

Perceptions of Preservice Teachers about Web Based Learning

Nurettin Şimşek, Ayfer Alper, and Özlem Çakır Balta

Abstract—In many different literatures mentioned that web based learning provides many advantages for students, instructors and learning systems. As Collins (2000) pointed out that the web based learning environment provides both teachers and students with numerous learning opportunities by allowing students to learn and develop at their own pace; enhancing writing and communication skills; developing higher-order problem-solving skills; and nurturing critical reflection. On the other hand, in their web based learning applications both students and instructors have some difficulties or problems that are opposed to the literature. The purpose of this study was to determine students' perceptions of the delivery system for web at the Ankara University. Most of the students had negative perceptions about their experiences in computer literacy course as a distance education. Although there is a blended learning, they still prefer communicate with instructors in the classroom.

Keywords—Web based learning, distance education, students' perceptions, blended/hybrid learning.

I. INTRODUCTION

THE improvement of educational technology and communication tools has created distance education. Distance education is described as instructional delivery in which learners and teachers are separated during the learning process by time and/or space (Motamedi, 2001). With the exponential growth in information and communication technology, many universities are using web-based distance learning to teaching and learning. One of the most appealing elements in web-based distance learning is the ability to teach/learn *anywhere, anyplace, anytime* (Cooper, 1999; Gubbins, Clay, and Perkins, 1999; Rose, 1999; Seymour, Durante, and Koohang, 1998). Apparently, this has made the web-based distance learning very attractive among students, particularly the adult learners (Thomson, 1988; Koohang, 2004).

Distance education, on the other hand, is quite difficult and many different conditions should be carried out. While some students prefer distance learning, others do not (Poirier, 2004; Simonson, 1997). One of the obstacles of web based learning

is communication or interaction with students to teacher and peers. Compared to the amount of discussion and research on interaction, discussions about interpersonal relationships in a distance education setting have been limited and scattered. The seemingly unique nature of the student-teacher relationship forged in a distance education setting, as well as its impact on student learning, has not been systematically studied in the field. This may be due to the inherently complicated nature of human relationships in general and a student-teacher relationship in particular (Shin, 2003). In web based instruction, interaction is not just selecting simple menu items or clicking icons on the computer screen. Instead, the interaction should involve complex activities by the learners, such as engaging and reflecting, annotating, questioning, answering, pacing, elaborating, discussing, inquiring, problem solving, constructing, analyzing, evaluating, and synthesizing (Liaw and Huang, 2000).

An increasing number of universities are incorporating web-based distance learning into the conventional classroom instruction. This type of instruction is known as the hybrid or blended instructional model. The hybrid instructional model is a combination of conventional face-to-face instruction and web-based distance learning. The hybrid instructional model is becoming more accepted among instructors and students. It provides the best features of both face-to-face instruction and distance learning. It encourages increased active independent learning and lessens class seat time (Young, 2002; Granham and Kaleta 2002).

At Ankara University Faculty of Educational Sciences, web based education has been carried out for computer literacy courses. Since instructor, computer laboratory and time schedule are not enough for about five hundred students in a semester, web based learning are planning for them. As in trial period, last semester we have applied ECDL program in web environment that includes windows and Microsoft office for computer literacy course. Since there have many discussions about interaction problems between student-students and student -instructor, blended learning was designed to eliminate them. At the class time all students come to computer laboratory and they follow their course in web site by the facilitating instructor.

Well designed as a web-based learning, ECDL courseware was accepted to application of this research. Pallof and Pratt (1999) shared that the instructor has four roles in the online class: technical, organizational, social, and intellectual. All four roles are intertwined with course design, as all roles focus on ensuring that learning occurs. Stewart and others (2004) mentioned that course design is a major component of any distance education initiative. Choosing web based

N. Şimşek, PhD, is with the Faculty of Educational Sciences, University of Ankara, and he is also head of Distance Education Center, Ankara, Turkey (phone:+90 312-2135120; fax:+90 312-363-6145; e-mail: simsek@ebuline.com.tr).

A. Alper, PhD, is with the Faculty of Educational Sciences, University of Ankara, Ankara, Turkey (phone:+90 312-363-3350-3210; fax: +90 312-363-6145; e-mail: ayferalper@yahoo.com).

Ö. Ç. Balta is with the Faculty of Educational Sciences, University of Ankara, Ankara, Turkey (phone: +90 312-363-3350-3210; fax: +90 312-363-6145; e-mail: Ozlem.Cakir.Balta@education.ankara.edu.tr).

technologies to deliver training should occur only after careful consideration of a number of factors. Powell (2000) listed these factors that include what is taught, where the teaching takes place, when the teaching takes place, and how the teaching supported. Number of learners, preferences of learners, characteristics of learners, content consistency and complexity, stability of content, media complexity, requirement of special equipment, technical infrastructure, teaching or learning time schedule and teaching supporters can be listed as some of these factors. These factors were considered before ECDL is decided to apply as a web based training at Ankara University.

In addition to Powell, Firdiyewek (1999) pointed out that basic profile of web based courseware in general would consist of three suites of tools: Administrator, instruction, and student use. ECDL offers all these three parts that can be set up by administrator. Administrator can add and remove the instructor and students from the system. Tools can be accessed through web-based interface. At the same way ECDL includes sound, images, animations and text files that cover whole instruction. Synchronous and asynchronous communication tools can be used for interaction with instructor and peers. For students there are authoring tools that can be application part of what students learn.

As Merith and Newton (2003), pointed out that e-learning offers potential benefits for tutors, learners and institutions, it raises fundamental questions about the learning process. In order to create effective web based learning environment, it should be known what are the perceptions of students and their roles as communicator. Whether or not students prefer the distance experience depends on if they find the experience has been an effective learning tool (Peak,T.,2004). As an effective tool, ECDL has been applied and students' perceptions has been analyzed to identify students' perceptions about quality in distance education. In order to discuss the reasons of the problems about distance education, researchers try to answer the following questions:

1. How many students prefer web based learning?
2. Do the whole students or some of them reluctant of this learning environment?
3. Why do students prefer to study with teachers instead of studying by them?
4. Are there any affect of individual differences on negative responses?
5. Which one of the reason such as design of materials, characteristics of students or usability of materials causes the students' in satisfaction?
6. Are the perception of students about materials influenced by pre-worked materials?
7. Which activities do the students like or dislike to the web based learning environments?

II. METHODOLOGY

Instrumentation:

A form for this study was developed based on faculty's experiences from distance education courses. Some items are yes/no questions, some are multiple choices and some are

open ended responses. Participants were asked to indicate their perceptions about ECDL software that includes many different parts to represent well designed software for web based learning. Some of the questions are as follows: "Do you prefer web based learning or traditional learning with the direction of instructor?"; "Do you prefer the same instructional methods for other courses?"; "Which way as reading, writing, listening, discussion ...etc. do you prefer for WBL?"; "Do the visuals effect your understanding?"; Do you prefer loudspeaker or headphone during listening the lecture?"; Do you have any difficulties during practices?"; "Is there any information where you are in the lecture?";

Sample:

The population for the study was all of the freshman students in Faculty of Educational Sciences during spring semester, 2007. The students are from different departments as; Computer education and instructional technology, Social Studies Education, Preschool Education, Primary School Education, Special Education, Psychological Guidance and Counseling. Totally 290 students participated for this study.

During the semester, faculty used the ECDL web-site in class time. The ECDL Foundation is the global governing body of the world's leading end-user computer skills certification program, the European Computer Driving Licenses (ECDL), which is known as the International Computer Driving Licenses (ICDL) outside Europe.

ECDL Training Software that is applied by Ankara University offers Training in Office 2000, XP and 2003 formats, and in Windows 2000 and XP formats; all fully approved by the ECDL Foundation. The courses are available as both an online course

ECDL Training Software includes high levels of interactivity with demos and practices; over 1000 "hands-on" interactive simulations bringing learning to life. It has user friendly content from the outset. Learning Management System allows administrators to track and record student progress.

The web based learning has been applied as a blended /hybrid distance learning. Since we had a chance to collect our students in class depending on schedule of faculty, we met with them around two hours for each section. Students can connect the web site at class time and share their difficulties with their peers and their tutor. Out site the class time, students can open their web site and interaction can be made by e-mail. End of the each subject, tutor summarize them and give some practice to reinforce their knowledge.

Data Analysis:

Basic descriptive statistics were computed for all items. There are open ended responses which are qualitative data that are provision of detailed and comprehensive data about the problem on hand (Yildirim and Simsek, 2003). The responses were content analyzed and grouped in empirically generated categories.

III. RESULTS

About 95,5% of students can connect with internet outside the class time (See Table I) and they can follow the whole course via internet. However 4,5% of students (n=13) can not reach the internet and they couldn't follow the whole courses through internet.

TABLE I
RECEIVING INTERNET CONNECTION OUT OF THE CLASS TIME

	Frequency	Percentages
Internet Cafe	113	40,8
At Home	63	22,7
Dormitory	25	9,0
Home and Int.Cafe	12	4,3
School and Int.Cafe	11	4,0
Home-School- Int.Cafe	11	4,0
School-Dorm.-Int.Cafe	10	3,6
Dormitory and Int.Cafe	9	3,2
Home-Dorm-Int.Cafe	8	2,9
Home-School- Int.Cafe- Dormitory	5	1,8
School	3	1,2
other	2	,7
Home and School	2	,7
Home-School-Dorm.	2	,7
	1	,4

N=277

Although whole of the students (91%) didn't take any courses before as a web based learning, most of the students (81%) are comfortable with the ECDL web site as a course design and the same ratio of the students agree that the buttons and other direction tools are understandable.

In addition, about 88% of the students found the understandable language of the web site and 89,3% of them also agree that graphs and visuals support to understand the subject.

One of the main negative responds during the training time is that the students don't like the sound or some don't prefer to listen from the web. The responds of survey demonstrate that many students (79%) are comfortable with the sound and around the same ratio of the students (73,1%) prefer headphone to loudspeaker. 72 students (n=290) don't like to listen the course with headphone.

After explanation of the subject, doing practice is more helpful of most of the students (83,8%). On the other hand, about 70,7 % of the students didn't have any difficulties during the practice. Others may be little amount (26,9%) but it should be considered that they had some difficulties during practice of computer usage.

Almost students (86,6 %) accepted that the course design is well-done and they had been informed where were you. At the same time, about the same percentage (86,9%) of students titles and subtitles of the subjects are clear enough to follow the course.

One of the questions in the form is that "Do you want to take any other course in the same way?" has been responded as "yes" from 30,7% and "no" from 67,6% of the students (See Table II).

TABLE II
REASONS OF THE STUDENTS' PREFERENCES OF WEB BASED LEARNING COURSES

Students prefer the WBL because:	Number of students
1. Reading the course materials in web environment is helpful of my understanding.	41
2. Visuals and animations are made understandable of the subject.	75
3. To understand the subject, I like to listen in web environment.	30
4. Detailed explanation of subject is made understandable of the subject.	28
5. I can review the subject whenever I want.	61
6. I like to study by myself	31

Students don't prefer the WBL because:	Number of students
1. I'm boring to read from web based courses.	161
2. I'm boring to follow the visuals and animations in WBL.	63
3. I don't prefer to listen in web based courses.	148
4. There are many details in presented subject.	71
5. I'm boring to sit down in front of computer.	89
6. I'm boring to listen with headphone.	73
7. I can't understand the efficiency of practices.	26
8. I don't like to study by myself	50

N=290

When asked to the students preferred web based or traditional learning, two-thirds (n=201) of the students expressed that they liked learning with instructor in a classroom. Typical reasons students gave for preferring traditional one:

- discussing with the teacher face to face,
- more facial movement, gesture and interactions with the instructor
- discussing with the instructor whenever I want
- listening from the instructor is better than the monotone sound
- asking to the instructor and get respond immediately
- being alone at web is boring
- little concentrating at web based learning
- instructor is one of the positive energy for me
- instructor is more lively than computer
- conversation with teacher but not at WBL.
- no retention after web based learning

One of the most of the emphasized respond is “I can understand the course with instructor in detail and its retention is higher”. Another one is “I can ask to the instructor whenever I want”. Next one is “I can not concentrate on the WBL; I can not discipline by myself, I should be more self-directed”.

“WBL is boring, it is more monotone and passive, there are too many details to read,” are another put too much stress on.

IV. CONCLUSION

As a conclusion of the all reflective findings and results we can categories the students perceptions about web based learning as follows: a) preferring learning with instructor instead of web b) asking their questions whenever they need c) more contents should be completed in a short time d) listening a monotone sound with a head phone is too boring e) listening from instructor but just repeating from web.

Shin (2003) pointed out that psychological distance is more important than physical distance. Being a matter of psychology, “distance” can be treated as a theoretical construct or a variable that can be manipulated by instructional design or a set of institutional arrangements (Moore, 1973, p. 665, 1991, p. 63). Depending on the way in which distance teaching is structured, students may feel different levels of distance from their teacher, tutor, or instructor. In order to minimize the distance either physical or psychological distance, blended learning was designed. But there are still interesting respond that they couldn’t ask their question either there is instructor at the class time or other times. The reason here may be that there are many topics that they should concentrate and follow, they may pass or delay to ask their questions.

As mentioned the same issue by Gifford (1998), our students indicated that self discipline and self motivation were necessary to complete this course. In addition lots of reading and writing is necessary. Students must be following written instructions; this may be difficult for verbal learner. On the other hand students found that internet class required more time than a regular in-person class. Hiltz (1990) also found that students likely to succeed in online courses tend to be self-disciplined, have average or higher verbal and quantitative skills, and easy access to the necessary equipment.

Although Web Based Learning has many advantages to increase the educated people, it should be considered as students’ desire and their self discipline. On the other hand, students should be ready for online learning. Otherwise no matter how well designed web environment and high qualified instructor.

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