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DIGITAL PLATFORMS – SUPPORT TOOLS FOR THE STUDY PROCESS

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Abstract

Teaching requires improvement of communication methods with students. Besides the interaction with the teacher in the classroom, the new information technologies allow communication online. The most widely used is the Moodle, platform offered for free, and which is constantly developing. Moodle provides teachers with a variety of useful tools in teaching, learning and assessment and allows defining adaptation the course to student needs. Who knows, may be future student will prefer wireless education.

Keywords*: education, e-Learning, Moodle, online training.*

1. Introduction

Quality in higher education is a multidimensional notion that has to comprise all its functions, dimensions and activities: the curricula, analytical teaching programs, training and research, staff, students, rooms, utilities, communication services and the academic environment, etc. The internal self-evaluation and external analysis, openly performed by independent specialists and, in case, by an international expertise, are vital for quality improvement. The National Quality Assurance Authority is already on its way to be founded, and quality comparative standards, recognized at international level, are to be determined. A high attention will be paid to teaching and research methods within L-M-D study programs. New informational technologies are an essential instrument in the quality assurance process as a result of their impact on the process on getting new knowledge and know-how.

Exponential development of informational technology and communications in the last decade led to the registration of a real revolution in the online training area. Amid rapid changes and the registered technological progress, as well as amid the tendency to globalize university education, new perspectives for the educational practice have been developed, which has been completed with modern teaching-learning-evaluation methods specific for the informational society.

Which student-teacher interaction methods are preferable, how students learn better, it is a very subjective issue to be approached. But combining different methods such as the interaction with the teacher in classrooms and direct or indirect communication are an essential prerogative for restructuring the teaching environment.

2. The degree of investigation of the current problem, and purpose of research

Education institutions have to adapt themselves to the requirements and new opportunities of the educational environment. Lately, teaching methods based on digital tools have acquired a high-level progress. If only few years ago the projector was something new, today computers, tablets are already present in classrooms as a quite mandatory tool. There is no an exact teaching mode. Usually, teachers work hard to offer a variety of teaching methods. Lectures, tests, PP presentations, videos are only few of the methods that lecturers use today as course teaching tools.

Today, informational technologies have paved their way to student campuses. It is important to realize the fact that, first, higher education institutions are the ones that use the results of ICT sector to modernize their activities and that it's not the ICT that transforms higher education institutions in virtual ones.

New ICT instruments change the perspective on educational practice, completing the educational framework with modern teaching methodologies specific to the informational society. ICT methods do not replace the traditional educational systems. They improve the teaching process. Adapted to educational requirements, as an alternative to the traditional education, they lead to free access to distance learning. At the same time, they facilitate the process of continuous training of the members of a community that adopts an e-learning solution.

Educational institutions have to take into account constantly changing needs of the technical environment when it comes to these tools. The continuous development of digital technologies led to the fact that many students spend a lot of time on Internet. Recent polls undertaken by the CampusBooks.com [5] on student preferences on using handbooks, technologies and social media showed that 48% respondents already use digital handbooks and course notes, 44% prefer this method, combining digital information with paper editions and 39% prefer to use paper edited study materials. Another question is whether students take notes during classes or individual learning. The answers would be the following: 62% take some notes on paper, 24% use their notebooks for taking notes, 8% use digital tablets and only 6% have traditional outlines for each course. Thus, it is to be noticed that the increased development of digital technologies leads to the situation when many students use computers or notebooks for their training and spend an increased amount of time on Internet.

Higher education institutions, counting on the ICT advantages and potential in an open, equitable and cooperative manner, have to play a leading role and to assure the quality, practical rigid standards and educational results through:

- involvement within networks, technological transfer, potential creation, development of didactic materials and change of experience regarding the application in teaching, training and research of the knowledge accessible to all students;
- creation of new forms of the teaching environment, within the limits of distance learning facilities and complete virtual higher education institutions and systems, capable to cross distances and develop high quality educational systems, thus assuring social and economic evolution and democratization, as well as other priorities relevant to the society, guaranteeing, at the same time, that these virtual educational facilities, based on regional or global networks, function in a manner that respects cultural and social identities;
- taking into consideration new possibilities offered by the ICT [3].

3. Applied methods and material

Implementation of ICT in teaching is a great challenge for teachers from the Technical University of Moldova as well. At the department of Economics and Management in Industry, initially, two courses on Enterprise Management and Enterprise Planning have been developed and tested during two semesters. Generally, students have accepted the challenge and have positively appreciated the novelty. The results came very quickly:

- First, during courses students pay more attention to the content and do not seek to entirely write what the lecturer says, making just certain notes. The whole material is accessible online.
- Second, the evaluations for each topic made students learn systematically, a fact that led to high marks at final exams.

There has been undertaken a poll in order to determine the detailed opinion of students on the Moodle tool.

4. Results obtained and discussions

4.1. Benefits of the MOODLE platform

The exponential growth of the ICT sector in the last decade has led to the development of many useful digital teaching tools, and the development of new platforms for e-learning. Methodologically, e-learning can be defined as distance learning in a collaborative learning environment that combines traditional teaching with technology-based methods to improve the individual performance of the student. E-learning is based on modern education otherwise than the classic one, which is more attractive and in which an important role is played by knowledge strengthening and assessment carried out in an attractive manner, appropriate to the needs of education, both from the point of view of the teacher and the students [1].

Among all digital platforms the Moodle platform developed by engineers from the IT field with teacher training is more highlighted. It was built on logical and simple principles so that it is understood by both users and administrators.

Moodle is a software package for producing online courses designed to provide a favourable environment for e-Learning. Moodle is distributed free under Open Source regime. The platform provides the implementer a site with Moodle possibility to adapt the software to personal needs. Both Moodle developers and users alike are working to provide a good quality, to add new modules and accessories, and to suggest new ideas for the development of the platform. A content management system is a system that provides a collection of procedures used to manage the work flow [2].

At global level, there is a ranking of the top 100 online learning platforms. The respective ranking is drawn up on the basis of internal statistics provided by these platforms. In this ranking the 11th place is taken by Moodle, which, during the last 7 years is constantly situated among the top 15 e-learning platforms in the world [2]. Now, Moodle official website [6] has a total of more than 72.3 million registered users from 235 countries, available in over 70 languages, which proves that Moodle has managed to create one of the strongest communities at global level. Statistics show

that there is a number of over 64,000 Moodle sites and a number of over 7.6 million courses created in this format. 1.2 million Instructors are trained in teaching courses.

Moodle is becoming increasingly popular in education because it presents a learning tool that provides services that complement the study tools and methods:

- Posting courses, labs, schedules, bibliography, topics, exams;
- Virtual secretariat; knowledge evaluation and self-assessment;
- Virtual teaching / collaboration classrooms for distance learning;
- Online courses and seminars;
- Communication and socialization;
- Projects development.

The Moodle platform provides a set of useful tools for the teaching, learning and assessment processes, while the method of forming the structure and content of courses allows an adaptation to the needs of students, including for the specialists going through a continuous training process. It is important that users can browse such a course at any time, where and how they want, because by its shape and structure a course developed and implemented on Moodle platform is tailored to their needs, accessible anytime and anywhere, even outside the auditorium, enabling collaboration through modern communication tools such as forums, chats, blogs, etc.

Changing the structure of normative hours for studying a course dedicated mainly to individual activities requires broader discussion and using several methods for valuing the knowledge. Using the digital platform allows, along with such traditional methods as the work control, the control test, held in the auditorium, as well as the on-going self-assessment for each module and course entirely. The coexistence of different types of evaluation contributes to strengthen learning, facilitates learning through feedback and challenges faced by students.

4.2. The use of MOODLE platform at TUM

There has been undertaken a poll in order to determine the detailed opinion of students on the Moodle tool. The overall analysis of the poll's results shows that 'teacher-student' interaction means through Moodle platform are appreciated because:

- There is a lot of study information;
- The access to the information is flexible;
- The material can be found at any time;
- It gives the opportunity to learn at home;
- It allows the student to study and solve the proposed tests and topics;
- It ensures the possibility to get better results using more chances, thus, finally, leading to development;
- There's the possibility to recap, summarize, realize attractive animated schemes that would lead to the easiest way of memorizing the information;
- Self-evaluation excludes teacher's subjectivity;
- The stress and emotions are reduced, as evaluation is made without teacher's presence (sometimes stressful for students).

But courses placement is not the end of the implementation of online studies. It is obvious that continuous improvement of courses will increase their quality, the platform will enhance its usefulness, thus, appreciation from students will change for the better.

Great achievements in the field of new information and communication technologies change the way of developing the acquired and delivered knowledge. New technologies open opportunities for content and teaching methods' innovation, give new chances for expanding the access to higher education. However, it should be noted that new methods based on information technology do not reduce the requirements to teachers. It changes their role in relation to the learning and continuous dialogue processes that convert information into knowledge, perception becoming fundamental.

The development of a course must take into account the specific features of the group of students. The teacher is constrained by the curriculum of the study discipline. Indeed, the course is elaborated structurally on themes as to meet the curriculum content, but the approach depends on the teacher and the group of students. In courses developed for placement on Moodle the emphasis is made not only on providing information. The activities involve exchanging ideas and building new knowledge and skills based on the acquired knowledge. The digital platform is an additional method of communication with the student. The teacher himself lives in a changing society. Using the platform allows and requires him to adapt, to adjust, and to continuously improve himself.

By using the online platform, teaching the course is no longer a closed process, with only two subjects – the teacher and the student. Due to Moodle, a part of the course teaching process is exteriorized, it becomes an open one. This certainly causes a higher level of responsibility of the teacher, facilitates quality control process of university courses and makes the interaction between the teacher and students more efficient. In parallel, the courses placed on this platform must be subject to a permanent process of permanent improvement during each year of study.

It might be said that using a common digital platform for communication with students, even if it is via the Internet, the teacher „keeps his hand on the pulse" of students' education. By placing materials the time limit disappears, the one that exists during contact hours directly to the academic hours. The placement space is not limited. Of course, an optimal volume of information required to study an object should be determined. Other materials may be offered through link sites.

The platform allows both self-evaluation and student's assessment. The teacher has the possibility to check student's activity on the dedicated time and the quality of online knowledge. By forums, the teacher can interact and inform students „just in time".

5. Conclusions

Thus, implementation of the digital platform Moodle helps strengthen educational skills for a better quality of teacher - student and student - teacher relations. Using the platform gets to ensure knowledge acquisition and formation of skills that enable students to adapt to the requirements of a constantly evolving society. At the same time, the use of the Moodle platform by students should ensure a balance between developing skills to use modern communication technologies, for accumulating knowledge and preserving the learning act in its psychosocial context.

Obviously, the possibilities offered by Moodle are endless, now they have managed only a small part of these possibilities. There are still many opportunities that this platform offers to be

capitalized. Advantages offered by Moodle can be noticed only after the development, implementation and use of courses for any subject, and in which it is recommended to integrate more activities and resources. One drawback that should be mentioned is the time to be allocated to the creation and development of courses, but once developed a course can be used whenever the need arises, thus, this significantly reduces the drawbacks.

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Rezumat

Învățământul necesită perfecționarea metodelor de comunicare cu studenții. Pe lîngă interacțiunea directă cu profesorul în auditoriu, noile tehnologii informaționale permit comunicarea on-line. Cel mai des folosită este platforma Moodle, oferită gratuit și permanent în dezvoltare. Platforma Moodle oferă profesorilor o varietate de instrumente utile în predare, învățare și evaluare și determină adaptarea cursului la nevoile studenților. Cine știe, poate anume învățământul fără fir va fi preferat în viitor de către studenți.

***Cuvinte-cheie**: învățământ, e-Learning, Moodle, instruire on-line.*

Аннотация

Образование требует пересмотр методов общения со студентами. Наряду с прямым взаимодействием преподавателя и студента в аудитории, новые информационные технологии позволяют провести обучение он-лайн. Преимущественно используется бесплатно предоставленная платформа Moodle, которой свойственно постоянное развитие. Платформа Moodle предлагает преподавателям различные полезные инструменты для преподавания, обучения и оценки, позволяет адаптировать курс к требованиям студентов. Кто знает, может быть, студенты предпочтут в будущем именно беспроводное образование.

***Ключевые слова:** образование, e-Learning, платформа Moodle, обучение он-лайн.*