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Electronic Educational Environment Moodle in English Language Training

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Abstract

The article deals with the causes, methods and functions of using E-learning in the process of training students English, as well as changing teacher's and learner's roles in the educational process. The introduction of information and communication technologies in educational and research processes is a compulsory requirement to implement the concept of modernization in Russian education. Recently, interest in English as a means of international communication has increased significantly, it has already been recognized as the language of professional communication in various fields of activity. The relevance of this work is undoubted. Modern higher school teachers are constantly looking for more effective approaches in training English and in the process of creating an electronic educational environment that would allow students access to various sources of information and help satisfy the interests of the modern student. The goal of the research is to increase the efficiency of training English in the system of higher professional education through the development and use of educational software products that apply modern information technology. Methods to achieve this goal include the method of using computer technology, methods of network planning and project management. The research showed that the organization of the information-instrumental educational environment uses a student centered approach, the development of an electronic educational and methodological complex (EEMC) is a search for an algorithm, most adapted to the student's cognitive needs, and EEMC in English creates the best conditions for the principle of interactivity. The practical significance of the study is determined by the fact that its materials related to the method of creating multimedia tasks and virtual environments can be used in the practical work of universities, as well as in the system of further training for specialists.

Keywords: information and communication technologies, education modernization, e-learning, virtual educational environment, English language training

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Introduction

With the increasing development of computer technology, electronic and telecommunications, information and Internet technologies, new opportunities for their use in education are being revealed. The introduction of new pedagogical technologies makes it possible to change the very education paradigm, and new information technologies help realize the opportunities inherent in new pedagogical technologies most effectively. In particular, the computerization in the field of communication defines a new level of English language proficiency requirements. It has led to changes in the definition of the goals and objectives of its study (Aldrich, 2003; Maurer, Sapper, 2001; Clark, 2007).

The use of new information technologies in teaching is one of the most important aspects for improving and optimizing the educational process, enriching the arsenal of methodological tools and techniques, which make it possible to diversify the forms of work and make the process of English training interesting for students (Stockley, 2006).

Information and communication technologies are a wide range of digital technologies used for creating, transmitting and distributing information and providing services “computer equipment, software, cellular communications, electronic mail, cellular and satellite technologies, wireless and cable communications networks, multimedia, and the Internet” (Koptyg, 2000, p. 54-59; Rosenberg, 2001).

The modern educational paradigm, built on computer-based teaching aids, takes as its basis the inculcation by students of self-education skills, but not the transfer to them ready-made knowledge and skills. At the same time, the student activities in class are the communication with a teacher, mediated through interactive computer programs and audiovisual media (Azman, Dollsaid, 2018; Rossett, Sheldon, 2001; Zarutskaya, Kisel, and & et al., 2018).

The use of information and communication technologies in teaching English makes it possible to present educational material more visually. It is also essential that the student can work in a self-pacing form, returning to the misunderstood, if it is required, or running ahead (Podoprigorova, 2003). In addition, computer-based training programs make it possible to train various types of speech activity and combine them in different combinations, understand language phenomena, contribute to the formation of linguistic abilities, create communicative situations, automate language and speech actions, and ensure the implementation of individual work and students' independent work.

Methodology

The systematic approach to the informatization of foreign language education allowed to consider the principles of this process at three levels (methodological and technological, system-integrative and conceptual-strategic). Their implementation will create a universal educational environment for training English. At the methodological and technological level, the principles of mastering certain aspects of the English language are developed, strategies and techniques for the formation of skills using information and communication technologies are determined. At the system-integration level technologies and teaching methods are synthesized within a single electronic educational environment. At the conceptual-strategic level, the existing educational programs in

the English language are adapted to the new technological conditions (Chemezov, Buhanova, 2012).

The methodological principles governing foreign language professional communication through information and communication technologies are also emphasized: the principles of conditionality, necessity, information content, reliability, interactivity, adaptability, complexity, polysensory, methodical support (Tsarkova, Ivachev, & Kulikov, 2013).

Results and discussion

Learning Management Systems (LMS) are widespread in Russian universities. One of the most popular open information systems is the Moodle system (Modular Object-Oriented Dynamic Learning Environment) (Behterev & Loginova, 2013; Loginova, 2011; Ovchinnikova, 2011; Rymanova, 2013).

It is a virtual learning environment that allows you to create a complete workspace for all participants in the educational process (Khusainova, 2013).

Moodle gives the teacher the opportunity to use electronic resources to organize information interaction between the teacher and students for solving different tasks during both classroom and extracurricular work, expanding cooperation in training, transmitting large amounts of information and knowledge control, organizing training in a more rational way, leaving easy topics for independent work (Andreyev, 2010; Dubskikh, & Zerkina, 2018; Obraztsov, 2000).

Considering the possibilities of the electronic educational environment, the authors of the article developed an electronic educational and methodological complex (EEMC) in the English language. It is a structured set of electronic educational and methodical documentation, electronic educational resources, teaching aids and knowledge control containing interconnected educational content for sharing applications to learn English effectively (Sritulanon, Chaturongakul & Thammetar, 2018). The main areas for application this complex are:

- full-time and part-time forms of education support;
- competitions, contests, quizzes in the English language;
- computer testing (Dyrdina & Zaporozhko, 2012).

The purpose of the EEMC is the development of professional foreign language communicative competence and all its components: knowledge acquisition about the language system and the rules to operate it in speech activity, mastering all types of speech activity in English, the basics of oral and written culture, language skills in everyday and professional communication situations, acquiring knowledge about speech behavior in certain standard situations based on understanding of national and cultural features of the foreign country and on the ability to exercise their verbal behavior in accordance with this knowledge, the formation of the ability to understand the interlocutor, to plan verbal behavior and transmit information in cohesive, logical statements (James, 2016; Mineyeva & Krasikova, 2010).

The content of EEMC reflects the requirements of a point-rating system, an activity and communicative approach to bachelors training. The course is based on modern e-learning technologies that ensure the implementation of individual learning trajectories under the continuous teacher guidance, and increase the efficiency of English training process (Daricheva, 2012; Sritulanon, Chaturongakul, & Thammetar, 2018).

EEMC has a thematic structure and includes the following blocks:

- instructional unit having organizational and methodical character. In this block, there is a news forum to inform students about all the events taking place in the training process; goals, tasks and educational results to master the discipline are stated; explanations of technologies and teaching aids, types of control are shown; the working program of the discipline, thematic plan and the individual rating plan of the student are presented; instructions and recommendations for the implementation of all kinds and forms of educational activities are given;

- resources for studying the course in the form of reference materials on grammar, vocabulary, English spelling, teaching and methodological information of the discipline, hyperlinks to open full-text educational and scientific literature, periodicals, Internet resources and other electronic educational resources (EER) for self-education of the student are presented in this unit;

- the didactic block consists of specially selected and clearly structured didactic materials, which are a combination of various educational and methodical materials allowing to optimize the process of interaction “teacher-students”;

- the control unit includes materials for entrance, current, boundary and control, materials for midterms (test/exam).

Thus, the teacher has diverse tools for organization of educational activities with students, training English practical classes, using such forms as the forum, the glossary, the lecture, the task, the test. A different combination of course elements is possible to achieve certain goals of classes.

Each topic of the e-learning course has a clear structure: at the beginning of the topic there is the “Glossary”, containing the main lexical units on the studied topic. It is important to emphasize that students are active participants in the development of a thematic glossary. They complement and edit the list of terms, and it helps to learn new vocabulary and refresh the previously studied. For example, in the Great Britain study course, one of the tasks for working with the text “Russia and Great Britain compared to each other” is adding vocabulary to the glossary on the topic. Then each unit of the glossary will be highlighted by the system in any of the texts (in a lecture, assignment, test). It allows students to focus on these words and expressions and, therefore, to remember them more firmly.

The system element "Lecture" is used to organize students' independent work on new theoretical material (grammar, teaching the principles of summarization and annotation, correspondence in English) (Gosper, Green and & et al., 2011). The most positive result in student work is observed in the assimilation of grammatical material. As an example lectures on such

grammatical topics, “Passive voice”, “Modal verbs”, “Complex Subject”, developed in Moodle, can be given. Thanks to the lecture settings specified by the teacher, students have the opportunity at their own pace to study new material and make a summary in the workbook. To increase active interaction and control the understanding of the material, the teacher uses various questions and tasks at the end of each section (page) of the lecture. Without understanding the reading material and checking the quality of the knowledge gained, it is impossible to continue studying the topic. Depending on the answer chosen by the student and the strategy developed by the teacher, students, answering the questions correctly, go to the next page or return to the previous page in case of an incorrect answer, having the opportunity to read the theoretical material once again and answer the control questions. The teacher evaluates the lecture, marks are recorded in the grade book.

In our opinion, the element “Task” possesses a large didactic potential in training English. The authors of the article widely use this electronic system tool both during the classroom work and for organizing independent work and homework. The algorithm for working with the “Task” element may be the working out of a new lexical and grammatical material, reading or listening to authentic texts on general or professional topics. After reading listening to the text, students do a series of lexical-grammatical exercises. In addition, the work on the content is accompanied by communicative exercises, and the result of the work may be the performance of creative tasks (preparation of the abstract, presentation, annotations). Students post them in the “Forum”. The element “Forum” is a tool for organizing training in a group. Based on essays, presentations, annotations, etc., students with a teacher discuss questions, leave their comments, and evaluate each other's works. For example, the result of the work on the theme “Study” (“Study in High School”) is the presentation “Our University”. The students' task is not only to compile and place a presentation in the forum, but also to evaluate the presentations of other participants of the course.

The next function of the “Forum” is an advisory function, thanks to which students have the opportunity to ask questions, get a teacher's advice.

In the process of creating EEMC in the English language, the authors attach great importance to such a structure element as the “Test”. We consider it is essential to use tests not only to control but in the teaching function, too. Depending on the test function its settings are made. The program editor allows you to customize the rating scale, the number of attempts, deadlines, time limit and the accrual of fines. If the test is of a training nature, the authors of the course indicate in the settings that the test time is unlimited and give students two attempts to solve the test. This will provide them with the opportunity, after the first attempt to analyze the mistakes made, to estimate the depth of the knowledge gained, to repeat and study the theoretical material more carefully, and then pass the test again. In this case, the average rating of both attempts will be set in the rating log. The final test students pass once for a limited period of time. Thus, we emphasize that the Moodle e-learning environment provides monitoring and evaluative monitoring of the educational process. The system of final testing allows students to check their knowledge at the end each topic. Tests developed by the teacher make it possible to check the level of learning quickly.

We especially note that the element “Test” allows you to implement the elements of the rating system for bachelors' preparation in English, as the testing system developed by the authors has a level character. Level A tests have a reproductive nature. They use the types of questions

"true / false", "multiple choice", "matching", "location in the right sequence." The "B" tests have a reproductive-productive nature: productive questions used in the "A" tests are supplemented with questions like "short answer". Students should type in one or several words or small sentences as an answer. The "C" tests have a creative character and consist of questions like "short answer," "description" and "essay".

A significant advantage of using the "Test" element for the teacher is quick processing of the results – most of the test tasks are processed and evaluated automatically. All results are stored in a statement that allows you to give a fair assessment of students' work and monitor their learning activities.

Moodle is equipped with a good rating system. EEMC in English has its own "gradebook". It shows all types of students' works, the maximum number of points for each work and the number of points a student has scored.

Conclusion

Using the tools of the Moodle distance learning system made it possible to make the process of training English for students of non-linguistic specialties personally-oriented, communicative and professional-oriented, and the teachers noted the following advantages and positive aspects of this platform:

- improving the educational process and ensuring effective independent work of students learning English;

- the optimal implementation of the content in training English in connection with the creation of a fairly extensive resource base. The Moodle system allowed teachers to solve the problem of providing students with educational and methodological materials, to present a training manual in a more accessible and convenient electronic format directly in the learning environment;

- flexibility and mobility of learning, achieved due to the fact that EEMC is available at any time and outside the university, so students could plan their curricula and course time, perform tasks at a convenient time;

- taking into account the specificities of students. The Moodle system gives students with different levels of learning and unequal abilities the opportunity to study at an individual pace. It creates a learning and educational environment that is conducive for a student and gives the prerequisites for more effective learning;

- active introduction of new information technologies in the training process using interactive tasks, computer and multimedia technologies, that helps to improve the process of forming students' foreign language skills, increase the level of such professional personal qualities as independence, creative activity and communication skills .

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