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LANGUAGE TEACHING OF MASTER'S DEGREE STUDENTS BASED ON THE OPEN EDUCATIONAL ENVIRONMENT

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Abstract

The aspects related to the use of an open educational environment for teaching a foreign language to Master's Degree students are considered in this article. Despite the fact that this is a fairly new phenomenon, language open educational courses for different areas of specialist training have been developed and are widely used. For the modern digital economy, competent personnel are required and for their preparation it is necessary to introduce digital tools of educational activity and include them in the information environment. Today, the use of e-learning, computer and distance learning technologies comes to prominence compared with traditional teaching methods. The current level of development of information technology, the equipment of universities with computers and the access to the Internet allow talking about the prerequisites for bringing foreign languages to a new level. The options for the basis of the educational environment that can be used to create language educational courses are analyzed in the article.

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Keywords: Language teaching, open educational environment, distance technologies, master's degree students.



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1. Introduction

In connection with the formation of a new social system (information society), huge changes took place in the world at the beginning of the 21st century. An important direction in the development of the information society is the IT penetration of education - the process of providing education with a methodology and teaching techniques for the optimal use of modern information technologies.

Currently, a number of initiatives are being implemented aimed at creating the necessary conditions for the development of the digital economy in Russia, which increases the country's competitiveness and ensures economic growth and national sovereignty. For this purpose, an Information Society Development Strategy for 2017-2030 and the program "Digital Economy of the Russian Federation" have been developed.

The digital economy needs competent personnel, especially they are necessary in the field of engineering, and for their preparation it is necessary to properly modernize the education system, including vocational training, bring educational programs in line with the needs of a changing society, introduce digital learning tools and enable them into the information environment, to provide the opportunity for citizens to be educated at anytime and anywhere on an individual educational path over a life.

2. Problem Statement

Nowadays, among the problems theoretically and experimentally solved by the method of foreign languages, the main one is the problem of internal and external motivation in most students of technical universities. This issue raises a number of problems of both scientific and practical content. In particular:

- forming students' motivation for learning;
- providing each student with individually - adapted teaching aids;
- giving students the opportunity to engage in an individual schedule.

2.1. Forming students' motivation for learning

To interest students of technical specialties in foreign language, where, in most cases, a foreign language is not the main discipline, is not an easy task. For students who are not fluent in a foreign language, language mass open online courses should be developed. They can be aimed at learning a general foreign language and will not be able to become the basis for teaching a foreign language for special purposes, but they can be successfully used to solve other educational problems, primarily so that students can compensate for their backlog or not successful participation in the cross-border control procedures (Litovchenko, 2019).

2.2. Providing each student with individually - adapted teaching aids

At a meeting of the Presidium of the Presidential Council on Strategic Development and Priority Projects on October 25, 2016, the passport of the project "Modern Digital Educational Environment in the Russian Federation" was approved. The aim of this project is to create conditions for the systematic increase and expansion of continuing education opportunities for all categories of citizens through the development of the Russian digital educational space and an increase in the number of students studying at educational

institutions by the end of 2025. To achieve this goal, the path of widespread introduction of online courses has been chosen.

2.3. Giving students the opportunity to engage in an individual schedule

Open online courses are becoming one of the competitive tools of modern universities around the world. Distance education in the form of open online courses is becoming a mass practice. These technologies are focused on the process of education management and the implementation of the psychological and pedagogical goals of training. The basis of this process is the objective laws of the development of human civilization, so this process will grow rapidly. In all developed countries, training is aimed at self-learning, the ability to independently obtain the necessary information, self-education, identify problems and look for ways to solve them, be able to critically analyze the knowledge gained and apply it to solve new problems.

3. Research Questions

The study raised the following questions.

- How can we provide Master's Degree students with individually - adapted teaching aids?
- Which methods can be applied to engage in an individual schedule for Master's Degree students?
- What are the advantages of using e-learning, computer and distance learning technologies in comparison with traditional teaching methods?

4. Purpose of the Study

It is assumed that the answers to the posed research questions will help to achieve the goal and will contribute to the development of recommendations to improve methods of teaching a foreign language.

5. Research Methods

5.1. Forming students' motivation for learning

In foreign literature, the advantages of using e-learning, computer and distance learning technologies in comparison with traditional teaching methods are described by means of five "A" (Cook & Triola, 2014):

1. Analytics. Nowadays, thanks to the electronic technology, we can collect information about learning process.
2. Access. Through the use of the Internet, it is possible to access any electronic educational resource from anywhere and at any time.
3. Adaptivity. The ability to change electronic educational resources for trainees, which makes the learning process personality-oriented and more effective.
4. Assessment. Distance learning technology allows us to make the process of assessing the formation of student competencies continuous and long-term.
5. Agility. Distance learning technology allows you to quickly rebuild curricula and expand them as needed.

The current level of development of information technology, the equipment of universities with computers and the access to the Internet allow us to talk about the prerequisites for bringing foreign languages to a new level. Today it is necessary to use the potential of information technologies, which are the basis of the field of engineering, in the process of teaching a foreign language to form foreign-language communication skills in the familiar environment for students (Malinin & Ponomarev, 2014).

5.2. Providing each student with individually - adapted teaching aids

European scientists are actively discussing the use of language MOOC (mass open educational courses) in higher education (Chekalina et al., 2018; Demeulenaere, 2017; Polyankina, 2014). The Portuguese Open University offers an iMOOC model for their implementation, based on a synthesis of two generally accepted types of MOOC – cMOOC and xMOOC (Chekun, 2016) – based on the potential of the network approach, as well as on the structured pedagogy of higher education (Moreira Teixeira & Mota, 2014). Here, “i” refers to individual responsibility, interaction, interpersonal relationships, innovation, and inclusion. Students use the personal learning environment (PLE) to manage their learning and to communicate with other students. In this model, students are supported by the educational community through cooperation, dialogue, feedback from the participants in the learning process, while teachers give a hand only where it is really needed. In group work with language MOOC, you can also use the experience of developers of such courses, paying special attention to the joint work of students. For example, in the “Italian for Beginners” course on the FutureLearn platform, joint practice in the discussion forum increases the level of learning and support of each other, and fosters a sense of community. Each topic of discussion is initiated by a question or article specially created by a team of teachers. The participation of the most active students is supported by a system of encouragement and approval (Motzo & Proudfoot, 2017). A similar experience can be used to evaluate students’ participation in language MOOC. This form of training becomes especially relevant and effective for undergraduate students. Even when enrolling in a master’s program immediately after graduation, there is a pause in learning a foreign language, since most engineering students study a foreign language mainly in the first two courses. Problems are also noted in doing the master’s program in the language discipline “Foreign Language for Special Purposes”, such as insufficient class hours and the inability to find hours for consultations for graduate students, different levels of foreign language proficiency, and the inability for some undergraduate students to attend classrooms due to their workload. All this confirms the sufficiency of using an innovative open educational environment.

5.3. Giving students the opportunity to engage in an individual schedule

The basis of the educational environment can be a course in the distance learning support system on the Moodle platform. The course should be a reflection of the curriculum and contain a summary of the entire course and the timing of its completion. The course may contain several modules, links to tutorials in Microsoft Word format, available for viewing, downloading and printing. The module is filled with various tasks corresponding to the content of the course (Kurbanov, 2015). Classroom work with students involves analysis of mistakes made during the completion of module tasks. During classroom work, a printed version of the textbook can be used. Work with absent students is carried out using the electronic version of the textbook and electronic didactic tools. It can be self-reading of texts; self-studying of

glossaries, doing exercises, filling in gaps, translating from Russian into English and from English into Russian, crosswords. All interactive exercises have feedback for the teacher and have a time limit. The teacher receives and studies the results of all exercises. Interim monitoring based on the results of each topic is the same for all students and is carried out remotely in order to save classroom hours in the form of a test or an independent creative task in the distance learning support system on the Moodle platform. Assignments may have a time limit for completion and feedback for the teacher. Students who do not attend classes, but undergo intermediate control on time, are evaluated without lowering the score. The final control in the form of an exam is carried out in the class for all students of the course and can be a presentation on a topic, a conversation on a topic, a discussion.

6. Findings

An open environment is a modern trend in the training of specialists in various fields of knowledge. Researchers of this relatively new phenomenon note that one of the main problems faced by language MOOCs is that language learning is based on skills rather than knowledge. Practical skill requires joint training, while most of the existing courses follow an instructive approach that does not necessarily foster collaboration. Thus, teachers' task is to create conditions that stimulate discussion and interaction between students (Barcena et al., 2014; Borshcheva, 2017).

As some researches state, the online technologies help students gain professional knowledge through active learning strategies, as interactive classes provide students with more flexibility than traditional campus-based courses (Manganello et al., 2019).

Using the techniques above the study has been conducted. The participants of the study were Master's Degree students of the Institute of Engineering and Economics (Reshentnev Siberian State University of Science and Technology). The material used in this study comprised the electronic course "English for masters studies", articles found and analyzed by students.

The course consists of three modules: Writing summary of the text, Publishing in scientific journals, My scientific research. All three modules are provided with audio instructions, written instructions to the tasks, vocabulary, different tasks on the topics (tests, multiple choice exercises, answering questions, etc.) During the course students did the following tasks: reading and summarizing scientific articles in English, writing articles, preparing presentations, which provided students with a motivating context through which they could practice their English by reading, analyzing and writing. Moreover, work with scientific material and rules how to prepare summary, articles, abstracts and presentations helped students learn new vocabulary, especially scientific terminology which is essential for their future scientific work.

The students were questioned and tested before they started doing the course and after finishing the course. The results were analyzed and can be presented in the following categories:

- language skills
- critical thinking skills

Students improved their writing, reading and listening skills. Speaking skills were mastered when students gave their presentations. According to the questionnaire, the students found the course challenging

and useful. They emphasized the importance of studying academic writing rules, which is essential as they carry out scientific research. The tasks and instructions to them are simple and clear. Also, the opportunity to do a distant course turned out to be very important to Master's Degree students.

It has been widely accepted that critical thinking is an important and vital topic in modern education. Critical thinking is a mode of thinking about any subject, content or problem in which the thinker improves the quality of his or her thinking by skilful analyzing, assessing and reconstructing it (Dewey, 1997; Litovchenko & Piland, 2019). All students state that they have become more conscious readers and started to see things from different perspectives.

7. Conclusion

Open education is education accessible to everyone. Its development will inevitably lead to a significant revision of traditional teaching methods and technologies. It is based on modern computer network technologies and is a logical continuation of distance learning. The use of an open educational environment allows: to provide all students with free access to the materials of the curriculum; to free the teacher of the need to print or photocopy materials for students; to evaluate all students' tasks, which is especially topical when working with undergraduates; to make the process of learning a foreign language attractive and understandable for future specialists in the field of engineering; to bring part of the program into an independent extracurricular form of work and to help solve the problem of reducing the number of class hours. The use of electronic didactic tools in teaching foreign languages should not be taken as an additional workload for the teacher. The use of modern technology makes the process of learning languages easier and more interesting for both the teacher and the student.

References

- Barcena, E., Read, T., Martín-Monje, E., & Castrillo, M. D. (2014). Analysing student participation in foreign language MOOCs: a case study. *EMOOCs 2014: European MOOCs Stakeholders Summit*, 11-17.
- Borshcheva, V. V. (2017). Osobennosti ispol'zovaniya massovyh otkrytyh onlajn-kursov v obuchenii inostrannomu yazyku dlya special'nyh celej [Features of using massive open online courses in teaching a foreign language for special purposes]. *PNRPU Linguistics and Pedagogy Bulletin*, 1, 86-95. [in Rus.]
- Chekalina, T. A., Tumandeeva, T. V., & Maksimenko, N. V. (2018). Osnovnyenapravleniyaiperspektivyrazvitiyaonlajnobucheniya [The main directions and prospects for the development of online learning]. *Professional education in Russia and abroad*, 44-52. [in Rus.]
- Chekun, O. A. (2016). Integraciya massovy honlajnkursov v obuchenie inostrannomu yazyku studentov neyazykovykh special'nostej MPGU [Integration of mass open online courses in teaching foreign languages to students of non-linguistic specialties of Moscow State Pedagogical University]. *Psychology and pedagogics of education*, 59-61. [in Rus.]
- Cook, D. A., & Triola, M. M. (2014). What is the role of e-learning? Looking past the hype. *Medical Education*, 930-937.
- Demeulenaere, I. (2017). The MMOC CLIL project: using MOOCs to increase language, social and online learning skills for 5 grade K12students. *Beyond the Language Classroom: Researching MOOCs and Other Innovations*, 29.
- Dewey, J. (1997). *How We Think*. Dover Publications, Inc.

- Kurbonov, A. M. (2015, April 6). Rol distancionnogo obucheniya inostrannym yazykam [The role of distance learning foreign languages]. *Young Scientist*. <https://moluch.ru/archive/88/17038/> [in Rus.]
- Litovchenko, V. I. (2019). Distancionnye obrazovatelnye tekhnologii pri obuchenii inostrannomu yazyku v professionalnoi sfere v magistrature tekhnichskogo vuza [Distance Learning Technologies in Teaching Foreign Language for Specific Purposes at Master's Program in a Technical University]. In *Problems of modern agrarian science. International scientific conference* (pp. 447-452). Krasnoyarsk State Agrarian University. [in Rus.]
- Litovchenko, V. I., & Piland V. (2019). The promotion of critical thinking into the foreign language classes. In *Modern Trends in Teaching Foreign Languages in Technical University* (pp. 31-35). SibSU.
- Malinin, N. V., & Ponomarev, M. V. (2014). Konceptual'nye osnovy elektronnoy obucheniya v sovremennom vuze [Conceptual foundations of e-learning in a modern university]. *Prepodavatel XXI vek*, 4, 97-109. [in Rus.]
- Manganello, F., Falsetti, C., & Leo, T. (2019). Self-Regulated Learning for Web-Enhanced Control Engineering Education. *Educational Technology & Society*, 22(1), 44–58.
- Moreira Teixeira, A., & Mota, J. (2014). A proposal for the methodological design of collaborative language MOOCs. In *Language MOOCs* (pp. 33-47). Sciendo Migration.
- Motzo, A., & Proudfoot, A. (2017). MOOCs for language learning - opportunities and challenges: the case of the Open University Italian beginners' MOOCs. *Beyond the language classroom: researching MOOCs and other innovations*, 85, 85-98.
- Polyankina, S. YU. (2014). Massive open online courses in ESP teaching: pros & cons. Language in the educational environment of a non-linguistic university: theory and practice. In *International scientific conference* (pp. 154-157). Novosibirsk State Technical University.