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Features of the Learning Modular System Moodle Use in Teaching the Russian Language to Russian and Foreign Students at an Institution of Higher Education

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Abstract

This paper introduces possibilities and conditions of teaching Russian with the use of the learning modular system Moodle. The experience of using this platform of teachers of National Research Tomsk Polytechnic University (Russia) is analyzed. We consider conditions for the optimization of the learning process which includes the use of traditional and innovative technologies to form student's actual speech competencies with the help of digital educational resources, interactive technologies, and his independent work. The tools used help to ensure training of highly qualified professionals to meet the needs of modern society, and are judged to be a necessary condition for the development of communicative and social competencies among Russian and foreign students studying at Tomsk Polytechnic University.

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1. Introduction

Modern society is characterized by accelerating development in all spheres. Universities all over the world are preparing graduates for a life which is absolutely unpredictable. In such circumstances it is important to ensure students' general cultural, personal, and cognitive development, and their ability to learn. Thus, one key problem of modern higher education is increasing the efficiency and quality of education.

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For the purposes of high school teaching, practice includes a module and competence approach, according to which the model of teaching the Russian language and speech culture is constructed. The modular system has been considered as an alternative to traditional teaching for a long time (Jerry et al., 1972; The modular instructional system as the teaching-learning strategy in an Indonesian development school, 1977; Mariani, 1981; Langlois & Robertson, 1991; Ghilic-Micu et al.; 2005; Sonek, 2006; Louwa et al., 2008; Isaila, 2011). It presents a link between theory and practice and is considered to be a system combining innovative and traditional teaching methods. Thus, the Russian language teaching model with the use of electronic resources is considered to be promising. “Electronic tools can make classes more efficient; lectures more compelling, informative, and varied; reading assignments more extensive, interesting, and accessible; discussions more free ranging and challenging; and students' papers more original and well researched” (Brinkley et al., 1999).

Learning programs in Russian higher technical institutions are focused on strengthening semantic relations between engineering and humanitarian subjects with consideration for professional characteristics of each field. Thematic presentations which have become a sign of a stable learning environment, modular test programs, and distance learning systems are actively used. The technological component of e-learning is considered to be very important, but it should conform to state requirements to teaching (the Federal State Education Standards-3).

Higher technical institution educational environments are heterogeneous: Russian and foreign students, full-time, distance, extramural and hybrid education – such diversity causes fierce criticism and inspection of the learning program content and its presentation to students (Kurowsky & Shchitov, 2015). Joint and simultaneous training of Russian and foreign students is a new challenge in the modern educational process. While developing didactic tasks, such training takes into account students' linguocultural differences (history, grammatical features, and culture). This is a special and interesting topic which presents a number of educational features and restrictions. Students vary in age, geography, quality and content of pre-university education. The heterogeneity of the student body is the reason education programs should be corrected annually with a significant amount of educational material updates. Heterogeneity is systemic in nature and should be taken into account when carrying out the educational tasks defined by the Federal State Education Standards.

2. Objectives, methodology and study design

The purpose of this article is to analyze results of the use of the learning modular system (LMS) Moodle based on its platform electronic courses in educational practice (as exemplified in National Research Tomsk Polytechnic University, Russia). Not only should the advantages of the tool be used for its intended purpose, but it is also necessary to follow sound didactic restrictions. The LMS Moodle tool adaptation in the practice of teaching linguistic disciplines has led the authors to build a theoretical model taking into account both the experience of pedagogical activity with traditional means and innovative resources of the developing educational system. It took time to explore the possibilities of the LMS Moodle, create our own electronic textbook, and get the first results. The methodology of analyzing the obtained pedagogical results is based on empirical (observation, conversation, questioning, learning other people's experience and one's own, documentation, the expert evaluation method, testing, and others) and theoretical (studying the literature on the research subject, theoretical analysis, pedagogical modelling, and others) methods which are necessary to assess the validity of empirical data. In dealing with the volatile and evolving educational process by creating an electronic textbook, we paid special attention to modelling the educational trajectory of students and then, after a number of expert assessments, began to check it against the real world learning process.

At the first stage, comprehensive training for working with tools of LMS Moodle was completed; at the second stage the theoretical discipline model oriented to the curriculum and the FSES was worked out; at the third stage the prepared training module was subjected to external review. The result of the study is the experience of creating electronic educational resources on the LMS Moodle platform, pedagogical reflection, tool adjustment, and making practical recommendations.

3. Results of the study

Researchers of virtual learning environments confirm the popularity of Moodle among various institutions (Berzins & Hudson, 2011). This electronic information-educational system (EIES) was launched in National Research Tomsk Polytechnic University (TPU) in 2010, and today teachers have created more than 400 textbooks on the LMS Moodle platform. Users benefit from various modifications of digital educational resources, traditional technologies, and methods to improve learning outcomes (Sitnikova et al., 2014). The innovative training model has been successfully used in the teaching of engineering and the humanities.

In our opinion, the pedagogical conditions for successful use of the educational resource LMS Moodle are the following:

- 1) students' motivation and teachers' educational activity;
- 2) a set of didactic recommendations (the modular structure of the curriculum, the multimedia training course, and the examination of teaching materials);
- 3) a set of creative personnel decisions (teachers' commitment to work in a multimedia environment; teachers' experience and students' learning activity);
- 4) technical and technological requirements (a tutorial, available technology, and training system maintenance).

Approval of our assessment of the training program created on the basis of LMS Moodle «The Language of Business and Professional Communication» is given by our colleagues (Polonskaya & Aylazyan, 2014). The analysis of pedagogical conditions for using various educational packages and systems is traditional for pedagogy, so we exclude a detailed description with the reference to the work of A.A. Khusainova (Khusainova, 2013).

Let us dwell on the structural description of training modules as the main didactic unit of the electronic textbook. According to its position, the module is situated between learning objectives and the student's personality. The module content must comply with the training program. The module must be adapted to the conditions of the program use (and even to multimedia means) and provide quality education.

Information and educational modules of the multimedia electronic textbook require a choice of topics, a set number of hours and study forms, learning specific concepts and terms in each topic, acquiring concrete knowledge and learning activities (Serysheva & Shchitov, 2014).

When completing academic work with an electronic tool, students acquire different skills from new learning activities as well as general cultural and professional competencies. The activity module is regulated by learning objectives, topics, methods of achieving the objectives and the specific types of training activities.

An evaluative and resultative module plans the interim and final tests taking into account substantive and activity modules: quality assessment summaries, tests (graded and practice), a dictation, a test, teamwork, monitoring, public speaking (a conference, a workshop, a report followed by a discussion), and phased implementation of the work.

Creating the electronic textbook on the Russian language involved two educational areas: 1) the proper, linguistic one – the creation of the theoretical basis for the tutorial, exercise, and glossary development, and 2) the technological one – converting training materials into the tool LMS Moodle.

Creating an electronic textbook on the Russian language and culture of speech has become of vital importance over recent years; the literacy problem has been discussed in the media and by the government several times. As a result, the idea of a nation-wide annual dictation has appeared. Professors and writers are sounding the alarm.

This module ensures a predetermined level of subject knowledge. The named requirements are installed in the educational LMS Moodle-complex as the substantive, activity, estimative, and resultative modules.

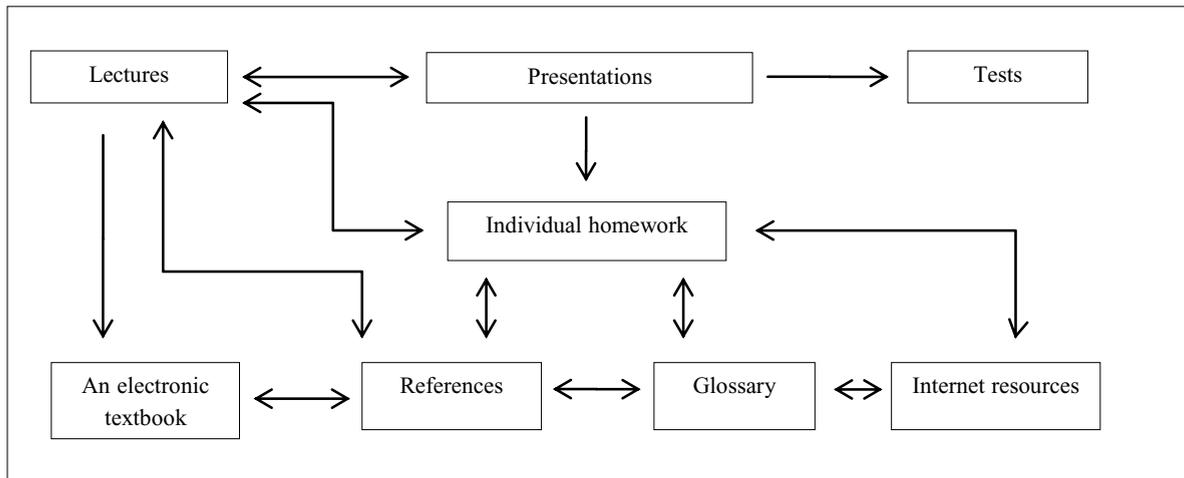


Fig. 1. The LMS Moodle use model in teaching the Russian language to Russian and foreign students at a technical institution of higher educational.

This diagram shows the complex relationships between tutorial components that makes it possible to prepare educational products and evaluate them as a system. The experience creating the electronic textbook "The Russian language and speech culture by employees of TPU's Russian Language and Literature Department, and its use make it possible to see the advantages and shortcomings of the tutorial. Its main advantage is the freedom of choosing the individual educational path by each student. LMS Moodle allows using the entire spectrum of media capability for teaching: texts, sounds, videos, a hyperlink system, and various types of training and control tests aimed at learning new theoretical materials. The complex program interface makes it difficult at early stages and demands sufficient user experience with the training manual creator. When creating the Russian language textbook, we did not use all LMS Moodle resources, but only those that were appropriate for the studied material.

During the academic work, bad examples and exercises became apparent. The training system makes it easy to make necessary changes. Didactic material can avoid making imprecise test questions. The test work makes it possible to check the task very quickly. It is necessary, however, to note that not every task is subject to program verification, but only those which can be formalized with the rigorous requirements of the training program, such as an essay.

New electronic media software programs provide pedagogical conditions for teaching and learning the Russian language and speech culture at all stages and in all forms.

Enumerating the advantages of digital educational resources does not solve all the problems of university education and developing the necessary common cultural and professional competencies. Academic development is strictly controlled by a known process of verifying theory by practice. Where science stops, art begins, or at least creativity does. This judgment is important because it is connected with language learning, and it is the main essence of cultural existence. Before language, there was only music and some kinds of art (for example, dance), and all other forms of culture and science were secondary, because they were developed on the basis of language (mathematics, physics, and medicine). LMS Moodle resources make it possible to solve the problem of preservation and transmission of information in an optimal way, and the textbook writer's art begins with the presentation of educational information in two basic forms: subject-figurative and verbal-logical.

Substantive and imaginative training reproduces the image of the object, its properties and functions. Through such a teaching method information is perceived immediately and completely as an image. Verbal and logical training is carried out within the framework of analytical thinking and leads to the development of synthetic, imaginative, intuitive and situational thinking. A specific character of language is manifested in the fact that it demands both creative and analytical thinking. Elements of the educational distance course (a glossary, a task, wiki,

a lecture, a test, a seminar, a survey, a forum, a chat) are not able to motivate a student to master the language and speech culture. It is a teacher who adapts the course to the subject features and provides developing both hemispheres of the brain and thereby the opportunity for students' personal growth. Therefore, "innovations in this area are often led by individual "champions" within an institution, who often come from academia, rather than IT service departments" (Berzins & Hudson, 2011).

In general, technology associated with computers and the Internet is changing with breathtaking speed. Some researchers confirm that mastering the use of electronic resources demands a lot of investment (Sharma, 2009; Egberongbe, 2011). There will be many things that will have to be relearned time and time again. Still, "certain skills will remain useful <...> over long periods of time, <...> it is also the source of some valuable innovations that can be of great use" in the future (Brinkley et al., 1999).

4. Conclusion

In this paper the experience of LMS Moodle use for teaching the Russian language and other language disciplines to Russian and foreign students at Tomsk Polytechnic University has been described.

The teaching practice is being successfully carried out, and is aimed at developing and improving the educational process. Development of new training modules is a relevant way to upgrade teachers' skills. Through creating the Russian language electronic textbook, the authors received a unique experience in the field of engineering pedagogy, and students got a new textbook with synergistic characteristics; you can update and modify the textbook according to the learning objectives.

The tool is being adapted to studying linguistic disciplines and is able to control thinking and educational processes within the boundaries of curriculum competencies. This modular object-oriented dynamic learning environment is applicable in full-time and distance learning, includes sufficient resources for storing and broadcasting educational information and monitoring students' educational activity. The student chooses an optimal learning path and frees time for independent study and research.

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