

IMPLEMENTATION OF E-LEARNING WITHIN THE TRADE CO-OPERATIVE UNIVERSITY OF MOLDOVA

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Abstract

A balance, thoughts and reflections concerning 516597-TEMPUS-1-2011-1-FR „CREATION RESEAU UNIVERSITIES NUMERIQUES THEMATIQUES EN SCIENCES APPLIQUEE ET SCIENCES ECONOMIQUES EN MOLDAVIE” project implementation within the Trade Co-operative University of Moldova.

This project has been implemented in collaboration with nine universities of the country and with support of other seven universities from European Union, which had large experience in the domain. The main scope of the project is modernization of higher education through renovation of teaching-learning-evaluating methods with emphasis on electronic education on the base of “Moodle” platform.

We succeeded to provide basic knowledge to pedagogical staff and students concerning methodology of electronic courses design and implementation, to provide them training on realization of the online education, to perform tests and improvements of the courses designed. There were created the prerequisites and conditions necessary for development, implementation of mass online education at the University. But efforts, concentration and support are still required.

***Keywords:** e-learning, information and communications technology (ICT), Moodle platform, educational process management and quality assurance.*

1. Introduction

Evolution of economy and society is greatly influenced by the quality of education. Accumulation of the intellectual capital, acquisition of professional and operational skills on the base of this capital, lead to the development and materialization of society, individual, community. All this becomes possible through professional growth, through continuous training, constant education, online education, e-learning.

In the proper sense of the word, under electronic education we understand the whole totality of educational activities and processes which use information and communications technology tools (ICT).

At the moment, there exists a large variety of electronic materials which help the teacher to provide, with better quality, young people with theoretical and practical knowledge from the designed educational courses: electronic books, didactical films, encyclopedias, different forms of presentations, tests, software tools designed to acquire skills, simulators, models, games and so on. Computers and electronic materials, being modern tools of communication, became an essential support in teaching, learning, evaluating and researching activities. E-learning represents a new paradigm of knowledge acquisition and professional skills development.

E-learning presumes implementation of different kinds and forms of trainings by massive use of the theory of information and communications: course presentation, independent work with

electronic sources, distance interaction with educational staff (tutors), creation of educational network.

TCUM (UCCM), as well as many other universities, has been involved into implementation of the electronic education. This happened simultaneously with the 516597-TEMPUS-1-2011-1-FR „CREATION RESEAU UNIVERSITIES NUMERIQUES THEMATIQUES EN SCIENCES APPLIQUEE ET SCIENCES ECONOMIQUES EN MOLDAVIE” project, which started on October 2011.

The general objective of the given project was modernization of the higher school education in the Republic of Moldova, with renovation of teaching–learning–evaluating methods by reference to the electronic education based on the “Moodle” platform. The project targeted on the creation of the Inter-University digital network, which provided online trainings for the fundamental and applied sciences, economics and management.

This project has involved nine universities from Moldova (MD), TCUM being one of them, which educate 85% of the whole number of students in the country, and seven universities from the European Union (EU) (from Belgium, Spain, France, Italy and Romania), which are very experienced in e-learning in different domains and can provide their competences to Moldova partners.

However, the institutions involved in the project, have proposed and specific objectives, namely:

- ✓ Informing MD teachers and students with e-learning methodology and techniques. Implementation of the project was accompanied by creation of specialized functional structures in the MD institutions;
- ✓ Providing to MD teachers training on implementation of the online education, through joint working groups MD-EU;
- ✓ Experimentation and dissemination of online education with help of training coordinators;
- ✓ Developing the synthesis and the appropriateness assessment of the methods used in relation to the training requirements of students;
- ✓ Improvement and dissemination of the results.

2. Activities, results

2.1. Project promotion

On December 7, 2012, by decision of the TCUM senate, the plan for the implementation of the above mentioned project within the University has been approved, among which we can mention the following issues:

- ✓ To define the members of pilot group for project implementation within TCUM;
- ✓ To train the staff coordinating the project and persons involved into the development of electronic courses;
- ✓ To organize courses for pedagogical staff training in the domain of electronic education:
 - a) Development of “e-learning” training program with modules:
 - introduction to e-learning;
 - design of a University course in the electronic format;
 - e-learning platforms;

- b) Deployment of lifelong training courses involving prepared training coordinators from other universities;
- ✓ Anticipated development of online courses by pedagogical staff involved into the subject-oriented working group: Economy and Management - Mrs. C. Melinte and Applied Mathematics – Mr. V. Seiciuc;
 - ✓ To ensure conditions for the first trial period of the online developed courses. To evaluate results;
 - ✓ To evaluate potential of the departments for identification of persons to be involved into e-learning courses development and management. To select responsible persons for each discipline, who will develop electronic courses and to ensure their continuous learning in the domain of electronic education and information technologies;
 - ✓ To create the Center for Information and Documentation on electronic education and information technologies;
 - ✓ To provide necessary equipment for the Inter-University digital network connection (Moodle network in Moldova);
 - ✓ To create a set of courses in electronic format and, after their certification in the agreed mode, to store them in digital Library.

As we can see above - good intentions and prudent steps, but what has been really done?

2.2. Creation of the Center

The first - with the financial support of this project, it has been created a specialized e-learning Center, equipped with advanced appliances (20 modern personal computers), multi-media blackboard, projector, laptop, video camera, where the courses with use of information technologies and electronic communications are held. On the basis of the Center training for pedagogical staff was organized on implementation of e-learning. All teachers were supplied with advanced hardware and software resources (computers, projectors, printers).

2.3. Pedagogical staff training

Further – under the aegis of the TEMPUS project 9 people (including 2 specialists in the field of information technology and 7 teachers) participated in different courses on getting “e-learning” competencies, organized by the Technical University of Moldova (TUM).

At the same time, TCUM has organized theoretical and practical seminars on e-learning regarding the formation of professional competences of pedagogical staff with participation of Continuous Training Center for teaching staff at the State University from Bălți –prof., dr. V. CABAC, assoc. prof., dr. E. CABAC (December 2012) and at ASEM – assoc. prof., dr. S. PORTARESCU (November 2013, March 2014 and June 2015). 32 teachers out of 66 total have been trained in these seminars. The course’s curriculum contains – Course Design, E-learning and Learning platform MOODLE.

Also, the TCUM teaching staff participated in the TUM Informative Seminars on the given project and followed the learning cycles on the Development and use of support materials for multimedia learning, moderator Gabriel JALAM, Agrocampus, Rennes, France (January 2012, February 2013 and May 2014).

What about formation of e-learning competences? It can be mentioned that TCUM participated in:

- ✓ The training for the representatives of Moldovan universities at Santiago de Compostella University, Spain, on March 25-29, 2012 (Mr. S. MUSTEATA, assoc. prof., dr., vice-rector);
- ✓ The theoretical and practical formation of the concept, use and maintenance of on-line courses in Iași, Romania (Mr. V. SEICIUC, prof., dr.);
- ✓ The training on the development of on-line courses, University of Rennes 1, France (Mrs. C. MELINTE, assoc. prof., dr., Mr. V. SEICIUC, prof., dr.).

2.4. Online courses development and implementation

During the process of project implementation, the TCUM pedagogical staff initiated 26 electronic courses. The courses can be accessed following the link www.elearning.uccm.md.

Among these courses, we have:

- 3 courses: Mathematics applied to economics, Enterprise economy and European Environment of Business which contain the Presentation course, Resource course (PDF, PPT), Practical tasks, Self-assessment tests, Bibliography, Students survey and have been tested in the process of educational activities with students:
 - Mathematics applied to economics (2 semesters);
 - Enterprise economy (3 semesters, the first semester was on ASEM portal);
 - European Environment of Business (1 semester);
- 7 advanced courses, which include - Presentation course, Resource course (PDF, PPTX, some courses – links to video resources), Practical tasks, Self-assessment tests, Bibliography.

Achievements and current problems concerning creation of electronic courses, were reflected in the scientific works of TCUM authors and presented at national and international scientific Conferences:

Larisa ȘAVGA, Claudia MELINTE

The experience and opportunity of implementation of research-based academic education at Trade Co-operative University of Moldova. Journal of Research on Trade, Management and Economic Development, VOLUME 1, ISSUE 1/2014.

Claudia MELINTE, Claudia TCACIUC

The Experience and the Opportunity of Implementation of Research- Based Academic Education on Corporate Social Responsibility of Co-Operative Enterprises. International scientific and professional conference, Contemporary Issues In Economy & Technology, CIET, Split, Croatia, 19 -22 June, 2014, s. 82-91, ISBN 978-953-7220-15-0.

Vladislav SEICIUC, Victor SEICIUC

Moodle platform implementation in teaching subject “Theory of probability and mathematical statistics”. The TCUM Jubilee International Scientific Conference, June 21-22, 2013.

Vladislav SEICIUC*, Victor SEICIUC*, Eleonora SEICIUC**

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About the use of Moodle platform in the development of the course: „Theory of probability and mathematical statistics” for distance education. The 20th International

Conference on Applied and Industrial Mathematics (CAIM-2012), dedicated to the academician Mitrofan Ciobanu. Communications in Education. Chişinău, August 22-25 2012, p. 201-202.

Vladislav SEICIUC*, Victor SEICIUC*, Eleonora SEICIUC**

About Moodle platform architecture of the University course „Theory of probability and mathematical statistics”. The 21st International Conference on Applied and Industrial Mathematics (CAIM-2013). Bucharest, Romania, September 19-22 2013, p. 108-109.

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The pedagogical management of e-learning in TCUM. Scientific Annals of the TCUM, vol. X, Chişinău, 2012.

TCUM provides moral and material support for the designed electronic courses: 100 hours (time reserved for training-methodical activity), material encouragements, rewards.

TCUM collaborates with all national partners within the above mentioned project in the domain of online education.

In the framework of another project TEMPUS 530181-2012-INURE: „INTEGRATED UNIVERSITY MANAGEMENT SYSTEM: EU EXPERIENCE ON NIS COUNTRIES GROUND”, which now is being implemented in the university, we cooperate with other institutions of higher education from Germany, Holland, Poland, Ukraine, Belarus, Moldova and Georgia in the field of Integrated Informational Systems in University Management (S.I.I.M.U.) (online education being the component part of S.I.I.M.U.).

Also, on December 6-7, 2010, TCUM participated in the international scientific-practical seminar «Дистанционные технологии образования в высших учебных заведениях потребительской кооперации» („Distance education technologies in the institutions of higher education on consumer co-operation”) which took place in Poltava University of Economics and Trade, Ukraine. Representatives of co-operate universities from Ukraine (Poltava, Vinița, Hmelniț and Lvov), Russian Federation (Belgorod and Novosibirsk), Republic of Moldova, Belarus and Kazakhstan participated in this seminar. TCUM has been represented by S. MUSTEAȚĂ, A. GRADINARU and P. PAVALACHI, who presented the ways of e-learning implementation within TCUM and got acquainted with the experiences in the field of implementation of electronic education in the educational institutions of Ukraine, Russian Federation, Belarus and Kazakhstan.

2.5. Results and Reflections

By means of a series of training seminars provided for the teaching staff from partner institutions, the implementation of this project made it possible to create the prerequisites for large scale implementation of e-learning, development and use of support materials for media trainings in these institutions, creation of Inter-University partnerships in the given field, improvement of material and technical base of partner universities necessary for the implementation of new ICT in education.

The impact is, obviously, positive. Moodle platform offers to teaching staff a possibility to diversify materials provided for course (narrative materials, PowerPoint presentations, video materials, recent articles and so on...) and to offer these materials to students in a quick mode. Students obtain possibility to work individually, and in case of necessity, to work in group with

other students as well as with the professor. We have many electronic courses elaborated, but not all of them are functional.

In the process of students' evaluation of the courses placed on the Moodle platform, it has become obvious that this project had a positive impact on the development of online education in the University. This survey on a sample of 337/221 people showed that students appreciate very much the courses hosted by the platform, as they have constant access to course resources from any location (home, University, campus, etc.), can get access to the tests for self-assessment that allows them to move faster and, at the same time, increasing student motivation for learning.

Very positive feedback has been provided by the part-time students, and those from TCUM branch at Soroca, as well as master degree students. Moodle platform provides quick feedback between the teacher and student, at least in the case of individual and group projects, developed by the students within a course. In our opinion, the courses got quite high appreciation (positively appreciated - 80-85 %) due to the diversification of learning tools that Moodle platform can offer to students.

From those well-known and implemented, we can conclude that: new information and communications technologies change the educational practice perspective by completing educational framework with modern teaching methods, specific to the information society. Currently, e-learning has become a viable alternative to traditional methods of education, so that it was adopted by many educational institutions, especially because of the advantages to obtain better quality in professional training provided to young specialists and to those people, who are offered opportunities of continuous training.

Higher education introduces more and more new technologies, reporting positive experiences in possibilities of training by means of on-line libraries, systems for distance learning courses via Internet, student support via on-line forums and via informational learning management systems.

However, in parallel, the other details can be observed. For some teachers, use of e-learning represents an attribute, imposed by fashion, rather than the realization of the fact that it is a reliable way to improve quality of getting professional skills.

During training of future developers of electronic courses the emphasis is set on technical aspects of e-learning. Learning platform is often considered only as means of content delivery, and electronic course – as digital version of traditional course.

Educational reserves and potential are not valued at their fair value. The accent is set on the informative aspect, to the detriment of the forming one. Many courses represent deposit of information. All “crumbles” because of low-quality course developed - the course designed without main deck - directing the learning activities of students.

Courses are implemented without going through an official certification procedure. Moreover, such procedures are not developed. There are no even elementary regulations developed for electronic education, for distance learning, with exception of simple declaration in a word of distance education in the Education Code. Best practices from European Universities remain unassimilated. We are 2-3 decades away from advanced practices of the European Universities in the domain of information technologies, distance learning and electronic education. Millions of students and pupils all over the world take advantage of electronic education services, employees of many companies develop new concepts and technologies in the workplace through e-learning.

3. Conclusions

However, we do not go into despair. Necessary prerequisites for mass deployment of electronic education (infrastructure, pedagogical staff training, experience got in design, development and management of e-courses) are already created. This process needs to be undertaken by the heads of Universities and to be included in the strategic development plan of the University. It is necessary to have the development program, approved by Senate, assisted by the corresponding support (financial, informational, methodological, employee incentive and so on).

This is at the institutional level (the lower one), what about national level – it should be determined by the Ministry, Government.

Implementation starts with change of pedagogical and management staff mentality.

Implementation model should be based on the below principles:

- ✓ Awareness of the fact that changes should be done;
- ✓ Desire to achieve the changes planned;
- ✓ Getting necessary knowledge for implementation of changes (any change starts with a training);
- ✓ Ability to implement the proposed technology;
- ✓ Motivation / call to action.

All of us should acknowledge the reality that e-learning penetrated in the formal and informal education, at home, both in the city and in the rural areas. Electronic education is spread everywhere, we can conclude that this is education without borders - it affects everyone and represents an essential component of each transformation.

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Rezumat

Un bilanț, gânduri și reflecții ale implementării proiectului 516597-TEMPUS-1-2011-1-FR „CREATION RESEAU UNIVERSITIES NUMERIQUES THEMATIQUES EN SCIENCES APPLIQUEE ET SCIENCES ECONOMIQUES EN MOLDAVIE” în cadrul Universității Cooperatist-Comerciale din Moldova.

Acest proiect, implementat în parteneriat cu nouă universități din țară și cu sprijinul altor șapte universități din Uniunea Europeană cu bune practici în domeniu, are drept obiectiv major modernizarea învățămîntului superior prin renovarea metodelor de predare-învățare-evaluare, fiind axat pe învățămîntul electronic în baza platformei „Moodle”.

S-a reușit cunoașterea cadrelor didactice și studenților cu metodologia elaborării și implementării cursurilor în format electronic, instruirea lor în realizarea învățămîntului on-line, experimentarea cursurilor elaborate și îmbunătățirea lor. S-au creat premise și condiții necesare pentru elaborarea, implementarea în masă a învățămîntului on-line în universitate. Însă se cer eforturi, concentrare și susținere.

Cuvinte-cheie: *e-learning, tehnologii informaționale și comunicații (TIC), platforma Moodle, managementul și asigurarea calității procesului didactic.*

Аннотация

Итоги, мысли и рассуждения по внедрению проекта 516597-TEMPUS-1-2011-1-FR „CREATION RESEAU UNIVERSITIES NUMERIQUES THEMATIQUES EN SCIENCES APPLIQUEE ET SCIENCES ECONOMIQUES EN MOLDAVIE” в Кооперативно-Торговом Университете Молдовы.

Данный проект, реализованный в партнерстве с девятью университетами страны и при содействии других семи университетов с передовой практикой в конкретной области из Европейского Союза, преследует основную цель – модернизирование высшего образования путем преобразования учебно-оценочных методов, с ориентацией на электронное обучение на базе платформы „Moodle”.

Удалось ознакомить дидактические кадры и студентов с методологией разработки и внедрения курсов в электронной форме, их обучение в области онлайн преподавания, экспериментирование с разработанными курсами и их усовершенствование. Созданы предпосылки и условия для разработки, массового внедрения электронного образования в университете. Но необходимы еще усилия, сосредоточение и поддержка.

Ключевые слова: *e-learning, информационные и коммуникационные технологии (ИКТ), платформа Moodle, управление учебным процессом и обеспечение его качества.*