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## **E-LEARNING IMPLEMENTATION AND ITS ANALYSIS IN KUZSTU**

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### **Introduction**

Universities in Russia are implementing online learning and information systems at a rapid pace, with 65% of higher education institutions identifying online learning as a critical part of their long-term development. The introduction of e-learning in Russia is associated with the usage of e-learning technologies in the educational process, the formation of global educational environment for international and interdisciplinary integration that forms the basis of the informative world.

The teaching methodology in e-learning environment on the Moodle platform has been developing at T.F. Gorbachev KuzSTU since 2014. ‘The purpose of using e-learning and distance learning technologies at the university is to increase the efficiency and quality of education, to intensify the learning process and to provide students with the opportunity to master educational programs regardless of their location and time to access electronic resources’ [1].

The aim of our research work is to investigate the level of e-learning implementation in KuzSTU and to analyze student’s attitude towards e-courses.

### **Methods of research**

We are students of KuzSTU, we study at Information Technologies and Engineering department. During the third term, we had nine electronic courses, but we chose and analyzed two electronic courses, because most of them had only an introductory module, which is made automatically by the system.

The first course is English for Information Technologies - the third semester (2019/2020)». The course author is Larionova Julia Sergeevna.

The e-course is based on a semester basis, it includes 4 modules, each is designed for studying within a month.

The second course is «System theory and system analysis» - the third semester (2019/2020)». The course author is Pimonov Alexandr Grigorievich.

This course includes three modules: a module with lectures and two modules with laboratory works. The analysis was carried out on the criteria given in the table 1:

Course criteria

Table 1

№	Criteria
1	The existence of the course name
2	The availability of information about the authors (name, place of work, position, academic degree, academic rank), as well as a photo
3	The existence of the main course illustration
4	The existence of a course promo video
5	Division of the course content into sections, subsections, pages and components
6	The existence of several components from the following list: <ul style="list-style-type: none"> <li>● text in the form of an HTML document for online self-study by a student (elements of the “MOODLE” system such as “Book” or “Lecture”);</li> <li>● video;</li> <li>● interactive tasks;</li> <li>● tests;</li> <li>● discussions (discussions)</li> </ul>
7	The possibility of peer assessment or students teamwork
8	Questionnaire availability
9	Games availability

The results of courses analysis showed that:

1. The name of both courses is fully consistent with the subject of the course.
2. Both courses contain the teacher’s contacts, there is also a link to the teacher’s profile on the KuzSTU portal.
3. Both courses do not contain the main illustration.
4. Both courses do not have promo videos.
5. a) The foreign language course is divided into thematic modules, each of which is separated from each other and is designed to work for a month.  
 b) The course of system theory and system analysis is divided by type of work in the course. So, there is the module “Lectures”, containing lecture material presented at the classroom lectures; there are modules “Laboratory work 1” and “Laboratory work 2”, containing methodological instructions for a laboratory work.
6. a) A foreign language course contains many different elements for working with the course: guidelines, textbooks, documents, links, videos and tests.  
 b) The course of system theory and system analysis contains only materials in the form of PDF and DOC documents, which is not enough to fulfil the analysis criterion.

7. To communicate with classmates and exchange works there is a forum in both courses.
8. Both courses do not have questionnaires.
9. Both courses do not contain game elements.

**Comparative analysis of e-courses**

Table 2

<b>The English course 3 term (2019/2020)</b>	<b>System theory and system analysis 3 term (2019/2020)</b>
✓ The existence the course name;	✓ The existence the course name;
✓ The availability of information about the authors (name, place of work, position, academic degree, academic rank), as well as a photo;	✓ The availability of information about the authors (name, place of work, position, academic degree, academic rank), as well as a photo;
✗ The existence of the main course illustration;	✗ The existence of the main course illustration;
✗ The existence of a course promo video;	✗ The existence of a course promo video;
✓ Division of the course content into sections, subsections, pages and components;	✓ Division of the course content into sections, subsections, pages and components;
✓ The existence of different types of components;	✗ The existence of different types of components;
✓ The possibility of peer assessment or students teamwork;	✓ The possibility of peer assessment or students teamwork;
✗ Questionnaire availability;	✗ Questionnaire availability;
✗ Games availability.	✗ Games availability.

In conclusion we can say that a foreign language course meets 5 criteria out of 9, and a system theory course - 4 out of 9. Despite the fact that both courses meet the criteria almost equally, the lack of content in the system theory course makes it impossible for a student to work independently and do self-assessment, but the foreign language course allows to do it.

We consider that using the e-learning system on the Moodle platform at KuzSTU allows solving the following tasks:

- ‘to adapt all courses for mobile platforms: smartphones are becoming an ally in training: e-books, educational tests, video lectures;

- to motivate students to study by using modern methods and tools – the Internet, multimedia content, game elements – all these facilitate learning, turning it into an exciting process
- to implement the principle of customization when each student has his own characteristics, strengths and weaknesses’ [1].

It should be emphasized that the usage of the electronic educational environment at KuzSTU gives a student the opportunity to integrate into the modern learning process, regularly receive necessary knowledge at a time convenient for a student and in a convenient place and form skills of self-educational activity. It is enough to have a modern gadget with the Internet access and an electronic course of a discipline that helps organize students' independent work both in and out the classroom.

The advantages of organizing independent work in Moodle from the point of view of a student are presented in the table 3:

**The advantages of independent work in Moodle**

Table 3

	<b>Students independent work</b>	<b>Student benefits</b>
<b>Active learning</b>	<ul style="list-style-type: none"> <li>– Testing</li> <li>– Peer review</li> <li>– Project work</li> </ul>	<ul style="list-style-type: none"> <li>– 24/7 available resource</li> <li>– Work results</li> <li>– Comfortable learning environment</li> </ul>
<b>Passive learning</b>	<ul style="list-style-type: none"> <li>– Content reading, watching, listening</li> </ul>	<ul style="list-style-type: none"> <li>– The ability to ‘close’ gaps in knowledge, trying again and self-assessment</li> </ul>
<b>Assessment</b>	<ul style="list-style-type: none"> <li>– Homework</li> <li>– Reviewing</li> <li>– Testing</li> </ul>	<ul style="list-style-type: none"> <li>– Progress self-controlling</li> <li>– Expert skills</li> <li>– Self-educational skills</li> </ul>

We organized and conducted a survey among students of different groups of KuzSTU in order to determine their attitude to working in the Moodle system. The survey involved 119 students who answered 5 questions.

1) Do you work in Moodle?

- 90.8% answered “Yes”
- 9.2% answered “No”

2) How often do you work in Moodle?

- 9.8% answered “1 day per month or less”
- 16.1% answered “2-4 days per month”
- 60.7% answered “2-4 days per week”
- 13.4% answered “5-7 days per week”

3) Is it convenient for you to work in an electronic environment?

a. 88.6% answered “Yes”

b. 11.4% answered “No”

4) What part of the disciplines of your training has an organized electronic course?

a. 20.2% answered “0-30%”

b. 42.1% answered “30-60%”

c. 27.2% answered “60-90%”

d. 10.5% answered “90-100%”

5) Are you interested in the development of Moodle platform at KuzSTU?

a. 83.2% answered “Yes”

b. 16.8% answered “No”

Thus, E-learning plays an important role in the educational system of KuzSTU, despite the small number of disciplines that have an organized electronic course.

In conclusion we want to say that with the help of e-learning system we are in lifelong learning process of studying many subjects and therefore e-learning system should be developing and improving further on.

### **Список литературы**

1. Dolgova N., Larionova Ju., Shirokolobova A. Engineering students English teaching in E-learning environment // MATEC Web of Conferences. The conference proceedings (ISPCIME-2019). 2019.P06007

2. Thelal Iqab Oweis, Effects of Using a Blended Learning Method on Students' Achievement and Motivation to Learn English in Jordan: A Pilot Case Study. Education Research International **3**, 1 (2018) ) DOI:10.1155/2018/7425924