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Procedia Social and Behavioral Sciences 15 (2011) 3999–4004

Procedia
Social and Behavioral Sciences

General overview on distance education concept

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Abstract

In 21th Century, depending on the development of information and communication technology tool, restructuring studies have been also made on education as it is made on each sector. World states strike out the education policies in parallel with the development of communication technologies. Distance education concept has gained a different dimension by using Web 3.0 tools of internet instead of Web 1.0 and Web 2.0 tools. Educational institutions have created new opportunities thanks to development of the internet and increasing the frequency use of it, and they also provide e-learning environment to provide Web support in Distance Education. Distance Education is a field of education that focuses on the pedagogy, technology, and instructional system designs that aim to deliver education to students who are not physically "on site" in a traditional classroom or campus. Nowadays, researches on the use of computer networks are becoming increasingly common in distance education technique. In this article, we have studied the history, limits, and advantages of distance education, and also the applications of distance education in our country today and in future.

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Keywords: Distance learning, e-learning, web-aided education;

1. Introduction

1.1. Distance Education: Main definition

Developing computer technology has brought innovations. Increasing of computer use filed has provided many opportunities, and has made the computer takes place in education. In computer technology, the use of internet network with the aim of communicating with other people has provided opportunity to deliver education to people who are away (Varol, 2007; Tuncay, N., & Uzunboylu, H., 2010).

Distance education is an education system that teaching and learning actions have been performed via communication technologies and mailing services by the teachers and students being different environment (İşman, 2005). Alkan (1998) defines the distance education as "it is a teaching method provided through varied environment and teaching units that interaction and communication between the planners and practitioners of educational activities and students have been specifically prepared in conditions that traditional teaching and learning methods limit the application of classroom activities." Basic reasons of popularity of distance education in this era, and the adoption of developing information communication technologies to the distance education have been listed by (İşman, 2005) as;

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- Teachers and students are in different places.
 - The use of communication technologies.
 - The use of mailing services.
 - School attendance is not compulsory.
 - Special teaching methods.
 - One-way and two-way communication
 - Special programs, special tools and supplies.
- According to Gürol & Atıçlı, 2001. Distance education has 6 indispensable features;

1. Teachers and students are in different places.
2. Existing of students and institution relationship.
3. The use of environment and tools such as printed materials providing communication between students and institution.
4. Possibility of face to face education at certain times.
5. Preperation towards the realization of two-way communication between students and institution.
6. Combining working life with education.

Teaching processes are carried out in three-dimensional approaches in distance education method(Atasoy, 2004);

- a) Teaching with printed materials
- b) Teaching through publications
- c) Face to face teaching

Implementation of distance education methods are applied in two ways as synchronous and asynchronous (Burma, 2004).

Synchronous communication is a face to face communication that occurs at the same time but people do not have to be at the same place during that period. In the field of distance education, this communication type is based on sharing data and information by implementing two or more computers' connections with each other over a computer network. As an example, communication proceeds with written text, audio tools, video and other techniques.

In asynchronous applications, course content is presented to students as one way, and interaction is extremely limited. TV broadcast systems or materials such as books, CD ROMs, and video tapes are used in this application. (Jonassen, 2000).

2. History of Distance Education

Distance education first started with sending letters and has come up today. Course notes that sent to students through the post formed the base of distance education. Teaching with letter has provided education almost in every branch of science for cultural development and professional training [1].

The British Open University, starting with newspaper and established in 1960s in England, lead to distance education in the history takes place below:

- First distance education studies started with "Steno Lessons" in a newspaper in 1728.
- Composition courses with letter were given to women in Swedish University in 1833.
- Education with letter department was first opened in Chicago University in 1892.
- Hermands which is one of the leading institutions in the world in distance education established in Swedish in 1898. Language education was given in this institution.
- Postal elementary started in the US in 1906 .
- First radio station related to education was established in the US in 1919.
- 1920 ABD'de 176 radio stations were published with the purpose of education in the US in 1920.
- High school education with letter started in the US in 1923.
- Educational TV broadcast started in IOWA University in 1932-1937.
- Distance education was provided to students during the war years in France in 1930.
- "British Open University" was established in England in 1960.

3. Distance Education

Today, many universities around the world give distance education services via internet. Students registered for distance education programs continue their education without leaving their environment. Students can follow their programs without being has to go to university thanks to distance education. It forces the limits of today's conventional school institution and makes the education a virtual fact by removing it from international dimension (Aktay, 2002; Bravo, E., Enache, M., Fernandez, V., & Simo, P., 2010).

Developing technology and changing definitions (Eryol, 2009):

- Web-based Learning
- Online Learning
- E-Learning
- Computer Based Learning
- Distance Education / Distance Learning ?

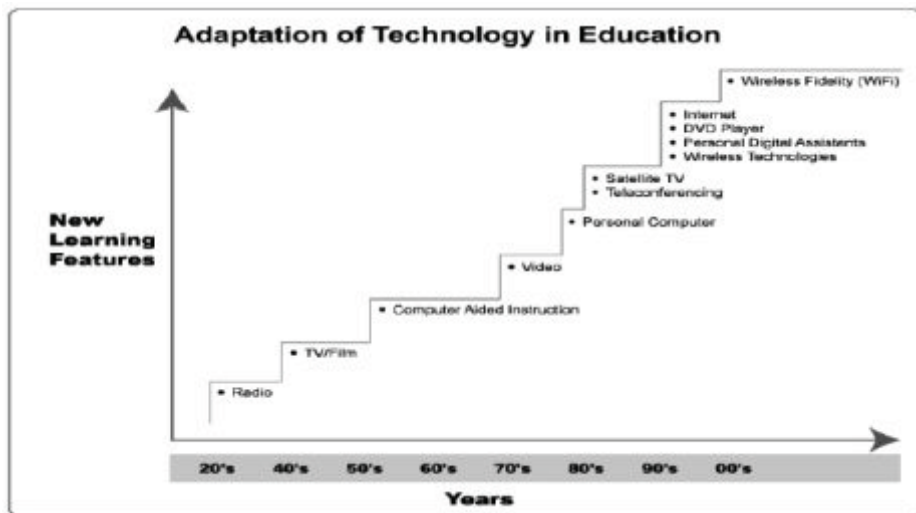


Figure1. Technology adaptation in education

As it is seen in figure 1'at the beginning of 1920s, the excitement of radio and television replaced with computer technologies in 2000s, and it can be said that computers and internet become slowly dominated in education sector as it is in all areas.

3.1 Web Based Learning

Web based learning is that educational content can be watched with the web browser. Resource downloading from the web is not in this context. It can be accesible on the internet, local network or CD/DVD. Especially it can be used in places having full multimedia data or limited network connection.

3.2 Online Learning

Online learning includes the educational materials which are avialible in computer such as online support, online documents, and online services. Office asistant and web page creation wizards are also included in online learning. It is not necessary to use the network.

3.3 Distance Education

Distance education is based on the principle of the communication among the students and their tutors from the specific distance. It is not necessary to use the network. It can be more effective when used with e-learning. Typical examples of distance education with e-learning are web-based live educational broadcasts, video conferences, email and discussion groups.

3.4 E- Learning

E-learning is the use of computer and internet technologies whenever and wherever students need education.

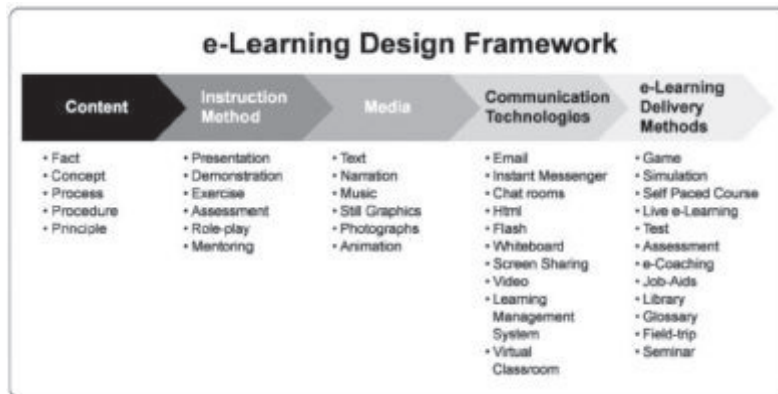


Figure2. Electronic Learning Design Framework

4. Distance Education in Our Country

First distance education application has been experienced in Turkish Republic of North Cyprus (TRNC) Campus of Open University. In TRNC, private universities have brought new dimensions on distance education applications by using Learning Management System in undergraduate and master courses. Results of the study done in the Ministry of Education show that an internationally recognized company is getting prepared to establish an institute to give distance education. In this sense, it is seen that distance education applications are becoming prevalent in TRNC. Attempts to establish distance education center at Near East University in these days, and applications of distance education method in master courses in some private universities in TRNC provide contributions to the education system of TRNC.

5. Advantages of Distance Education

The most important advantage of distance education is to make lifelong learning easy. Advantages of distance education have been stated as below (Kaya, 2002):

- Provides different education options
- Facilitates mass education
- Provides information from the first source
- Gives individuals responsibility for learning
- Provide individual and independent learning
- Provides a rich learning environment for students
- Reduces the cost of education,
- Provides a standard in education program
- Minimizes the inequality of opportunity

Comparison of traditional education with internet-based education system is given in table 1 (Hazmaçebi, 2002). Accordingly, internet-based education system is based on student-centred and constructivist approach. Students tend to be researcher and more cooperative.

Table 1. Comparison of Traditional Education and Internet-Based Education System

	Traditional Education	Internet Based Education
Classroom activities	Teacher-centered	Student-centered
Role of teacher	Dominant in teaching	Guides in teaching and learning
Role of student	Audience, passive in learning	Makes cooperation, active in learning
Learning method	Memorization	Relationship between concepts and new discoveries
Concept of knowledge	Accumulation of knowledge	Transformation of knowledge
Use of technology	Exercises and practices	Communication, sharing and access to information

6. Limitations of Distance Education

Besides its advantages, distance education has also some limitations. Limits of distance education are listed as below (Kaya, 2002; Yurdakul, 2005):

- Lack of individual assistance.
- Blocks socialization of individuals.
- Lack of immediate feedback.
- Lack of communication and interaction.
- Depends on access facilities and communication technologies.
- Not effective for all lessons.
- Has limitations in terms of face to face communication and interaction.
- Limitations in communication due to excess number of students.
- Although it is effective in cognitive acquisition, it is limited in developing of affectional and psychomotor behaviours.
- Difficulties in the realization of application studies.
- Not useful for students not having independent study habit.
- Cost can be high according to used technology.

7. Results

The model of this study named as Distance Education Concept is a literature survey. Our research states that distance education has gained a new dimension with development of information and communication technology. Web-based distance education has gained popularity, and this education system has been applied in everywhere due to becoming wide spreading of the internet. Every day, universities and even other educational institutions have put distance education concept in curriculum using both asynchronous (asynchronous) and synchronous (simultaneous) applications. Moreover, our daily lives cell phones have become part of the education system, and mobile learning concept has gained importance in people's minds. It is seen that world states have made important changes in educational policy and have brought professional education together with internet by revising individuals' education needs. Anmore distance education system has gained popularity in our country. Researchers and experts in this field have made studies on using distance education applications widely in primary, secondary and all the academic institutions. These studies present training design by taking limits and advantages of distance education system into consideration and provide significant benefit to information age. Especially, distance education is preferred by people who are disabled and volunteer for technology, and want to meet economic needs and people who could not have completed their education.

Today, the spread of internet has made distance education people's favourite within the scope of lifelong education. Researches and experts expect the spread of distance education in all education institutions by decreasing the limits of distance education to minimum level.

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