

E-LEARNING EDUCATION SYSTEM IN UNIVERSITIES WITH INSTRUCTORS' PERSPECTIVES AND A SURVEY IN TURKEY

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Abstract

E-learning is becoming more popular way of education system for the universities in our period with the high spread of internet based applications. There are researches related to e-learning which examine the benefits and barriers throughout the integration period and most of them emphasize on the students perspective. This research concentrates on instructors of the universities, who use them as a new education tool, with the aim of breaking the perceptive barriers and establishing the instructors' awareness for the benefits of e-learning education system. The factors that affect the successful e-learning adaptation from the instructors' side could be realized with the help of this research. The research method is based on quantitative analysis which generally searches information about the factors that affects the instructors throughout the e-learning education. This will provide considerable educational framework for universities' instructors.

Key Words: *E-learning , education system, university, distance education, instructors.*

JEL Classification: I2, O3

1. INTRODUCTION

In traditional education system, instructors contact with their students by face to face. In other words, in order to contact with students physical attendance is mandatory. If students are absent in class, they cannot have information about lessons, course materials, or presentations. With the rising of electronic communication tools, the way of life is becoming to change in various ways. The education system is one of the changing areas. E-learning is becoming more popular way of

education system for the universities in this period with the high spread of internet based applications. There are researches related to e-learning which examine the benefits and barriers throughout the integration period and most of them emphasize on the students perspective. At the same time, there are related suggestions about the methods of e-learning education systems.

One of two is emphasizing that it will take time to replace its place with classical education system. Since ratio of the lecturing in e-learning system is less than the classical education system, e-learning education system is still not the core element in the education system. E-learning seems to become complementary element in education. And this thought is recommending the hybrid system. According to this idea; e-learning and lecturing will be helpful, for understanding the topic well or reviewing the old information and knowledge and repeating the topics, and learning by themselves (Zhao, McConnell, & Jiang, 2009).

Replacement of classical education system with e-learning is another approach to this change. Throughout the integration period, the benefits for the aim of breaking the perceptive barriers and establishing the increase of e-learning usage ratio in education centers should be taken into account. Computer based training is one of the solutions for this replacement. Computer based training has some advantages over traditional lecture. Use of computer technology can significantly improve the efficiency and effectiveness of training. Along with user can participate in training actively by means of computer based learning (Williams & Zahed, 1996). Computer based training provides users some advantages. These are; immediate feedbacks and reinforcement, automated documents, controlling variables and objects and individualized self-paced instruction, computer graphics. Users' monotony of reading book or other reading materials decrease, and this situation results in enhanced interest in subjects (Williams & Zahed, 1996).

Computer based instruction can provide a conceptual change. According to Pedretti, Mayer-Smith, & Woodrow, 1998, computer technology using in class encourages users to use its resources and to think deeply (Pedretti, Mayer-Smith, Woodrow, Wiley, & Sons, 1998).

The next approach to the educational system is e-learning Physical attendance is not necessary in this system. In teacher centered education, time and place were not flexible (Wallhaus, 2000) whereas flexible in e-learning.

Feedback is one of the most important components in education. Users should have information about whether they are right or wrong in their educational activities. Bonham, Deardorff, and Beichner(2003) also think the same. . This feedback motivates the person for taking action for another activity (Bonham, Deardorff, & Beichner, 2003). However, sometimes teacher cannot give students immediate feedback in traditional education, because of the fact that classrooms can be crowded or instructors' ineffectiveness. On the other hand, in computer based learning, users can have immediate feedback. In accordance with Cole and Todd, 2003, immediate feedback helps users to see their answers' accuracy (Cole & Todd, 2003). For instance, feedback is given straight away after doing an activity in educational software. There is no limitation in multimedia and e-learning learning. Thus, users can explore everything which is related to topics. Also, users can discuss anything with their friends or instructor in multimedia environment (Muller, Bewes, Sharma, & Reimann, 2008).

With e-learning education systems, teachers can share course announcements such as; course notes, documents and syllabus. Students can reach this information or materials easily. This is

important in terms of users, because they can know what instructor expects from them (Waterhouse & Rogers, 2004).

One of features of computer based environment is that; users can control on variables in learning environment. In study of Lin, & Lehman, (1998) controlling on variables in a computer based environment is important, because user is an active learner in this environment. Users can explore the knowledge their selves by means of controlling on variables. Hence, when users control on variables and become an active member in this learning environment, this situation encourages students to explore their own learning process.

In a research, the students show negative attitudes across, especially in math and science because of many intangible concepts. However, by means of using e-learning in education, the students had the ability to transfer a problem from intangible to tangible (Cavas, 2000 However, by means of doing experiments in e-learning, students can observe the reason behind this situation.

Besides the benefits, the barriers are important during the integration period of e-learning. According to Yamamoto(2010) the barriers related with e-learning can generally be examined under four categories as macro barriers, personal barriers, organizational barriers and technological barriers. Also, the paper emphasizes that content designing is an important barrier with the organizational restrictions because of its' high-cost, and time consuming.

An important barrier of e-learning integration is "content providers instead of instructors or teachers". Content providing is an important barrier for e-learning integration success, because if the instructors examine that situation as a threat to lose her/his job than instructors will resist the change.

This research concentrates on instructors of the universities, who use them as a new education tool, with the aim of breaking the perceptive barriers and establishing the instructors' awareness for the benefits of e-learning education system. With the help of this research, we can understand the factors that affect the successful e-learning adaptation from the instructors' side.

2. METHOD

The research method is based on quantitative analysis which generally searches information about the factors that affects the instructors throughout the e-learning education system. During the empirical analysis, factors are categorized and measured according to their effectiveness. The information about the factors related to e-learning from the instructors' perspective will provide considerable educational framework for universities, instructors, students and also for information technology experts and other decision makers that manage the electronic environment for e-learning.

Data is collected from the instructors in Okan University. Answers to the questionnaire collected by face to face surveys. The sample size is 29 and there are 28 questions in the questionnaire. 29 samples present 300 academic staffs who are working for Okan University in Turkey. Questionnaire aims to collect information about the instructors' benefits, demographic variables of instructors' and instructors' choices for e-learning education system. The questions can be grouped in three as follows; instructors' benefits, demographic variables of instructors and instructors' preferences.

2.1. Instructors' Benefits of E-learning

In our study benefits of e-learning are detailed as;

- ✓ Lectures' visual content will be richer than the classical education system.
- ✓ Decrease in costs, because there is no need to use physical rooms and one instructor can consume less time relative to classic education system, also instructors can have more spare time.
- ✓ Students will get announcement in shorter time relays.
- ✓ Students can receive and send their homework more rapidly.
- ✓ Slow learners and quick learners' conflict can be solved.
- ✓ Time and place dependency will be solved.
- ✓ Students can communicate with each other with the help of chat rooms and e-mail groups through the e-learning portals.
- ✓ Preparing exams and assessments of the exams will be easier for the instructors.
- ✓ Instructors can track the students efforts related to the lectures and instructors can get more effective results on analyzing the weaknesses of lectures subjects.

2.2. Demographic Variables of Instructors

Age, gender, title, instructors'' are questioned

2.3. Instructors' Preferences for E-learning Education System

In this study bellowed preferences for e-learning education system were ordered as;

- ✓ The instructors' selection between theory and laboratory based lectures for joining e-learning education system.
- ✓ The instructors' preferences about the online exams.
- ✓ The easiness of e-learning education system.
- ✓ Willingness to prepare contents for the lectures in e-learning education system.
- ✓ The thoughts about the futures' education system, classical or distance education.

3. EMPIRICAL RESULTS

Empirical Results grouped in three bases as mentioned in the method part and these three groups evaluation are the results of questionnaire data which can be examined in Table A and Table B.

Table A covers the first 8 questions of the questionnaire and the answers of these questions are collected by two point scale; yes or no. Table B covers the questionnaire data that belongs the questions between 9-28 and five level likert scale is used which are; strongly disagree, disagree, neither agree nor disagree, agree, strongly agree.

3.1. Benefits of E-learning

Generally, instructors believe the benefits of the e-learning education system with; rich visual content, rich communication facilities, easier learning and teaching, getting rapid information through the system, getting more spare time, establishing equal opportunities for their students, having no time and place dependency. Also, they believe that homework receiving is much easier, online exams help to learn more effectively and lecture assessments test in e-learning education system help the instructors' performance evaluation.

3.2. Instructors' Preferences for E-learning Education System

Approximately, half of the instructors have used e-learning education system as an instructor and as a student. Most of them believe that e-learning education system takes the place of classical education system, but they believe that this will be in the long run. Generally, they do not believe in the success of e-learning education system. Besides, they do not want to create content for lectures and will to educate with e-learning education system. Instructors prefer observers during the exams and teach theory based lectures instead of application based lectures, Instructors want to get students' transcript information through the system.

At the same time, they believe that interactive education cannot be applicable with e-learning education system.

3.3. Demographic Variables of Instructors

62 percent of the instructors' gender who answer the questionnaire are male, 51,72 percent of instructors' academic field is science, instructors' ages are mainly range between 30 and 45 and their titles are assistant, professor, assistant professor and university lecturer while the instructors' titles are equally distributed.

Table A

1	% 58 Yes	Have you ever used the e-learning education system as an instructor?
2	% 58 Yes	Have you ever used the e-learning education system as a student?
3	% 22 Yes	Willing to learn with e-learning education system
4	% 41 Yes	Will e-learning education system take the place of classical education system?
5	% 15 Yes	Believing the success of e-learning education system
6	% 16 Yes	Willing to educate with e-learning education system
7	% 12 Yes	Will the ratio of e-learning usage increase in close time?
8	% 20 Yes	Willing to prepare contents of lectures for e-learning education system
Table A: Questionnaire data of first 8 questions (Two point scale is used; yes or no)		

Table B

9	3,24	Preferring theory based lectures in e-learning education system
10	2,24	Preferring application based lectures in e-learning education system
11	3,66	Preferring observers during the examinations
12	2,55	In classical education system, content creation is much more easier relative to e-learning education system
13	3,31	In e-learning system, lectures have richer visual content relative to classical education system
14	3,11	Communication facilities are richer in e-learning system relative to classical education system
15	2,55	Interactive education can be applicable with e-learning education system
16	3,03	Learning is easier in e-learning system related to classical education system
17	2,90	Teaching is easier in e-learning system related to classical education system
18	2,62	E-learning education system students' researching capabilities can develop more effectively
19	4,03	Students can get information more rapidly relative to classical education system
20	3,10	Instructors can get more spare time with relative to classical education system
21	3,38	Students can have equal opportunities during education with e-learning education system
22	4,00	There is no time and place dependency in e-learning education system
23	3,93	Instructors should get students' transcript information through e-learning education system
24	3,21	Online exams will help instructors
25	3,55	Instructors should track the students' e-learning education system log-in durations
26	3,72	Homework receiving is much more easier for instructors relative to classical education system
27	3,17	Online exams will help to learn more effectively in e-learning education system
28	3,41	Lecture assessments tests in e-learning education system will help the instructors' performance evaluation
Table B: Questionnaire data that belongs the questions between 9-28 (5 level likert scale is used; strongly disagree, disagree, neither agree nor disagree, agree, strongly agree)		

4. CONCLUSION

With the benefits of e-learning education system, growing student ratios and academic staff shortages in Turkey will lead the integration of e-learning education system instead of classical education systems. Related literature reviews and statistical findings support that there are varieties of barriers in front of the fast integration of new education system.

This research tries to describe the framework of instructors' preferences and thoughts related to new education system for accelerating the integration. The empirical findings support that instructors are aware of the benefits of e-learning education system.

But, the main problem behind instructors' is the lower motivation for integrating to new education system because of the content creation step. Besides, instructors still prefer face to face communication to establish interactive communications between students and the instructors.

In the close future, e-learning education systems will create their own work areas and “instructor role” will be replaced with the “content creator role”.

Instructors are still insisting their old teaching methods because of the easiness of old routines. Therefore this system will not be easy to implement in present.

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