E-Learning in Higher Educational Environment

Tatiana Shopova
tshopova9@gmail.com
SWU „Neofit Rilski" (Bulgaria)

Abstract

This paper aims to discuss the role of E-Learning in the new Higher Educational Environment in the digital age which creates student-centered learning and educational practice, offering new more flexible learning methods. In the digital 21st century cannot be achieve high results in learning and educational process without integrating new information and communication technologies in the education system.

The development of European higher education, part of which is Bulgarian, is connected with the comprehensive modernization in all areas of learning, research and innovations, and improving the coordination, flexibility and adaptation to the needs of society.

After defining the e-Learning, author focuses on issues related to ICT in Higher Education and new innovative approaches to teaching, learning and assessment based on the use of software applications, multimedia products and web-based information.

The use of enormous integrated set of computer and internet tools and resources in the new learning environments allows us to achieve more efficient and effective training. The students are no longer passive consumers of the educational programs and services, but active participants in the educational process. Their skills and competencies to work effectively with digital technologies are prerequisite for successful and responsible solving and presentation of scientific problems and case studies.

The paper highlights the key role of South-West University in Bulgaria for improvement and development of the educational process supported by modern technology; for facilitating e-learning to help students develop and enrich their learning skills in IT environment.

1. Introduction

Information and communication technologies (ICT) have become one of the most important factors to the formation of society in the twenty-first century. Their impact is revolutionary. It affects the way of life of people, their work and education.

The new paradigm of modern education incorporates primarily the requirement for informatization of education as an important factor for its development. The EU's eLearning initiative called the participants involved in education and training with an appeal to aware of the importance of new technologies in modern education and training systems and undertakes the continuous self-improvement.

The development of European higher education, part of which is Bulgarian, is connected with the comprehensive modernization in all areas of learning, research and innovations, and improving the coordination, flexibility and adaptation to the needs of society. The South-West University in Bulgaria with its efforts to informatization of the education and training contributes to the formation of a democratic and open society in response to the aims of „Digital Agenda for Europe Programme" (8/12/2010) - a part of the Europe 2020 strategy. It strives to input innovative transformation of the provision of education and training to promote objectives of "smart, sustainable and inclusive growth notably by equipping citizens with skills and competences which the European economy and

European society need in order to remain competitive and innovative, but also by helping to promote social cohesion and inclusion" [1].

2. ELearning in the European educational politics

Adapting to the globalization and the construction of the most dynamic economic area based on knowledge, has identified new challenges to the EU's education policy. European Commission invited Member States to establish "an ambitious program to modernize the social and educational system". The "Education and Training 2010 Work Programme" adopted in March 2002 by the EU Council identifies the requirement of introducing "urgent reforms" in European education systems by 2010, concerning the quality of education and training, and providing access to all. Special attention was paid to the key competencies that Europe's citizens need to acquire in order to adapt to rapid changes in socio-economic life, those from which people need for their personal and cultural development and active citizenship.

The eLearning term includes a wide range of uses of such technologies, starting from working with computers and ending with distance education, to which already is drawn more attention. It includes the use of CD\DVD-based (offline), network - Intranet or Internet-based (online). The documents of UNESCO highlights that the practices of e-learning „offers personalized monitoring coupled with flexibility in the management of learning and greater autonomy in the acquisition of knowledge" [2].

3. E-Learning in Higher Education

The increasing influence of globalization and the emerging information society, set new requirements for all areas of social life, including to higher education. E-Learning became an important instrument in the new Higher Educational Environment in the digital age which creates student-centered learning and educational practice, offering new more flexible learning methods.

"E-education" began to implement in the prestigious universities in Europe and worldwide. A part of the Bulgarian virtual educational space is the South-West University which has become a significant factor in the higher education system as an attractive center for the young people not only of the region but also from all Bulgaria and neighbouring countries. The focus on real problems of education and the uses of information and computer technology in the learning process is one of the priorities of the University. In South-west University there are already sufficient modern facilities and technical equipment, and built-in general information system. The access to the current scientific and educational information significantly expanded primary databases were created for the academic staff, for the research potential, for the doctoral students. It was decided and then the preparation for accession to the ECTS began.

3.1. Student-centered learning

The modernization of education suggests that the students not only have to acquire skills and habits to work with the growing volume and more sophisticated information streams but have to possess ability to get new knowledge, independently to build the overall cognitive process in the surrounding IT environment.

In the new IT environment of special importance is the human adaptation to ever-changing conditions of working and life that require development of a number of key competencies associated with effective and efficient use of IC technologies. In this regard, the students` training gets a new dimension. Through the use of digital technology in the learning process the students acquire skills to identify different sources of information in applications such as electronic media or video, to communicate through newsgroups, online discussion forums, web blogs or chat rooms, to search databases of local and global networks and create their own sites. It is suggested that the students also understand how to support the information society's creative potential and innovation, how to understand problems of legality and reliability of the information. Work in the information society requires a critical and reflexive attitude towards available information and responsible use of the interactive media.
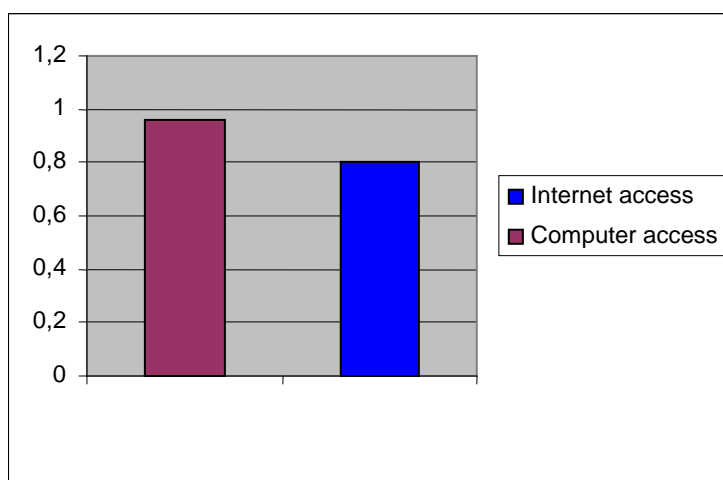
3.2. Supporting interactive and individual learning environment

The paper focuses on the role of ICT and new innovative approaches to teaching and learning based on the use of software applications, multimedia products and web-based information. The author identifies that the improvement of digital literacy of the students can contribute to improving their outcomes because they are no longer passive consumers of the educational programs and services, but active participants in the educational process. Their learning and employability skills related to the effective use of information sources are important prerequisite for increasing students` responsibility for their own learning.

The SWU guarantees an appropriate e-learning environment for effective and quality training process. An important condition for acquiring knowledge and skills is the existence of electronic resources in the University Library of South-west University "N. Rilski". For eight years this system has proved its reliability for scientific purposes. Every day in the base are entering approximately 20000 new books. The program access and use of the system improves with each passing day - students can be informed through the links to other specialized but popular sites with similar content. The searches can also be done in the 11 databases simultaneously. The computerized equipment at the University meets the requirements of modern development of the educational system in Bulgaria.

The team from the Center for the New Media and Digital Culture conducted a survey in October-December 2010 among 30 students of the Department of Culturology at SWU. Its objectives were to establish what the students` access to computers and Internet is; whether the students use the library's electronic resources of the University; how the student use of internet tools and recourses helps them to improve their learning process. The present study, a part of the project "E-learning in Higher Education - European Dimensions" which is taking place in the SWU should follow the students` perceptions of e-learning and its benefits; the level of utilization of digital competence of young people at the university; their motivation to work and creative expression in the new multimedia environment.

By conducting two focus groups the students allow us to get a great deal of information, sharing openly their thoughts and opinions. As we know focus groups is one of the so called "qualitative methods" in sociology and can be used as a powerful means to collect subjective data. During a focus group session the respondents who expressed their visions helped us determine the degree of involvement of students in the e-learning environment. According to the percentage of students who have access to computers and the Internet has increased significantly compared to past years. Students' usage of computers in learning process (Computer-Assisted Learning) can help them to remember better the material and to self-evaluate.· The study showed that majority of students surveyed have access to computers (96 %) and the Internet (80 %) (Figure1).
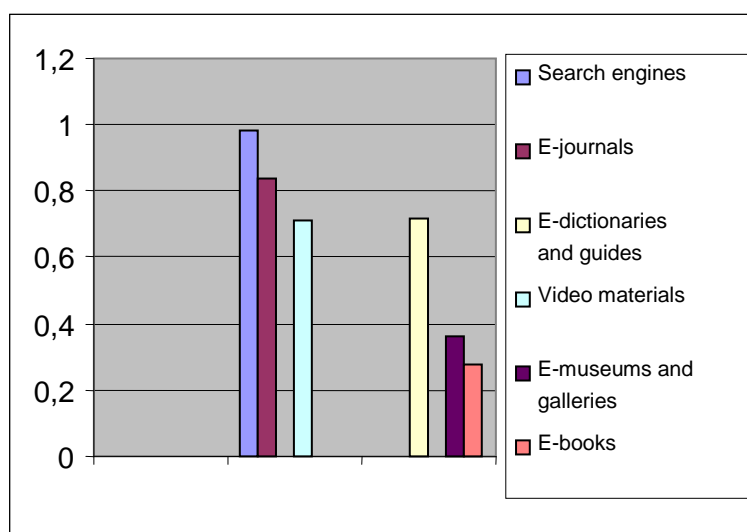

Figure 1 Students` access to computers and the Internet

The most of them have daily access to the global network at the university (65%) and have pointed out that their contacts to a majority of lecturers via e-mails allow them to share their ideas and decisions. They can actively interact with teachers and other colleagues, and thus reinforce their knowledge. Internet access provided by the University covers e-mailing, access to major subscribed databases and library collections. They can use successfully the computer tools such as text and graphics editors, databases, e-tables, presentation packages in order to participate in processing information and etc. Therefore, students have no big difficulties in preparing their tasks, determined by lecturers. It appears that 97 per cent of them use computers for researching information in Internet.

For academic purposes students use in the first place search engines most especially Google (97%), followed by e-journals (84%), e-dictionaries and guides (72%), video materials (71%), e-museums and galleries (16%) (Figure 2).

Figure 2 Type of e-recourses used by students

Students have full access to the University Library at South-West University; they know well the advantages of electronic information about EBSCO publishing and rely on it for their daily searches and scientific developments. The students are facilitated in their daily scientific searches and elaborations by the advantages of the electronic publication of information because in addition to the specialized bibliographic information they receive the full content of actual publication. But the study found the students have not yet acquired a permanent habit to take advantage of the e-library.

The study showed that the improvement of digital literacy of the students can contribute to improving their outcomes during their training. Students felt that the e-learning environment in the SWU made them more motivated and more responsible in their learning activities.

It is important to emphasize that the students' participation in the contemporary digital environments of learning requires not only ensuring effective access to computer labs and Internet, access to electronic library resources and to other information products and services. It is necessary to understand how the use of certain skills in interactive environment helps students in their effective participation in the learning process in a creative and innovative way. Equipped with the latest interactive computer technology, they have the advantage not only to emerge as objects of the educational process, to receive and store necessary information but also to act as individuals, as active creators in the new e-learning environment thanks to the wide opportunities for expression of their initiative, creative and selective behaviour. The creative online activity for students involves not only seeking information, but also creating and sharing new content, provoking their participation in conversations fuelled by that content.

According to this, the efforts of the teachers should be focused on supporting different appropriate ways to use interactive information and communication media which will increase the students` abilities for more effective approach to information suggesting its critical and competent assessment,

creative use of sources to solve specific problems and to manage information in a responsible manner.

4. Conclusion

The development of new information technologies in the 21st is expanding the range of information resources; it is also creating conditions for the formation of a global informational, educational and cultural space and therefore changes occur in the education system. The paper underlines that high results cannot be achieved in the learning and the educational process without integrating new information and communication technologies in the education system. The use of enormous integrated set of computer and internet tools and resources allows us to achieve more efficient and effective training. The students are no longer passive consumers of the educational programs and services, but active participants in the educational process. Their skills and competencies to work effectively with digital technologies are prerequisite for successful and responsible solving and presentation of scientific problems and cases.

The development of new technologies and the use of e-learning in teaching and learning is of great benefit for the SWU "N. Rilski"; integrating digital technology into the educational environment can increase the efficiency and the quality of the education system.

References

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