of the fulfilled task (full compliance to the requirements) (max. 10 points);

3) activity of work in a online course (systematic work (max. 10 points);

4) passing of the module tests (max. 10 points);

5) fulfillment of tasks from the additional module (max. 10 points).

The minimum passing number of points (points students have to get) is 40 points. If they get them they are given "satisfactory" grade for their work in the subject. If students want to improve their grades, they are asked to fulfill the tasks from the additional module [5].

Interaction teacher-students and student-student takes place in forums, in chats which are available / open for all participants of the group. Managers of your educational institution and students' parents (that is natural in Russia) can also control the progress of their student if they wish, thus the principle of transparency of work and assessment in the e-environment is observed.

Conclusion

The principle of universality, interchangeability / flexibility and availability of blended learning means that work in a classroom and independent learning of students in Moodle platform can complement one another and/or replace each other when necessary, for example, when students have problems with learning material / tasks fulfillment in Moodle platform. When it happens the activity can be easily transferred to a classroom and vice versa, the teacher/tutor seeing that students' work is successful in a classroom and there is no need of further teacher' participation can transfer work of students to e-environment that allows to take into account features (even specific) of all students.

Besides, students can continuously master the discipline, being at any place at any suitable time. Even if they cannot attend your class their learning of the subject is not interrupted and continues in the e-environment where the teacher can control and if necessary correct work of students. The electronic environment allows the course continue, supports the teacher-students and students of the group interaction. It is very useful if students have to begin learning the subject from the second or third semester (for example after a gap year). The previous parts of a course allow to restore the missed stages in the e-course under the tutor's supervision, if necessary consulting the teacher and/or other students of the group.

In conclusion, we would like to emphasize that learning in Moodle platform has great educational and also self-educational potential. The efficiency and effectiveness of learning in the electronic environment depends on a rational design of an online course based on planning of all stages of students work and following them step by step, on the basis of the principle of reverse course design, the principle of professional orientation; the principle of communication; the principle of transparency (assessing the work of students and teachers) / universality and accessibility and the principle of mobility.





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