

Applying E-learning and Distance Learning Technologies in Modern University Complex

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ABSTRACT— *The article describes applying E-learning and Distance learning technologies in university complex, influence of legislation, prerequisites for the establishment of electronic informational-educational environment (EIEE), difficulties and development trends.*

Keywords— e-learning, distance learning technologies, electronic information-educational environment (EIEE), development prospects of EIEE

1. INTRODUCTION

Applying of E-learning and distance learning technologies (abbr. DLT) promotes to enhance the quality of training and the organization of educational process. Today, E-learning and DLT widely used in world practice and implement almost all the possible areas of education: a large proportion relates to economics, finance, business, management, law, etc., large sector information technology, the rest almost equally distributed among the other scientific areas.

2. APPLYING OF E-LEARNING AND DISTANCE LEARNING TECHNOLOGIES IN RUSSIA

Applying of E-learning and Distance learning technologies by educational organizations regulated by the federal legislation in Russia.

The main documents are «The Law about Education in Russia») and Federal State Educational Standards. Besides them there are series of Russian Ministry of Education documents. As for Admiral Makarov State University of Maritime and Inland Shipping the Ministry of transport also regulates organization of educational process Because of belonging the University to the transport industry [1,2].

According to «The Law about Education in Russia» the difference in the definition of «E-learning» and «Distance learning technologies» is in indirect (at a distance) interaction of students and academic staff (in case if DLT).

Today, it can be argued that the implementation of projects in the field of e-learning and DLT in the Russian Federation is in the stage of its development. The gradual introduction of these technologies suggests that many universities are interested in it and the relevance of this topic is growing. The number of educational organizations are focused on switching fully using E-learning and DLT in the training process [3,4].

3. APPLYING OF E-LEARNING AND DISTANCE LEARNING TECHNOLOGIES IN ADMIRAL MAKAROV STATE UNIVERSITY OF MARITIME AND INLAND SHIPPING

According to the instructions of federal legislation and for applying E-learning and DLT in Admiral Makarov State University of Maritime and Inland Shipping was built an electronic informational-educational environment (abbr. EIEE).

The main purpose of EIEE is information support of the educational process.

Generally EIEE is an integrated environment of information-educational resources (like E-library systems, learning management systems and programs), software, hardware and telecommunications, instructions and etc., what provides information support and educational process management for educational organization.

Applying E-learning and DLT realized by providing educational materials on electronic media, using popular IT-technologies like video-conference, forums, chats, e-mail and other, using of specialized techniques: Content management system (CMS), Learning management system (LMS), Learning content management system (LCMS), some author's programs.

Besides the federal legislation The International STCW Convention influence on organization of educational process. According to it one of the main EIEE's task is to ensure the learning outcomes that meet all the requirements of the provision and demonstrations and basic knowledge and expertise.

About 43% of students of Admiral Makarov State University of Maritime and Inland Shipping use E-learning (more than 15 years) and DLT (more than 10 years) as a complement of the compulsory training (their use is optional) for the following academic programs:

- Secondary Vocational Education;
- Bachelor Degree Programs;
- Specialist Degree Programs;
- Master's Degree Programs;
- Postgraduate Programs;
- Continuing Professional Education Programs;
- Pre-university programs.

Multiple EIEE includes:

– Learning content management system «Educational portal» (functions: storage of educational and methodological content, system of information exchange between teachers and students; news and announcements service).

– Learning management system «FARVATER» based on Moodle-platform (functions: organization of distance educational process for students, opportunities for academic staff to create e-learning courses, organization of training and final assessments);

– E-library complex (including E-library system, internet- and intranet E-catalog, Electronic Reading Rooms);

– Complex information-analytical control system (Automation Educational process management system);

– Official website of University;

– Reference and legal system «Consultant +»;

– Corporate e-mail and portal (provide conditions for the functioning of the EIEE, realize some functions of Enterprise content management).

Some Cloud technologies (which give students access to computing resources hosted in a virtual environment, and that the student can use remotely).

All that components of EIEE solve the territorial distribution of University educational complex including in its structure a network of training camps on the territory of St. Petersburg and the regional network of branches.

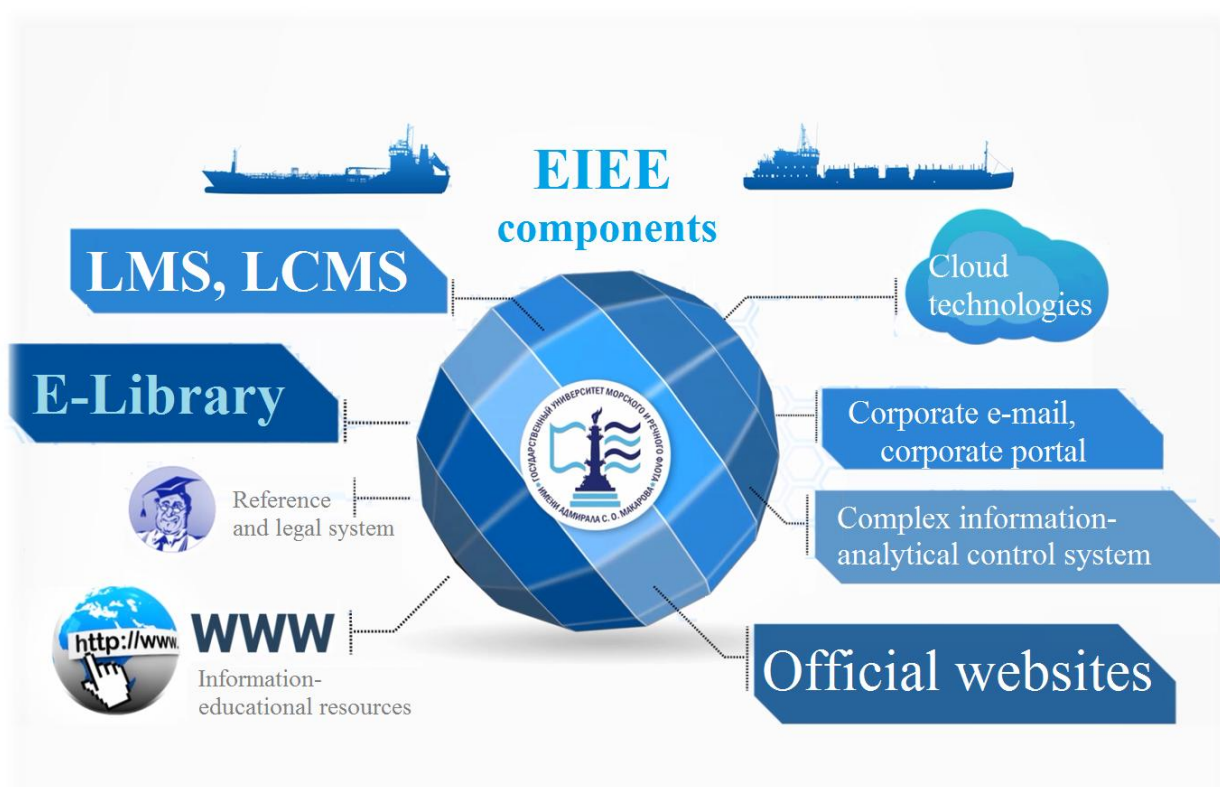


Figure 1: Components of EIEE

Most of EIEE's components meet international standards like XML and SCORM.

4. EIEE OPPORTUNITIES

4.1 EIEE opportunities for academic staff:

Primary headings are numbered; font size 11; center-justified; bold; line spacing is single; spacing before and after paragraphs are 6 pt; and in title case, i.e., with all letters capitalized.

- publication of educational-methodical documentation;
- development of lectures and a bank of test items,
- remote control of students' knowledge;
- communication with other teachers and students (both individual and group);
- organize questioning and interviews for students.

4.2 EIEE opportunities for students

- access to educational-methodical documentation, to the schedule of classes and examinations;
- access to video portal;
- performing tasks, upload materials for evaluation, work together in study groups;
- monitoring of their results;
- communication with teachers and other students;

4.3 E-learning and DLT are used in following educational programs:

- «Shipbuilding, ocean technology and systems engineering of marine infrastructure»;
- «Operation of ship power plants», «Operation of ship electrical and automation»;

«Navigation»;

«Logistic of water transport and hydrographic support of navigation», «Technology of transport processes »;

«Information Security», «Applied Mathematics and Informatics»

«Information Systems and Technology», «Applied Informatics»;

«Building»

«State and municipal management», «Law»;

Economy, Management, Advertising and PR, Tourism;

4.4 And others.

Technical support

All EIEE components have instructions for students, teachers and staff to work with them, located in the reference section of the respective components. The instructions contain recommendations and explanations of all the functionality of LMS (creating e-learning courses, posting educational content, registration, user account on the course, view the analytical reports, etc..) and equipped with screen shots with footnotes. In addition to the instructions and support team work, the university regularly conduct refresher courses for academic staff to train how to apply modern IT-technologies.

5. CONCLUSIONS

Applying E-learning and DLT is becoming more popular in the world. More and more educational Implement educational programs through E-learning and DLT.

In Admiral Makarov State University of Maritime Inland Shipping the number of users is increasing annually by an average of 15%.

Hope, soon we will be able to join to "Open education" - a modern educational platform that offers online courses on basic subjects studied in Russian universities. This project is combined with the global trend in education Massive open online courses.

6. REFERENCES

List and number all bibliographical references in 10-point Times New Roman, single-spaced, at the end of your paper. For example, [1] is for a journal paper, [2] is for a book and [3] is for a conference (symposium) paper.

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