The Role of E-learning

Duong Van Thinh

Óbuda University, Keleti Faculty of Business and Management
duongvan.tinh@kgk.uni-obuda.hu

Abstract: The term E-learning refers to a novel teaching and learning in education. This educational high technology is an important part of today's world, which delivers, supports and enhance the quality of learning. E-learning involves the participation of instructors, and students and mentors who use this technology to update their work. This paper reports on the extent to which the effectiveness and students' attitudes towards e-learning impacts their learning styles.

Keywords: E-learning, Social support, Hiegher Education

1 Introduction

Nowadays, in the rapidly changing world the education plays an important role. The primary, the secondary, and the tertiary education altogether is responsible for the human resources [10],[11],[14].. Over the past years, e-learning has become a vital source of expansion and studing in education. Due to the opportunities created by e-learning, teaching and learning can now happen at any time and in anywhere. The new media like the internet has become one of the vital ways to make available resources for research and learning for both teachers and students to share and acquire information. The explosive growth of the World Wide Web (WWW) has made information techlogy a popular platform for providing e-service, e-learning service.[18], [4]

E–learning is defined as acquisition of knowledge and skill using electronic technologies such as computer and Internet-based courseware at local and wide area networks. Technology-based e-learning encompasses the use of the internet and other important technologies to produce materials for learning and teaching in organization [6]. As a result Internet and Information technology in tutoring and studing has created a different necessity to modify how university students learn by using more modern, effective, and alternative such as e-learning system.[8]

Regardings to e-learning, many people are now attracted to training and education who previously would not have considered it as a relevant part of their lives. [4]

Tao et al. really thought that this new learning environment was centered on electronic networks had found a way for undergraduate to have learning schedules that is more suitable for them as well as separate from other students. [7]

With the developping of computer and Internet technologies, this technology has a high interaction and collaboration level between instructors or lectures and peers than traditional environment for learning. [19]

Hence, e-learning system might be able to deliver a broad array of solutions to enable learning and improve students' performance.

2   Literature Review

There are three ways of classifying the models of e-learning. The first one is called synchronous, the second one is asynchronous and the third one is blended learning.

Synchronous training (at the same time):

Intrinsically synchronous training involves the collaboration of participants with E-mentor via the virtual platform in real time. In other words, synchronous training provides facilities to the participitians to discuss with the mentor and also among themselves via the e-classroom with the use/help of tools such as the videoconference and/or chat rooms. [12][15]

Asynchronous (not at the same time):

The asynchronous mode gives the opportunity to the participitians to discuss with the instructors or teachers/mentor as well as among themselves over the internet on his/her own pace without live interaction with the instructor. In this way students are able to learn at a time that suits them the most. However, immediate feedback from instructors, their colleague learners is not receivable. [15]

Blended learning (the mix of synchronous and asynchronous learning):

This kind of training combine aspects of online and face-to-face instruction, so the course materials and explanations is shared between traditional learning method and e-learning method in the classroom setting.

Blended learning allows for personalized education as a result students can work at their own pace, making sure they have mastered the curriculum before moving on.

Using e-learning at university classrooms give to instructors the multiplicity of their lectures, displaying more information, and enhancing student learning. Also e-learning system can helps lecturers to save time and allow for more attention to be paid to the content of course.

With e-learning system students don't have to come to class in person and feel uncomfortable answering their teacher's questions in class. Therefore, students can study at home, work or even on the street by using multi-electronic devices as computers, laptops, or smart phones. As follows, students can easily read or download the materials or reference books online when and whereever they want.

There are numbers of advantages for using this technology and learning materials in the university classroom: [20]

- More active learning class

- Diversified teaching method

- Better student attention and realization

- Effective time management for lecturers

- Visual stimulation

The major advantage of e-learning lies in its flexibility and ability to cover distances. The curriculum can be repeated until it is understood by the trainee. Hence full time and part time undergraduates can take part in their degree courses selected from any place or location so students can gain multiple learning ways depending on their needs. [1]

Just as a glass may be half full, it may also be half empty. There are also disadvantages for using e-learning.

despite the statements that e-Learning can improve the education quality, e-learning is still a support device for existing methods of learning. Also e-learning can not solves the problems created by the absence of vital personal interactions, not only between learners and instructors, but also among undergraduates.[9],[17]

Since e-learning is based on Internet technology and it creates a virtual "class room" for the students; therefore, it depends on Internet connection. Also this technology requires students to have a massive technical skills and Internet connection with high bandwidth to download the materials from the courses and upload their tasks or work with e-system.

Therefore the disadvantages of e-learning might be the followings:

- E-learning may possibly deteriorate institutions' role of socialization, and also the role of instructors as the directors of the process of education.

- Since tests for assessments in e-learning are possibly done with the use of proxy, it will be difficult to regulate bad activities like cheating.

- Equipment failures

All in all, e-learning could offer learning-on-demand opportunities for students in order to reduce costs and time, while improving their products (Kranz, 2008). On the other hand, we have to take notice of the reason why stundents would use this technology.

The purpose of the next part is to identify factors beyond the educator that support students' ability and motivation to learn in online courses.

Tsai and Weng's study pointed out that social support from mentors and peers (*ussually a neglected factor*) has significant effect on students' learning satisfaction, also family support affects students' continuous intentions to participate online courses. [16]

2.1 Social support

Social support covers the exchange of resources between at least two parties, with an intention of enhancing the well-being of the recipient. [5] The exchange of empathy, care, love or trust provides actual aid in time, money, advice, information and suggestions. [21]

Kim's study showed that social support from different sources is positively associated with learner's well-being and plays role in determining students satisfaction and decisions as to whether to participate in HEI's e-learning programs.[3]

The scientific literature distinguish several forms of social support. [2] These are Informational Support, Instrumental Support, Emotional Support and Affirmational Support.

Informational Support:

As the name implies, Informational support includes the provision of helpful information, advice, or suggestions on how to deal with certain issues. Support could come from different people. For example: sophomore students offer information to freshman on how best to deal with school concerns.

Althought informations pertain to immaterial goods, on various occasions it can be expressed in monetary value, that is why it is rarely found in it's pure form.

Instrumental support:

All of tangible aid that provide practical help and resources falls into the category of instrumental support. For example, undergraduates received support in the form of guidance from classmates or instructors on how to find the informations which could help them solve their homework.

Emotional support:

This kind of social support usually manifests as expressions of love and caring, Providing emotional support can help individual know that he or she is valued.[13]

For example: Students share experiences and support each other through life events such as family illness, final examination, looking for work, or adjusting to new place, it leads individuals to a sense of community.

Appraisal support:

This kind of social support happen when individual offers information that allows someone to make an informed decision on their own.

For example: The compliance like "I trust your judgment" or "You are doing the right thing" could generate appraisal support.

According to the mentioned theories it can be said that e-learning concept is based on self-efficacy and belief that one can be successful in e-learning activities. However, social support is also needed to keep users' intentions to continue using a technology . in this case e-learning. With this object I'm wondering whether social support could influence students' evaluation of e-learning.

3   Methodology

3.1   Research participants and data collection

For this study, online questionnaire was used to investigate students' opinions and evaluation of e-learning about using/ applying it in their own learning. The online survey has been initiated and circulated (via google drive) among students at Obuda University. The online quantitative survey consists of 24 questions on required fields.

231 students filled out the online questionnaire (161 males and 75 females), expressing their opinions of e-learning system under investigation.
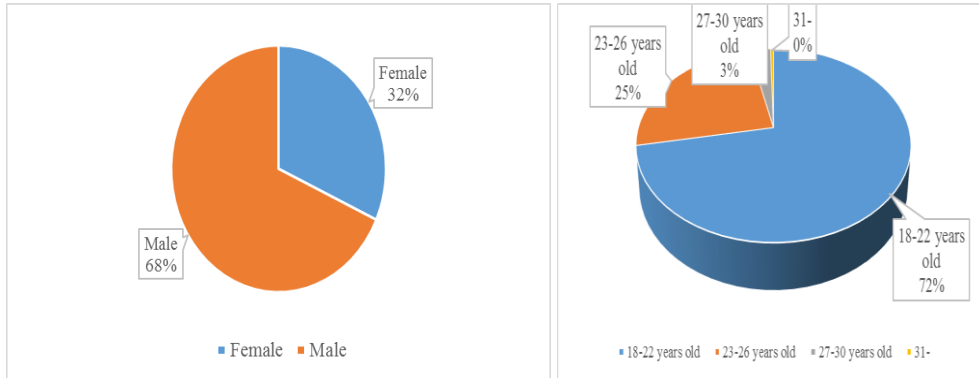
Figure 1

The respondent's distribution by gender and age

Source: Own data

The sample included 170 answers from 18-22 years-old students, 58 responses from students in the age group of 23-26, seven from the 27-30 years-old students and 1 from students' who are older than 31 years-old.

According to the collected data 75,4% of students used e-learning system and they would love to use it in the future during their academic years, 12,3% of them used it but if they can, they would not use it during their academic years.
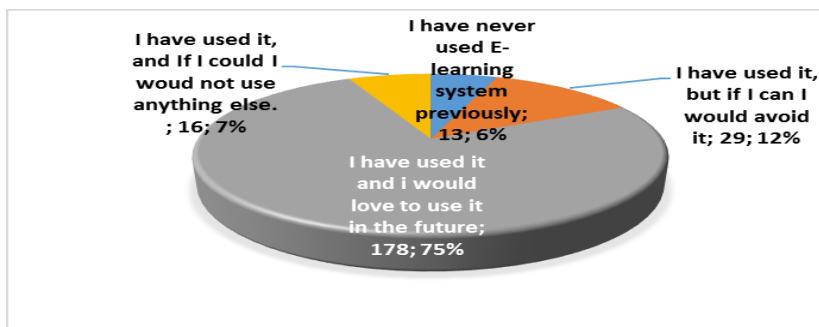

Figure 2

The respondents' cognition of e-learning

Source: Own data

Mixed Replies were received to the question of which kind of didacticism do they prefer? The vast majority of the respondents 99 out of 231 chose blended training as a favorite didacticism, 45 of them selected lectures, 38 of them picked consultations, 16 of them chose Asynchronous training and 3 of them chose Synchronous training.

By this token I take it that blended training would be the most popular and welcomed training form at the examined institutes.
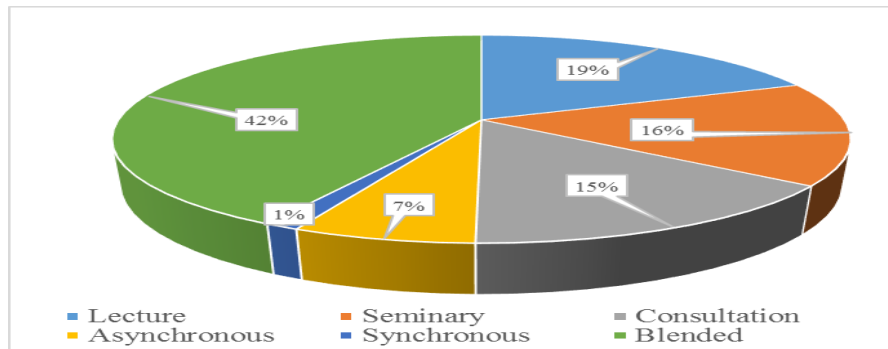

Figure 3
Students' opinion about differents didacticism
Source: Own data

The collected data has been analyzed using SPSS 20 program. In addition, descriptive statistics, a cross table was run in order to explore the relationship/ correlation between the variables. Since the paper is presented with the preliminary results of an ongoing research, all relationships described below are seen as indicative, rather than evidential statements. Because of the quantity of elements this database cannot be considered representative of Obuda University's fellowship.

3.1.1   Data Analyses

The findings of this study showed that e-learning system would be a very profitable device for the students and the universties as well. Hence my primary goal with this study is investigating whether social support is needed or on the other hand is it even available via e-learning system? That's why my research questions are the following:

1.   With the support of e-learning's materials students do not require real time contact with fellow students.

2.   Regardless of e-learning's trainings and materials students do need help to fulfill the requirements

3.1.2   Research question 1

According to the students' opinions e-learning system (training and materials) is necessary (138 out of 191 thought that e-learning is necessary and 43 students thought that it is absolutely necessary) even for those (20 out of 28 thought that it is necessary) who have used e-learning system but would avoid it if there are any other options. However, there is no statistical relationship/ correlation between the examined variable (Pearson Chi-Square = ,062) (1 appendix) Despite the fact that there are no statistical correlation (Pearson Chi-

Square =0,231) between the student's willingness to use e-learning system and whether they need real time interaction with their mentor. The collected data show that most of them (141 out of 191 and 22 out of 28) do want to have conversation or real time contact with their mentor.

How comfortable for you to discuss about assigment and tasks with your mentor?	I do not want to discuss with anyone	I do not really want to but I could get used to it	I do not mind to discuss it	I could not imagine it in other way	Total
Do not want to use E-learning system	0	6	11	11	28
	0,0%	21,4%	39,3%	39,3%	100,0%
Do want to use E-learning system	17	30	86	58	191
	8,9%	15,7%	45,0%	30,4%	100,0%

Table 1
Students' opinion about real time connection with their mentor
source: own data

The same result is showed between the student's willingness to use e-learning system and whether they need real time interaction with their fellowship. There were 88 out of 191 students who are favourably inclined toward e-learning, do need real time connection with companions and 27 out of 28 191 students who stand against e-learning felt that they do need social interaction with their mates.

How comfortable for you to discuss about assigment and tasks with your fellowship?	I do not want to discuss with anyone	I do not really want to but I could get used to it	I do not mind to discuss it	I could not imagine it in other way	Total
Do not want to use E-learning system	1	0	13	14	28
	3,6%	0,0%	46,4%	50,0%	100,0%
Do want to use E-learning system	6	19	78	88	191
	3,1%	9,9%	40,8%	46,1%	100,0%

Table 2
Students' opinion about real time connection with their mentor
source: own data

3.1.2. Research question 2

According to the students' views of their academic years, students' comfort level of studing alone is quite high. 60,7% of students who are comfortable with using e-learnig stated that studing alone is more prefered than in group. The same situation has found in the case of

those student who are not comfortable with using e-learning system. (Pearson Chi-Square = 0,040)

It suggests the idea that students have grown up in a global world of information. Thus, they have accustomed themselves to acquire information from the internet.

As a students I would rather studing alone	I'm absolutely disagree agree with it	I would rather disagree with it	Neutral	I would rather agree with it	I'm absolutely agree with it	Total
Do not want to use E-learning system	0	1	15	3	**9**	28
	0,0%	3,6%	53,6%	10,7%	32,1%	100,0%
Do want to use E-learning system	11	15	49	**55**	**61**	191
	5,8%	7,9%	25,7%	28,8%	31,9%	100,0%

Table 3
Students' studing attitude
source: own data

Despite the fact that with or with out the support of e-learning students would rather studing alone. But presumably that is not enough. Since, there are 46,6% of them who do need help from companions during their academic years. (Pearson Chi-Square =0,024)

247

As a student	I am able to meet all of requirements with out any help	I need help from companions to understand the curriculum and to meet the requirements	I need a lot of help from companions to understand the curriculum and to make all of my assigments ready	Total
Do not want to use E-learning system	11	**<u>14</u>**	3	28
	39,3%	50,0%	10,7%	100,0%
Do want to use E-learning system	102	**<u>78</u>**	11	191
	53,4%	40,8%	5,8%	100,0%

Table 4

Students' studing opinions about whether they help during their academic years

source: own data

Conclusion

E-learning could be an effective tool for transferring knowledge and it has a potential to overtake the traditional teaching method. Web-based training helps facilitate learners and instructors in educational environment. Nowadays, many universities, colleges implement e-learning system in their own training programs to satisfy their students needs. The survey results of the students' attitudes toward e-learning showed that they do need it. Since e-learning could match well students studing habits. It could be a very effective and practical learning method. However, the support of e-learning is not enough to ensure effective incentives for effective learning students do need social interaction with their mentors and fellowship during their academic years. As a result, there is a real need for a well-established e-learning environment which teachers and students can rely on. I am strongly think that with the complement of instructors, mentors, e-learning will become more popular in the future in order to make the users feel comfortable and secure

This study shows that students at Obuda University would rather studing alone then in group but when they experience high levels of academic press and expectations they need social support and social interaction to maintain their focus and performance.

(I am agree that students need to be pressed hard to learn. But without supportive environments it will not lead to meaningful gains in academic achievement.)

Which means if the university wants to improve their student achievement/perfomance by raising expectations or creating high stakes for academic performance-Scientific Student Conference) they should not ignore the social support, interaction that necessary for students to be successful.

References

[1]   Aggarwal, D.: Role of e-Learning in A Developing Country Like India. Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi, India, 2009.

[2]   Lazányi, K.: A társas támogatás szerepe és jelentősége a felsőoktatásban a diákszervezeti tagság kapcsán . Vállalkozásfejlesztés a XXI. században , pp. 155-170, (2011).

[3]   Kim Munich.: Social Support for Online Learning: Perspectives of Nursing Students. International Journal of E-learning & Distance Education vol 29 (2), 2014

[4]   Richard & Haya: Examining student decision to adopt web 2.0 technologies: theory and empirical tests. . Journal of computing in higher education, 21(3), 183-198, 2009

[5]   Shumaker, S. A., & Brownell, A.: Toward a theory of social support: Closing conceptual gaps. . Journal of Social Issues, 40(4), pp.11-36, 1984

[6]   Sloman, M.: The e-learning revolution: From propositions to action, London: Chartered Institute of Personnel and Development, 2001

[7]   Tao, Y. H., Yeh, C. R., & Sun, S. I.: Improving training needs assessment processes via the Internet: system design and qualitative study. . Internet Research, 16 (4), pp. 427–49, (2006)

[8]   Valentina Arkorful & Nelly Abaidoo. (2014). The role of e-learning, the advantages and disadvantages of its adoption in Higher Education. International Journal of Education and Research, 397-410.

[9]   Young, J. R.: Rethinking the Role of the Professor in an Age of High-Tech Tools, The Chronicle of Higher Education, pp. 44 (6), 1997

[10]   Csiszárik-Kocsir, Á. – Medve, A. (2009): Beszédes számok – avagy a hazai közoktatás finanszírozási és hatékonysági jellemzői a nemzetközi eredmények tükrében, Humánpolitikai Szemle, 2009. 5. szám 45.-58. old.,

[11]   Lazányi, K. (2015): What is the Role of Higher Educational Institutions in Managing their Students' Competencies? Science Journal of Business and Management 3:(1-1) pp. 46-52.

[12]   Algahtani, A.: Evaluating the Effectiveness of the E-learning Experience in Some Universities in Saudi Arabia from Male Students' Perceptions, Durham University, 2011

[13]   Lazányi, K. (2012): A társas támogatás szerepe egy individualista társadalomban, A Virtuális Intézet Közép-Európa Kutatására Közleményei 4:(2) pp. 51-58.

[14]   Pató, Beáta Sz. G. (2015): The Logistical Approach of Public Education, Studia Universitatis Babes-Bolyai, Oeconomica 2015. Vol. 30 Iss. 2. pp.22-41.

[15]   Almosa, A. & Almubarak, A.: E-learning Foundations and Applications, Saudi Arabia, Riyadh, 2005

[16]   Apollo Weng; Cathy Weng; Chin-Chung Tsai: Social support as a neglected e-learning motivator affecting trainee's decisions of continuous intentions of usage, Australasian Journal of Educational Technology, pp. 177-192, 2015

[17]   Burdman, P.: Cyber U, Anaheim (California) Orange County Register, September 13, sec. 1, p. 9, 1998.

[18]   Fry, K. (2001). E-learning markets and providers: some issues and prospects. Education Training, 233-239.

[19]   Giddens, A.:Sociology. 4th ed, Cambridge: Cambridge: Polity, 2001

[20]   Hassan, M. S.: Critical success factors for e-learning acceptance, Elsevier Computers & Education 49, pp. 396–413, 2007

[21]   House, J. S.: Work stress and social support, . Reading, Mass: Addision-Wesley Pub. Co., 1981

Appendix 1.

		What is your opinion about E-learning (trainings, materials)				Total
		It is absolutely not necessary	Not necessary	Necessary	It is absolutely necessary	
Do not want to use E-learning system	Count	$0_{a, b}$	5_b	20_a	3_a	28
	% within Do not want to use E-learning system	0,0%	17,9%	71,4%	10,7%	100,0%
	Std. Residual	-,3	2,5	0,0	-1,3	
Do want to use E-learning system	Count	1_a	9_a	138_a	43_a	191
	% within Szereti_Nem_szereti	,5%	4,7%	72,3%	22,5%	100,0%
	Std. Residual	,2	-,8	,1	,1	
Total	Count	1	14	165	51	231
	% within Szereti_Nem_szereti	,4%	6,1%	71,4%	22,1%	100,0%