METHODICAL POTENTIAL OF E-COURSES IN DISTANCE EDUCATION

POTENCIAL METÓDICO DOS CURSOS ELETRÔNICOS EM EDUCAÇÃO A DISTÂNCIA

POTENCIAL METÓDICO DE LOS CURSOS ELECTRÓNICOS EN LA EDUCACIÓN A DISTANCIA

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ABSTRACT: The article deals with the effectiveness of distance education for students which depends on: the real time of education, the level of cognitive interests, the level of motivation for education, the establishment of the education system effective to each student and elaboration of e-courses. Special e-course "New tendencies in linguistics" elaborated on LMS MOODLE of Kherson State University «KSU Online» for first-year students obtaining master's degree, aims at expanding their knowledge in Cognitive Linguistics, Semiotics and Pragmatics, presents learning material in a methodically unified form and creates conditions of its content usage in any place and at any time apart from the form of students' education. According to the results of the investigation, the level of students' autonomy while doing given tasks is increasing significantly as well as the amount of educational web-pages visits on open platforms.

KEYWORDS: Distance education. Communication. Pandemic. Moodle. Educational web-pages.

RESUMO: *O artigo trata da eficácia da educação a distância para alunos que dependem: do tempo real da educação, do nível de interesses cognitivos, do nível de motivação para a educação, do estabelecimento do sistema de ensino efetivo para cada aluno e da elaboração de e-cursos. O e-curso especial "Novas tendências em linguística" elaborado no LMS MOODLE da Universidade Estadual de Kherson «KSU Online» para alunos do primeiro ano de mestrado, visa expandir seus conhecimentos em Linguística Cognitiva, Semiótica e Pragmática, apresenta material didático de forma metódica e unificada e cria condições de utilização do seu conteúdo em qualquer lugar e em qualquer momento, independentemente da formação dos alunos. De acordo com os resultados da investigação, o nível de autonomia dos alunos na execução de determinadas tarefas está aumentando significativamente, assim como a quantidade de visitas a páginas educacionais da web em plataformas abertas.*

PALAVRAS-CHAVE: *Educação a distância. Comunicação. Pandemia. Moodle. Páginas educacionais.*

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RESUMEN: *El artículo trata sobre la efectividad de la educación a distancia para los estudiantes que depende de: el tiempo real de educación, el nivel de intereses cognitivos, el nivel de motivación por la educación, el establecimiento del sistema educativo efectivo para cada estudiante y elaboración de e-cursos. El curso electrónico especial "Nuevas tendencias en lingüística" elaborado en LMS MOODLE de la Universidad Estatal de Kherson "KSU Online" para estudiantes de primer año que obtienen una maestría, tiene como objetivo ampliar sus conocimientos en lingüística cognitiva, semiótica y pragmática, presenta material de aprendizaje de manera metódica. forma unificada y crea condiciones para el uso de su contenido en cualquier lugar y en cualquier momento aparte de la forma de educación de los estudiantes. De acuerdo con los resultados de la investigación, el nivel de autonomía de los estudiantes mientras realizan las tareas asignadas está aumentando significativamente al igual que la cantidad de visitas a páginas web educativas en plataformas abiertas.*

PALABRAS CLAVE: *Educación a distancia. Comunicación. Pandemia. Moodle. Webs educativas.*

Introduction

In the modern world distance education is gaining popularity. Current challenges connected with pandemic has put it into high-priority area in education in Ukraine and the whole world.

Literature review

Distance education issues were in the focus of attention of both national and foreign scientists and different directions in their research. Theoretical aspects of distance education implementation in Ukraine were investigated by H. Synyavska and V. Yablochnikova (2015), I. Bakhov (2013), O. Bakulina, I. Lehan, and Bakhov, I. (2019), L. Gavrylova and Zh. Katasonova (2017), V. Varava (2015), V. Kukharenko, O. Rybalko, and N. Syrotenko (2002). Psychological and pedagogical aspects of distance education are highlighted in works by L. Tkachuk (n.d.), I. Lukashenko (2016), O. Lutsenko, M. Smulson, Yu. Mashbyts, and M. Zhaldak (2012), L. Koretska, I. Makarenko. Requirements to distance education teacher's knowledge and skills are explored by A. Trotsko, L. Rybalko, O. Kyrylenko, H. Trush (2019), L. Kaidalova, N. Tverdokhlebova, N. Yevtushenko, N. Nosovets. Practical recommendations for teachers concerning the organization of distance education are given in Common European Framework of Reference for languages (MILANOVIC, 2001), Ukrainian official documents (Osvita.ua, 2020), handbooks and training guides of researchers such as: H. Kolomoyets, O. Mel'nyk, S. Hrutsai, and A. Voznyuk (2019), K. Osadcha, V. and Osadchyi (2014), V. Isayenko, H. Kashyna, K. Nikolayeva, and L. Pavlyuchenko (2014), S.

Strilets, T. Zaporozhchenko (2015), Yu. Trius, I. Herasumenko, and V. Franchuk (2012), N. Morze, O. Buinytska, and L. Varchenko-Trotsenko (2016).

Michael E. Krauss, the author of the course "Integrating the Internet into the classroom" and a web-laboratory for English self-study, states that the main difficulty in students' distance education lies not only in the lack of time and technical misunderstandings, but in the absence of direct communication as sometimes "it's easier and faster to show than to explain what to do" (KRAUSS, 2005).

Concerning the effectiveness of distance education, we share Yu. Mashbyts's opinion who supposes that it can be defined due to consideration of real time of education, the level of cognitive interests, the level of motivation for education, the establishment of the education system effective to each student (SMULSON; MASHBYTS; ZHALDAK, 2012).

Methodology

To achieve the purpose of this article, a complex of general scientific and specific research methods was used. When studying the degree of elaboration of the given problem, they are the methods of analysis, synthesis and generalization. We used both theoretical and practical analyses of psychological and pedagogical experience in the viewpoint of the research to substantiate the scientific and methodology support for our investigation.

During confirmatory stage of the experiment, the methods for questioning and investigating respondents were used. Questioning, testing and interviewing were conducted at Kherson State University at the Faculty of Ukrainian and Foreign Languages and Journalism during two semesters of the academic year 2019-2020.

The quantitative analysis facilitated establishing an appropriate ratio of the outcomes within the pre-experimental and post-experimental stages of the above-mentioned training.

The pedagogical experiment consisted of 3 stages: 1) pre-testing of the students (to determine the level of their basic knowledge in linguistics); 2) training course intended for the future foreign language teachers according to combined (interactive and traditional) author's teaching methods; 3) post-experimental testing. The integrity of the assessment process was provided by the control methods.

Result analysis

The effectiveness of pedagogical impact while providing distance education with the help of computer telecommunication networks is impossible to comprehend without considering the peculiarities in communication between a teacher and a student. It is significant here to find the ways of tackling the problem caused by the following *factors*: the material in the process of communication is not only transmitted, but also formed, specified, developed; verbal communication is realized by means of dialogues and debates; natural addition to language is the usage of non-verbal means of communication, such as: gestures, mimic, pantomimic; the quality of voice, vocal range, tone, inclusion of pauses, laughter, coughing, etc. into speech; visual communication (eye contact); interactive aspect of communication is realized in collaborative activities; in the process of communication there must be mutual understanding between its participants (SMULSON; MASHBYTS; ZHALDAK, 2012).

However, among the advantages of distance form of education not only the possibility of providing immediate feedback between the student and teacher within network and the increasing of "the level of freedom" in the choice of learning rate seem to be attractive, regular actualization of education material with less efforts. In contrast to traditional education where a student is considered simultaneously both the subject and the object of the educational process, in distance education he serves as the subject only due to the usage of computer (SMULSON; MASHBYTS; ZHALDAK, 2012).

The peculiarities of organization of students' educational activities in the system of distance education lies in shifting of the focus on students' self-education: compulsory mastering of definite levels of digital competences among teachers and students, in particular, skills of qualified of computer, communicative technologies and various services in the Internet; in the change of the ways of interaction between the subjects of education cause by the appearance of the corresponding informative and communicative technologies, flexibility in the place of location of each subject and time of classes.

One of the forms of distance education is e-courses. Our e-course "New tendencies in linguistics" elaborated on LMS MOODLE of Kherson State University «KSU Online» for first year students obtaining master's degree, aims at expanding their knowledge in Cognitive Linguistics, Semiotics and Pragmatics. This course on LMS MOODLE is comfortable and easy in usage, as it is available at any time and place in the world. Fig.1 contains characteristics of the course, which also includes annotation.

Figure 1 – Characteristics of the e-course "New tendencies in linguistics" on LMS MOODLE«KSU Online»

Source: Devised by the authors

At the beginning of the e-course there is section News where tutor demonstrates the list of events which will take place in the nearest future. All course users are subscribed to the News in mandatory mode. These events are also listed in sections Recent news and Soon. A user-friendly interface of LMS MOODLE helps to browse through above mentioned sections and stay focused on the course content. The course includes feedback elements such as Forum and Chat. Using Forum, a tutor can ask questions or answer users' questions, students can communicate with each other or with the tutor, etc. It is this element of LMS MOODLE that allows the participants to implement asynchronous debates, i.e., discussions which proceed during a long period of time that is extremely useful at lockdown caused by COVID-19 pandemic. Participants can subscribe to Forum to get notifications about new messages. However, the usage of Chat helps participants to discuss things online in a synchronous textual mode. Chat sessions are preserved and are open to browse through. In Chat, high education students gather to discuss their experience with each other and their tutor. In Fig. 2 you can see the beginning of the e-course: News, Forum, Chat and parts of the first topic.

Figure 2 – The beginning of the e-course with feedback elements

Source: Devised by the authors

To the advantages of e-course we also refer different types of tasks: reference to lectures of different format, textual references to seminars and lectures, multiple choice tests. Diversity and interactivity of tasks in e-course encourage users to the study of Cognitive linguistics, Semiotics and Pragmatics.

Figure 3 – The samples of references and tests to topics

Source: Devised by the authors

As it was stated above, lectures are of different formats, but have unified structure that includes annotation and several topics (from 2 to 8). References used during lectures contain

material from training guides, textbooks, articles of modern foreign and national scientists as well as materials elaborated by the tutor himself.

Final tests are also worth considering. These elements of summarizing evaluation help to check users' total knowledge of the topic material. Test Script and Schemas demonstrated in Fig. 4., is taken as an example.

Figure 4 – Test samples in the e-course "New tendencies in linguistics"

Source: Devised by the authors

Test is of multiple-choice type, where a student should choose one or several answers from the list. Questions and answers are constantly mixed that complicates students' work. Each test attempt is evaluated automatically and has passing grade. LMS MOODLE gives chance to choose for each group of students in the course their individual time for test and set time limits. Just after the attempt students can estimate their results – right and wrong answers. Analysis of the wrong answers and collection of statistics enable to form individual educational strategy both for a separate student and groups of students. Certain tests can have definite restrictions provided by the tutor according to the demands of the group. To these restrictions we refer compulsory browsing of lectures, passing of preliminary tests etc. In Fig. 5 you can see the example of a completed test that clearly shows: when the attempt begun and when was completed; the amount of time spent to pass the test; the amount of scores the student got; the grade obtained by the student and the highest possible test grade; right and wrong answers.

Figure 5 – The sample of a completed test
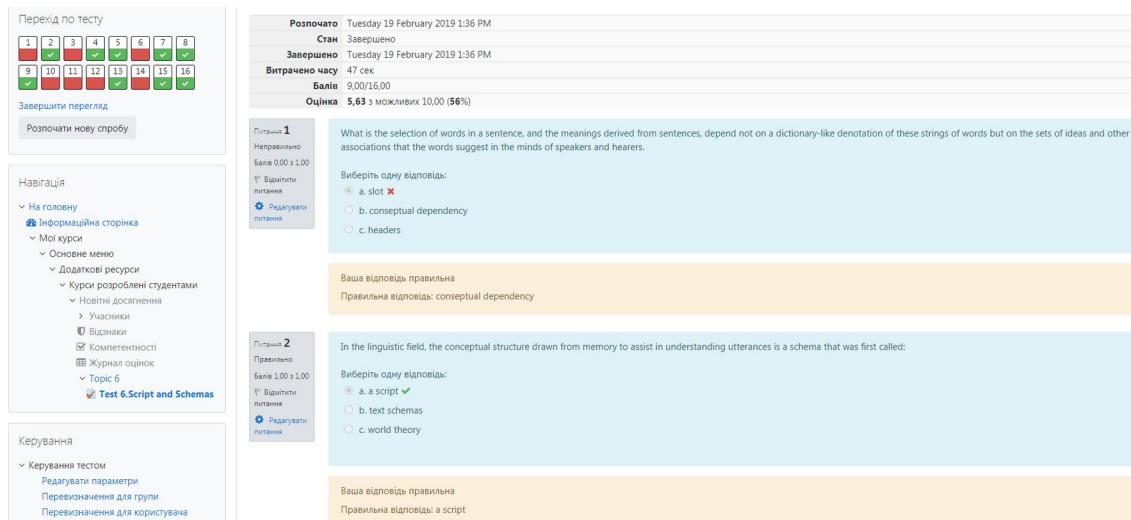
Source: Devised by the authors

LMS MOODLE gives possibility to browse and edit a full list of questions used in all tests of the e-course. Question storage enables to form special categories and subcategories, browse through old questions that are preserved even after test deletion. Some of the questions from the storage of the course are depicted in Fig. 6. We consider question storage being useful for tests to create occasional questions with different level of complexity.

Figure 6 – The start of the question storage in the e-course "New tendencies in linguistics"
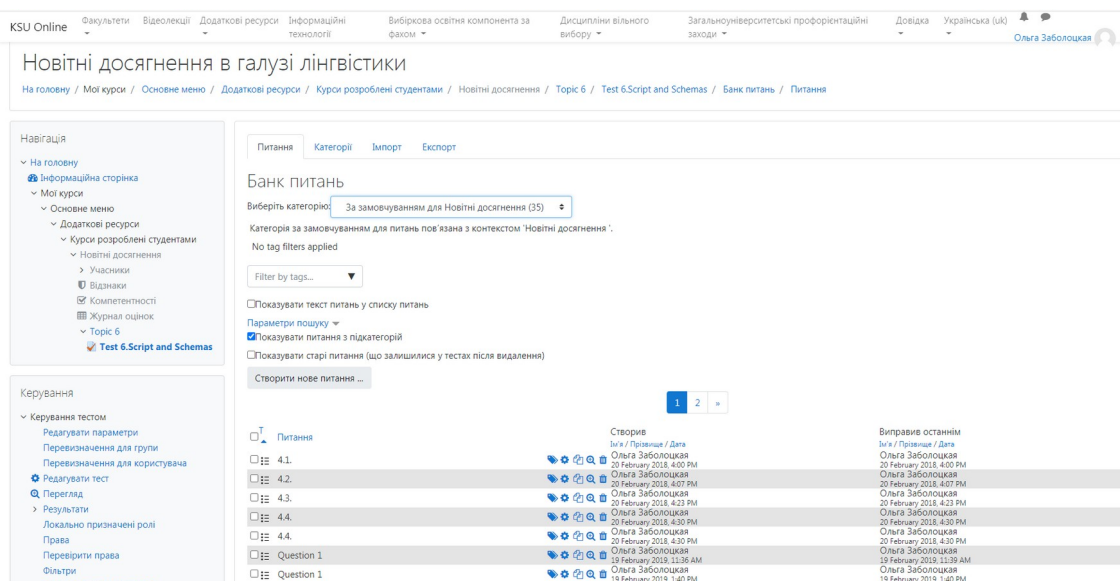
Source: Devised by the authors

Section Statistics is very easy to use and allows to calculate automatically statistical data from all completed attempts of a certain test. This helps to define complicated and extremely easy questions for students.

LMS MOODLE also uses e-register to evaluate students. All test grades are automatically transferred by the system into the register that tutor can easily download in Open Document, Microsoft Word, Excel або XML format. E-register shows all users logged into the course, their e-mails, test results, grades put manually by the tutor and calculates overall score in e-course. Tutor can set up e-register according to his/her needs, change the value of each separate test, use various formulas to count the average grade for the course.

Author's course "New tendencies in linguistics" elaborated on LMS MOODLE of Kherson State University «KSU Online» presents learning material in a methodically unified form and creates conditions of its content usage in any place and at any time apart from the form of students' education. Pedagogical experiment of forming professional students' competence by means of the given course have been taking place in Department of Foreign Languages in Kherson State University for 3 years and recorded positive changes in the level of development of professional competences and students' individual skills. 1ˢᵗ year students, specialty "Foreign language", 90 students in all, participated in the experiment. Control group (CG) and experimental group (EG), the latter had access to this e-course on LMS MOODLE «KSU Online». Experimental group had additional recommended learning materials in Cognitive linguistics, Semiotics and Pragmatics, represented as links on the Internet (handbooks, guides, articles, etc.). In CG and EG the results of academic performance were caused by test results, and the level of development of individual skills, students' motivation in acquiring practical skills in Cognitive linguistics, Semiotics and Pragmatics were evaluated by means of monitoring method and method of examination. According to the results of research, the level of students' autonomy while doing given tasks is increasing significantly as well as the amount of educational web-pages visits on open platforms. Experimental group students became more motivated and ready to do creative tasks of professional nature. In comparison with control group, experimental group showed the rise of a qualitative indicator of academic performance of 16 %, that is demonstrated in Fig. 7.

Figure 7 – Comparison of the results of pedagogical experiment in CG and EG
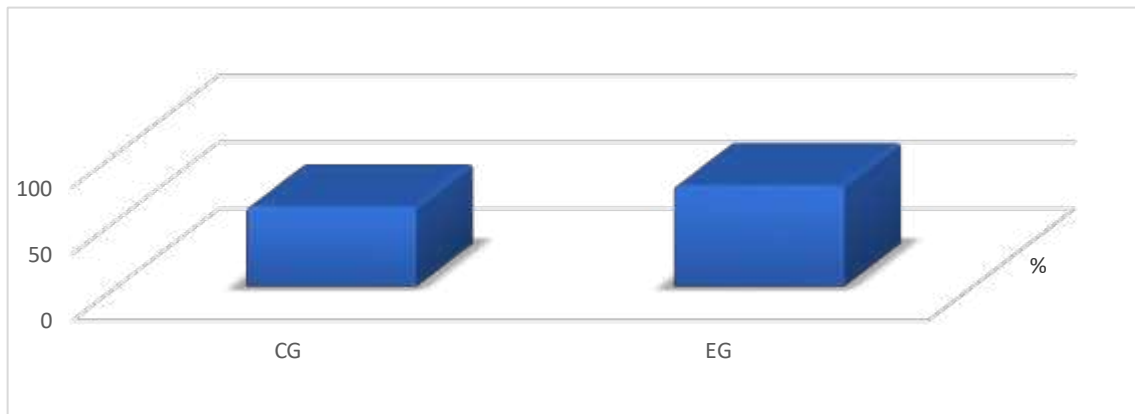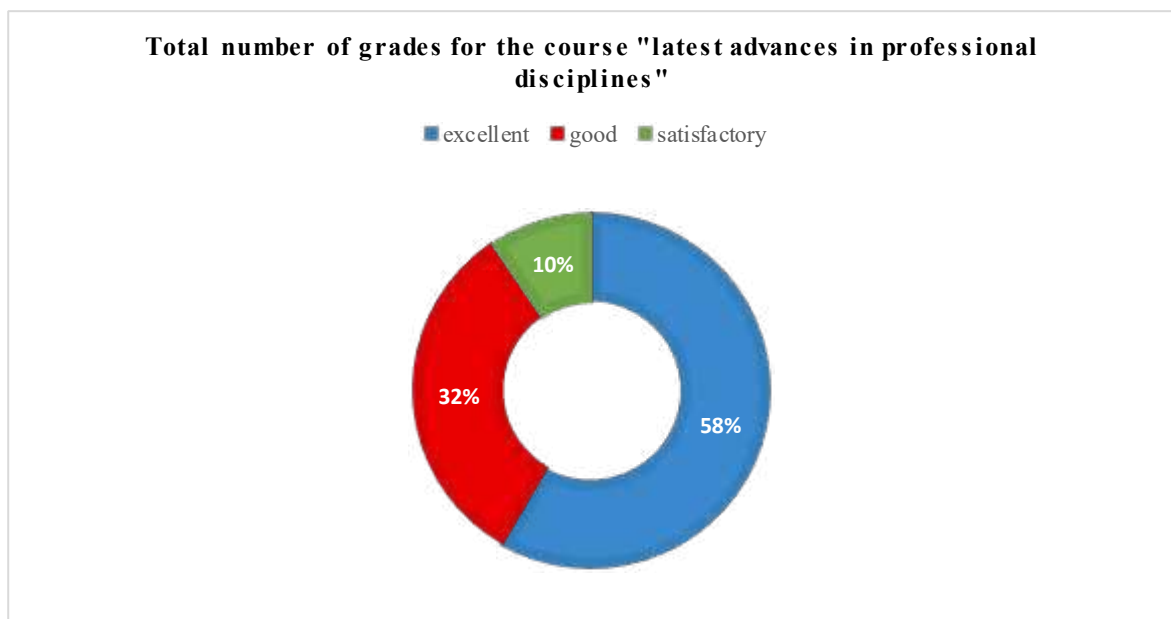

Source: Devised by the authors

Qualitative indicator of academic performance was calculated according to end-of-semester exams' results. Thus, each group got grades for seminars including e-course grades in such topics: Cognitive grammar, Discourse world, Text world theory, Poetic text, Images in ballads, Pragmatics, etc. (20 hours in general).

Graphical representation of grades in the separate subgroup in the given course is shown in Fig. 8.

Figure 8 – Graphical representation of end-of-semester grades of a separate experimental subgroup in course "New tendencies in professional subjects"

Source: Devised by the authors

Conclusion

Google questionnaire consisting of 8 questions was elaborated to determine the effectiveness of acquiring professional skills by students. According to questionnaire results, we conclude that most students (87%) wish to continue studying of Cognitive linguistics, Semiotics and Pragmatics, and to improve knowledge and skills with the help of e-course. 77% of 1st year students getting master's degree are satisfied with the possibility to use LMS MOODLE. Experimental group students demonstrated better skills in practical exercises in Cognitive linguistics, Semiotics and Pragmatics.

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