

## **A Brief Introduction of Distance Education**

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*Abstract: Distance education has seen fundamental changes in its long history, through three generations of delivering educational material around the world. The transformation in this field will not be brought to an end soon because of the revolutionized development of information and communication technology devices. This paper introduces the origins of distance education and gives an accurate definition of the term, and illustrates the technical medium in distance education.*

*Keywords: distance education, three generation, technical medium, learning models*

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### **1. INTRODUCTION**

Three generations of distance education have developed and shaped the learning and teaching method as it is today with changes in the media and technology field. The great opportunities to communicate and the different levels of distance education courses have driven students all over the world towards distance education. Thousands of students have studied at a distance with the help of one-way or two-way technologies. These students have different backgrounds; different reasons for choosing this way of learning and therefore they also have different social and academic need, such as, access, collaboration, support and need for flexibility. With all these individuals in mind, a variety of learning models have to be considered in order to get the best results for distance education students.

### **2. THE ORIGINS OF DISTANCE EDUCATION**

The origin of distance education goes a long way back and this method is nothing new in the field of education. Correspondence education is said to have begun in the late 1770s but some authors suggested that with the industrial revolution, distance education was conceivable for the first time (Keegan, 1993). In 1840, Isaac Pitman used the post to teach his students and later in 1856 correspondence education began in Germany but mainly in language teaching (Rowntree, 1992). In many countries distance education was used as an addition to the existing curriculum and some of the first students were teachers in rural areas, children in isolated villages and military workforces situated overseas. (Evans & Nation, 1993).

Distance education has developed to a great extent due to the media and technology. In the 1980s it was possible for the first time to teach at a distance using a face-to-face approach and that was because of the development in the electronic telecommunications (Keegan, 1993).

## **2.1 Three Generations of Distance Education**

Distance education is often divided into three generations. The first generation of distance education began with correspondence education, where students did not interact with the teachers and the technology involved was very simple and often just one type. Print-based material and postal services were used and people from all over the world could take part in courses situated in London, Dublin and America, to name a few. The most successful institution was the British Open University established in 1969. Its first course model concentrated on the use of one-way technologies but in the 1990s the courses changed towards the third generation technologies. This first Open University was a model for other institutions in the development of open and distance education courses, which have been further established around the world with great success throughout the years. This type of education was not seen as effective because many students failed to finish their courses and examinations score were often low (Bates, 1995). Correspondence education suffered from a lack of two-way communication and was seen as “a very individualized mode of learning that tended to isolate and insulate students from group learning processes”.

The second generation (multimedia distance education) was marked by the multimedia approach and two-way communication, but where a third person still mediated the study. The learning material was specially designed for distance education where print, broadcasting, cassettes, in some cases computers and face-to-face tuition were combined together throughout the courses. Distance education at the end of the 1980s was more or less print-based despite technological development and still needed more interaction in terms of two-way communications and quality learning (Bates, 1995; Keegan, 1990).

Third generation (computer-mediated) distance education, gave students the opportunity to interact more significantly with the teachers and other students by the use of two-way communications media. The Internet, the information highway of today and computer-mediated communication with its immense collaborative opportunities mark these changes and have provided distance learning with a new approach. In some people’s opinion it is an exceptional development in human communications. The possibilities for social learning and collaborative work with interactivity and public spaces for discussion gave the third generation more educative potential than the last generations could ever have accomplished. Moreover, with the third generation, new types of educational organizations developed.

### **3. DEFINITIONS**

When looking through the literature on distance education there appears to be much confusion about some key terms. For example, open university, open learning, distance education, distance learning, distance teaching, distance training, e-learning, virtual learning, virtual teaching, virtual university, computer-mediated education, computer-mediated training, computer-assisted instruction, tele-learning, asynchronous learning networks and Web-based instructional systems. All these terms will not be defined here, only distance learning, distance teaching and open learning. Distance learning and distance teaching are often used as the same term, but distance learning refers to the teacher and the challenges of his profession. Furthermore, many people misapprehend the two different concepts, open learning and distance education. All this misuse makes it difficult for researchers to analyse and study this field in a sufficient way. However, many have made an attempt to do so and therefore several definitions have been presented. Although the meaning of the terms are in some way different as may be seen from the definitions, both distance education and open learning have the same aim and that is to provide students who would otherwise not have the opportunity or are willing to study in another way to get the high quality education and training they need in as flexible way as these methods offer.

Perraton (2012) defined distance education as “an educational process in which an appreciable part of the teaching is done by a person who is distant in time and/or space.”

### **4. TECHNICAL MEDIUM IN DISTANCE EDUCATION**

#### **4.1 The Need for Technology in Distance Education**

Many claim that because the educational sources are at a distance from the learner, the technical medium is essential for communication and for the delivery of the material. In addition, because of its continual improvements, technology is becoming more powerful pedagogically than ever before. Conversely, Rowntree (1992) says that if the learners are not so dedicated to the learning and what the material has to offer, the medium makes no difference itself. He went on to say that it is also very important how the medium is used, advanced media is not necessarily better than basic media, such as, the post or telephone; it all depends on the situation at that time and the aims and the objectives of the course. However, it is a fact that it takes more time to deliver material by post instead of using computer technology.

The four most important media in distance education were: text, audio, television and computing. Later, in 1995, Bates added “direct human contact” (face-to-face) to his medium and revealed a list of the development of new technologies since 1980. Since 1995 there has been many changes in the computer technology and this will undoubtedly develop further and further in the future.

Despite the early age of the Internet, it plays an important role when designing a today's distance education course and educators have to decide how much online material they want to use according to their students technological background.

#### **4.2 Synchronous and Asynchronous Communications**

Computer-mediated communication (CMC) tools allow interaction at a distance and distributed learning; these are the synchronous and the asynchronous communications tools. Synchronous communication takes place in real time where students and/or teachers communicate at the same time with the help of, for example, chatrooms, audio/video conferencing, electronic whiteboards, instant messenger and shared mouse control in applications. Asynchronous communication, however, can be accessed at any time when participants are available, by using electronic mail, fax, bulletin boards and discussion forums. Synchronous learning benefits from the immediate feedback from other students or teachers, which gives the learner more support either as an individual or as a member of a group. However, learning in an asynchronous way gives the student more time to respond and reflect upon what has been discussed. The feedback is not as quick as in synchronous learning but the student controls the pace of his learning and that can sometimes be better for learners who, for example, suffer from poor typing skills or are disabled in some way.

### **5. LEARNING MODELS**

To create an effective learning environment in distance education we need to adapt the knowledge we have already about the traditional learning situation to this new approach and try to have as much diversity as possible. There are three models of learning, the constructivist model, the experiential learning model and the collaborative model.

#### **5.1 The constructivist model**

The main emphasis in constructivist model is that the learners construct their own knowledge based on the learning they have gained combined with their prior experience. It is a learner-centered method but the teacher plays an important role in facilitating the learner in constructing his knowledge.

#### **5.2 The collaborative learning model**

The saying "Two heads are better than one" is often true when we need to come up with different ideas. The collaborative learning model focuses on students working together by sharing their learning and interpretation by using negotiation and problem-solving skills in the process. In a traditional learning environment collaborative work is one common method used

by teachers, but in distance education it was impossible to ask students to work together because of the distance from each other. However, now there is more demand for collaborative work in distance education after the arrival of the Internet. Most students like the idea of collaborative work so they do not feel isolated. Advantages of collaborative learning encourage active and constructive learning and encourage deep processing of information, as well as evoking critical thinking, reasoning and goal-based learning.

### **5.3 The experiential learning model**

As the term indicates the experiential learning model encourages students to use their experience in making sense of learning by reflecting on the process. The theory focuses on how knowledge is created and the relationship between learning, work and life activities. The non-linear learning process is more important than the actual final product, such as exams, projects, essays and so on.

Comparing these three learning models I found that the experiential model is perhaps the most appropriate one in distance education and in many other educational settings.

## **6. CONCLUSION**

Distance education has seen fundamental changes in its long history, through three generations of delivering educational material around the world. The transformation in this field will not be brought to an end soon because of the revolutionized development of information and communication technology devices.

Many terms have been used for the method, which makes it confusing for researchers to analyse and evaluate distance courses. However, the great success of distance education throughout the world has given people opportunities to get, for example, a degree without worrying about geographical distance, mobility, time or pace of their study. People who live in rural areas or who are not able to study in a traditional classroom because of other reasons can benefit from computer-mediated communications (CMC), which decreases the danger of isolation and supports collaborative work among students.

It is one thing to design and deliver distance education courses but another to use it in a way that students will benefit the most. Course developers have to consider student's needs and how they can motivate them in the best possible way. By looking at learning models and examining how students learn, educators are one step further towards the effective use of distance education.

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