OPEN EDUCATIONAL E-ENVIRONMENT OF MODERN UNIVERSITY

Collected Scientific Works

Within the framework of the international project IRNET

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INTRODUCTION

There have been deep and objective processes of the common open educational environment formation in the world today. Some specialized educational structures of the open type are being created. The research is being done on the organizational structure and educational institutions (especially, for adult education and training) that could facilitate the transformation of the "lifelong education" principle to the one of "education throughout life", – the most important problem of the 21st century. Educational environments could become social institutions that would be able to offer various educational services which might allow continuous learning and acquiring updated professional knowledge, development of the educational direction that should meet, the best and the fullest, individual educational and professional skills and needs regardless location.

The open educational system is supposed to provide solutions for the following problems:

- organization of the access to education that could meet the educational needs of people in the 21st century (education is to be accessible since the very early childhood and lifelong);
- egalitarian access to education for all people at all levels of education;
- ensuring quality education and its meeting the social requirements;
- sharp educational system efficiency and performance improvement.

While creating and using educational environment, quality education remains one of the crucial issues. Openness and quality of the educational environment, as well as the overall open educational system, are interdependent, given the implementation of informatisation issues into the educational policy of modern university educational process.

To ensure quality education under open educational environment, a special attention should be paid to the following e-learning system components:

- strategic management;
- infrastructure;
- educational process;
- academic staff and students;
- content

The practical implementation of open education and e-learning has shaped the following indicators for strategic management quality assessment:

- E-learning is supposed to be a constituent part of the University strategy.
- Corporate normative procedures (documents) should define and indicate the mechanisms of interaction, tasks and functions, duties and responsibilities of the participants involved into e-learning process in order to coordinate different divisions in the field of e-learning.
- The procedures connected with control and evaluation for e-learning should be bonded with administrative and managerial systems to enhance continuous e-learning improvement. Satisfaction and feedback assessment mechanisms for employees, academic staff, students and employers should be applied to promote efficient interaction in the framework of e-learning.
- All stakeholders should get involved into the process of working out and determining the e-learning strategy at University.

The following criteria should be considered while forming the ICT competence of teachers and students to ensure e-learning quality:

- There should be methodological and organizational support established and implemented at University.
- There should be a mechanism which is supposed to be clearly defined and easily understood to encourage e-learning, as well as relevant research which could be beneficial regarding career opportunities.
- There should be academic staff performance assessment diversification mechanisms in act (survey on satisfaction, voting, rating, elective courses).
- In order to ensure continuous actuality of faculty knowledge and skills, there should be normative mechanisms for regular advanced training and attestation of the staff using electronic environment and new educational technology.

Taking the above-mentioned into consideration, the modern university infrastructure should meet the following requirements:

- unrestricted 24/7 access to online educational services and educational environment;
- accessibility and performance of educational services that can be used by a wide range of fixed and mobile devices, the requirements to which are described by University and given to students (applicants) for mandatory review;

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- providing constant (24 * 365) high speed (at least 50 Mb/s) unrestricted access to the Internet. There should be a possibility for mobile computers to access computer network information services, as well as the Internet on the territory of the campus (for example, via Wi-Fi technology);

- access to various communication resources (online databases, news, bulletins, etc.);
- working places for individual and team work with the services of electronic environment (tests and examinations included), as well as virtual working places equipped with certain special licensed or free software.

During content development, a special attention should be focused on:

- Online course design, development and evaluation. That should be ensured by special individual professionals and groups of experts who are competent in both academic and technical issues.
- Informational and methodological support for students to specify the objectives of the programme, mode of studying with student rights and duties, training stages, periods, assessment system, limits for feedback, appealing / complaining procedures, instructions and methodological recommendations on academic disciplines, expected results of training.
- Materials and information accessible in the University electronic environment should be subject to continuous supervision, review and renovation. The responsibility should be normatively explicit, whereas the staff with responsibilities should have a required safe access to the system to process and renew educational materials.
- There should be unified requirements and standards for the quality of online courses worked out for the University, the compliance with which should be obligatory for all courses. The University level standard should include general requirements for the structure and technology of taking courses that are taught via electronic learning and distance educational technology to meet the requirements of advanced international practices in e-learning development.
- It is rational to develop the educational process considering the following criteria:
- Individual technical and pedagogical support both online and offline. The responses of teachers and administrative staff should meet the time limit that is to be determined by the nature of interaction: reply

for the dean's office – not longer than 24 hours, the results of control – not longer than 7 days (if other limits are not stated in the University corporative normative documents).

- The University must provide students and its employees with training in the required ICT skills.
- Software applications collecting and analyzing analytically the data according to the system of performance indicators for student, faculty and administration.
- There should be some independent contests (online testing, assignments for practical training) that allow getting external independent audit of student knowledge.

The collection of scientific articles deals with the issues of openness and quality education, as well as the creation of the distance learning system under open educational environment, which is becoming one of indicators of contemporary education quality.

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