

## Diffusion of Distance Education in North Cyprus

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### ABSTRACT

The purpose of the present paper is to explore how distance education has diffused in north Cyprus. In this paper, Rogers' diffusion theory (1995) was used to analyze the acceptance and implementation of distance education in institutions of higher learning in north Cyprus. The four main elements of the diffusion paradigm-the innovation, communication channels, time, and a social system-were used to analyze the North Cyprus distance education project. The results of this research indicate that the Rogers' four elements were useful in analyzing the innovation of distance education in north Cyprus.

**Keywords:** diffusion theory, North Cyprus distance education project.

### TECHNOLOGY AND DISTANCE EDUCATION

Technology represents an educational tool for both teachers and students. However, the role of technology in education is mostly controlled or directed by the teacher. Teachers can organize technology-related projects or assignments for the students. These technology-based assignments may represent independent or cooperative work. In the discipline of instructional design, technology plays various instructional roles. A tools approach assumes that student learners can flexibly apply general purpose software, such as word processing or spreadsheets, to various educational topics. This approach can be contrasted with the use of software developed specifically to teach a particular topic.

Educators worldwide are launching a revolution using technology in their classrooms and schools. One vital educational technology is distance education. Distance education is a multidimensional process involving education conducted over long distances and mediated by instructional technology. It includes programmed texts, TV programs, computer software, and entire courses of web-based instruction. Distance education is revolutionizing education. Distance education can enrich traditional face-to-face instruction and make it more individualized, valid, accessible, and economical. In north Cyprus, technological advances in the educational sector have been rapid, with the result that distributors of educational hardware and software are constantly coming up with new options for higher organizations, individuals, and families in the Turkish territory of north Cyprus. A relatively new practice for Turkish Cypriot educators is distance education.

### ATTRIBUTES OF DISTANCE EDUCATION

Higher educational institutions in north Cyprus have adopted the use of telecommunication technologies (such as the Internet) in course instruction, and the educational system has benefited greatly from these technologies (Isman, 1997). Internet is a search engine or

virtual library for scientist at universities to share ideas and data on scientific projects. Today, the Internet is available in schools, as well as in many students' homes in North Cyprus. Through the Internet, students and professors converse through a variety of forums, including e-mail, online discussion forums, bulletin boards, and web pages. With the developments in the Internet and the global network system, the universities immediately took the advantage of using World Wide Web to deliver instruction, regardless of the physical distance and time.

The effectiveness of an online instruction is mainly measured by how much interactive the process is, how much it satisfies the students' needs, and how it eliminates the communication barriers between the involved participants. There are number reasons to encourage distance educators to use the Internet for delivering the instruction. First, distance educators can create virtual classrooms into research laboratories. Second, the Web encourages some of the latest trends in learning. Students of all ages learn better when they are actively engaged in a process. Third, Internet activities can also heighten learner motivation. Fourth, the focus of distance educators for the twenty-first century will be collaboration, project-based team activities, and cooperative learning. Twenty-first century distance educators will create a student-centered and motivated based environment. Fifth, the world is getting smaller. The Internet has the ability to provide communication links for students, to get up-to-date research and to foster collaboration with peers in other countries. They will share their experience, cultures and bringing the real world into the distance education classroom. Finally, the idea of "learning how to learn" works well with the Internet for students. In this system, teachers are coaches for distance education students.

One of the most important initiatives in Turkish Cypriot is distance education courses and a two-year program, which uses Internet to deliver instruction to students at a distance. Students especially in two year program who live in different part of the world take courses and can earn undergraduate degrees by way of Internet. Distance education courses and programs have become more increasingly popular with people who want to study at home in their free time after work without the long evening commute to campus (Isman, 1997).

## **DISTANCE EDUCATION IN NORTH CYPRUS**

The history of distance education in north Cyprus began in 1990s. During those years, some students registered the Open Education Faculty was founded as a part of Anadolu University in Turkey in 1982. During 1995s, the higher education institute which is Eastern Mediterranean University (EMU) in north Cyprus decided to launch their own distance education system. EMU started offering online on campus distance education courses during the mid-1990s. There were a few students (approximately 100 students) registered in those courses. The number of students taking distance education courses at EMU increased steadily from 1995 to 2000 (reaching approximately 500 students) and increased rapidly between 2000 to 2004 -- reaching 2,500 students in North Cyprus, Turkey, Europe, and other countries.

## **METHODS AND DATA-COLLECTION**

For the present research, EMU served as a research site. Eastern Mediterranean University (EMU) is the only higher education institute applied distance education in North Cyprus that has implemented distance education. We randomly selected 100 EMU undergraduate students that were taking online distance education courses. This yielded 88 students who were in the on campus distance education courses and 12 students enrolled in the two years distance education program.

## **DIFFUSION OF TURKISH CYPRIOT DISTANCE EDUCATION IN HIGHER EDUCATION**

Diffusion is a process in which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1995). It is a special type of communication, in that the messages are concerned with new ideas, technologies, or practices (Rogers, 1995). Communication is a process in which participants create and share information with one another in order to reach a mutual understanding (Rogers, 1995). In this section, Rogers' (1995) four elements in the diffusion of innovations are used to analyze the Turkish Cypriot distance education in North Cyprus. These elements are identifiable in every diffusion research study, and every diffusion campaign or program (Rogers, 1995). These elements are:

- |    |                        |
|----|------------------------|
| 1. | The innovation         |
| 2. | Communication Channels |
| 3. | Time                   |
| 4. | A social system        |

An innovation is an idea, practice, or object that perceived as new by individual or other unit of adoption. It matters little, so far as human behavior is concerned, whether or not an idea is objectively new as measured by the lapse of time since its first use or discovery. The perceived newness of the idea for the individual determines his or her reaction to it. If the idea seems new to the individual, it is an innovation (Rogers, 1995). A communication channel is the means by which messages get from one individual to another (Rogers, 1995). The time dimension is involved in diffusion;

- in the innovation-decision process by which an individual passes from first knowledge of an innovation through its adoption or rejection,
- in the innovativeness of an individual or other unit of adoption—that is, the relative earliness/lateness with which an innovation is adopted—compared with other members of a system, and
- in an innovation's rate of adoption in a system, usually measured as the number of members of the system that adopt the innovation in a given time period (Rogers, 1995).

A social system is defined as a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal. The members or units of a social system may be individuals, informal groups, organizations, and/or subsystems (Rogers, 1995).

### **The Innovation of Distance Education**

Distance education is the means by which EMU is able to offer university-level education and teacher training for everyone. Funding new buildings is very expensive, as North Cyprus, is a developing country. On the other hand, there is a big student demand to attend this university. For this reason, EMU cannot accept and accommodate all students. In addition, opportunities for Turkish Cypriot people outside the country's borders to receive education in the English language are limited. For these reason, EMU established a distance education institute which gives the opportunity to a large number of students to receive a university diploma.

In North Cyprus, distance education is more convenient than attending traditional course because it allows people to work and go to school, either to support their families or

**maintain their position in a company. Of our sample of 100 students, some sixty five percent agreed with the following statement:**

**“We have to work and pay our school tuition because our family has a financial problem. Other wise, we could not attend the undergraduate program, so both we work and study here at the EMU”.**

**The other thirty five students agreed with the following statement:  
“We have to maintain our position in a company”.**

**Distance education is compatible with most Turkish norms and social values (Isman, 1997). People who work for private or government organizations enroll in the EMU distance education program to increase their salary and position. Twenty one respondents noted that they got higher position and salary at their company. Their interview pointed out that they had a positive experience with distance education program. More over, they felt that there are no opposite ideas inherent in the social systems which work against distance education. For this reason, people have adopted this innovation because distance education is compatible with their prior experiences, norm and values (Isman, 1997).**

**Furthermore, some of EMU distance education students taking a distance education course were observed in terms of technical aspect, instruction, membership-interaction, organization, and course management. The results of these observations state that although internet based distance education is technologically complex to implement, using it as a student is relatively simple. Students did not much training to use the Internet. During the lab observations, students could easily understand how it worked. Most students remarked that they had learned almost as much as traditional classroom instruction and enjoyed taking distance education courses except in respect to communication with their teacher and close friendships that can develop in classes. They mentioned that the difference was that distance education courses did not have interaction as much as traditional classroom. Therefore, the results of interviewing and observation brought out that about 85 percent of these students liked distance education course. If students like taking a distance education course, they will continue. If they do not like it, those can attend traditional courses (Isman, 1997). EMU has introduced distance education to its students with successful applications. Thus, this “try-ability” factor influenced EMU students to adopt the innovation because they saw its potential (Isman, 1997).**

### **Using Communication Channels for Diffusion of Distance Education**

**Communication channels, as Rogers (1995) suggests, are important factors in the diffusion of distance education as an educational model in North Cyprus. The communication channels include television, radio, articles in newspapers and magazines, papers delivered national and international conference and meetings, and worth-of-mouth communication (Isman, 1997). EMU has broadcast programs about distance education on its television and radio stations. These programs share advantages and disadvantages of distance education with students and assist EMU students make decision about adopting distance education. Beyond television and radio programs, some articles have been published by writers and educators in news papers and magazines. These articles are very successful in diffusing the new educational innovation. In North Cyprus, this approach is persuasive since many people read newspapers, magazines and articles everyday.**

**The EMU occasionally organized a conference on distance education in May 2003. This conference participants return to their organization with the new information and communicate with their friends, neighbors, and colleagues. During these human network interactions, new information about the educational innovation was shared, leading to its**

enhanced diffusion in these social systems (Isman, 1997). In North Cyprus, students meet each other to talk about their experiences at coffeehouses and in their homes. During these personal meetings, students distribute their experiences about distance education. Hence, human network communication is an effective way of further diffusing this innovation (Isman, 1997).

#### **Time for Diffusion of Distance Education**

After adopting distance education, EMU students make a decision on whether or not taking distance education course. Rogers (1995) explains that there are four factors in the decision making process. These are:

- |    |                |
|----|----------------|
| 1. | Knowledge      |
| 2. | Persuasion     |
| 3. | Decision       |
| 4. | Implementation |

In this case, EMU students first obtain information about distance education from communication channels. Then, after receiving the information, those students evaluate it to make a decision regarding taking distance education course. Third, in the future students will see implementation of the innovation. Finally, EMU students make decision whether taking distance education course or not. Those who are satisfied with distance education course always continue, and those who are not satisfied always discontinue distance education. During the interview sessions, a number of students stated:

**"We need a time to understand how distance education can help our education. At the end of the time we always make our decision whether continue taking distance education course or not. We always made decision to take distance education course because we saw benefits of distance education in our education life. We were always satisfied with distance education course. Few of our friends were not satisfied with distance education. Then they decided not to take distance education course."**

#### **Social System for Diffusion of Distance Education**

As Rogers' theory mentions, the social system is a part of the diffusion of innovations (Isman, 1997). There is a huge market for distance education in North Cyprus and Turkey. The primary change agents, or promoters, for distance education have been The Ministry of Education and EMU. During the diffusion process, these change agents must be aware that they should respect social values and community norms because of the key roles they play in the diffusion process. During the interview sessions, a number of students indicated that distance education is suitable for their social values and community norms. During the interview sessions, a number of students stated:

**"We were always satisfied with that distance education always respected our social values and our community norms. If we saw not respect our social values and community norm, we were not continue to take distance education course. We always pay attention our social values and community norms. These norms and values play a key role in our life"**

In addition, the administrators of EMU distance education institute stated that the primary opinion leaders for distance education have been the professors.

Opinion leaders include professionals who work for universities, the government, EMU, and The Ministry of Education (Isman, 1997). As members of the educational system, they can influence other members and provide people with information concerning distance education. EMU professors can convince their students to adopt distance education. According to interview sessions, however, EMU students taking distance education course were convinced by their friends who took distance education course before. EMU students will likely adopt distance education because such "peer" experts have social power in the education system (Isman, 1997). In North Cyprus, government agencies can decide to implement distance education, but individuals must make personal decision whether or not to use it.

### **The Limitations of EMU Distance Education System**

According to our respondents, and a number of observation sessions conducted during spring, 2004 at the EMU campus, there are two factors that can limit the quality of education in the EMU distance education.

The first limitation in EMU's distance education institute is situated in the teaching methods. Teaching method plays a key role to deliver instruction to students. A research study stated that there are individual learner differences in response to distance education and its various techniques, as there are to classroom instruction, to particular teaching style, even to particular teachers (Moore, 1989). Distance education teachers should implement different teaching models in terms of the characteristics of students. Those teachers should know that teaching in distance education is different from traditional classrooms. According to interviews results with a number of students, professors usually have used traditional teaching methods in distance education courses. Almost all of students stated that professors teaching distance education course should know how to teach efficiently and effectively in distance education courses. Web design is also a problem. These students also stated that distance education courses' page should be designed professionally and use different educational methods in the web page because the instruction of distance education course is delivered only through the Internet. The success of diffusion of knowledge in distance education in higher education depends on largely the effectiveness of the teacher, and that this in turn depends on the teacher teaching style and knowledge about the topic. EMU distance education institute should train their professors in distance education pedagogical proficiency. The other limitation of EMU distance education institute center around technological problems. As one of the EMU distance education student remarked:

"We have sometimes Internet problem. We think that EMU has internet connection problem. When we study our course, Internet is disconnected even on campus. Our university should solve this problem. Other wise, students will not adopt the distance education courses".

So, EMU distance education institute solve the technological problem to get more students in distance education institute.

### **CONCLUSION**

Diffusion is a process in which an innovation is communicated through certain channels over time among the members of a social system. It is a special type of communication, in that the messages are concerned with new ideas (Rogers, 1995). Communication is a process in which participants create and share information with one another in order to reach a mutual understanding (Rogers, 1995). The four main elements are the innovation, communication channels, time, and the social system. The elements are identifiable in every diffusion research study and every diffusion campaign or program (Rogers, 1995).

In this paper, Rogers's diffusion theory was used to analyze the acceptance and implementation of the innovation of distance education in higher education in North Cyprus. Distance education was slow in gaining hold but effectively diffused in North Cyprus over the course of the last four or five years. It is hoped that in the future the EMU will solve Internet connection problems and train their teachers more effectively in distance education pedagogical practices.

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