

Distance Learning: What are its Strengths and Pitfalls?

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Abstract:

In today's Information Age, teaching and learning are no longer confined within the four walls of a classroom or the school day. There are many technologies that can offer a great deal of flexibility in when, where, and how education is distributed. The current paper examines the strengths and pitfalls of online distance learning in the formal education system.

1. Introduction and Framework

Distance learning has become popular in higher education because of its flexibility and availability to learners and teachers at anytime from anywhere. Distance learning is not a new term and it has been around for well over one hundred years (Valentine, 2002). The University of London was the first University to offer distance learning degrees, establishing its external Programme in 1858 (Key Facts, University of London). The University of Chicago had in 1892 the first major correspondence program in the United States where teachers and students were learning in different places (Sharp, 2009).

One of the earlier forms of distance learning was done through correspondence courses started in Europe. This was the primary means of distance learning until instructional radio and television became more popular (Valentine, 2002). Then videotaped lectures took the next form of delivering distance learning (Moore & Lockee, 1998). In correspondence courses, also audiotapes and lessons sent through the mail were used to teach subjects (Teaster & Blieszner, 1999). According to Simonson, Smaldino, Albright and Zvacek, (2003), the used media for the delivery of distance learning can be historically summarized as follows:

- Correspondence study,

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- Prerecorded media,
- Two-way audio,
- Two-way audio with graphics,
- One-way live video,
- Two-way audio, one way video,
- Two-way audio/video,
- Desktop two-way audio/video.

The rapid growth of the Internet has opened dramatic new opportunities for collecting and disseminating information worldwide. Over the last two decades, there has been a considerable interest in using the Internet as a medium for delivering distance learning (Hayes & Harvel, 1999). The Internet and compressed video have taken distance learning in new directions, allowing distance learning to occur in real time (Valentine, 2002). In this paper the delivery of distance learning through the Internet or online distance learning will be considered.

There are many private and public, profit and non-profit institutions offering courses and degree programs through distance learning. For example, distance learning provides organizations and companies with opportunities to let employees update their skills while remaining at their work place or their home (Belanger & Jordan, 2000). Thus, distance learning can be offered in formal and non-formal learning frames. Merriam, Caffarella, and Baumgartner (2007) stated that "the term non-formal has been used most often to describe organized learning outside of the formal education system. These offerings tend to be short-term, voluntary, and have few if any prerequisites. However they typically have a curriculum and often a facilitator" (p.30). They also stated that "formal education is highly institutionalized, bureaucratic, curriculum driven, and formally recognized with grades, diplomas, or certificates" (p.29).

The purpose of this paper is to examine the strengths and pitfalls of online distance learning in the formal education system.

2. Definitions and Terms

In this section some definitions and terms that are related to the field of online distance learning will be given.

2.1 Definitions of Distance Learning

With the history of distance learning there have been many different definitions put forward in the modern literature.

Greenberg (1998) defines distance learning as “a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning” (p. 36).

Derek Rowntree (1992) defines distance learning in his book “*Exploring Open and Distance Learning*” as follows: “distance learning is learning while at a distance from one's teacher – usually with the help of pre-recorded, packaged learning materials. The learners are separated from their teachers in time and space but are still being guided by them” (p. 29).

Desmond Keegan (1995) says that distance education and training result from the technological separation of teacher and learner which frees the student from the necessity of traveling to “a fixed place, at a fixed time, to meet a fixed person, in order to be trained” (p. 7).

Teaster and Blieszner (1999) argued that “the term distance learning has been applied to many instructional methods: however, its primary distinction is that the teacher and the learner are separated in space and possibly time” (p. 741).

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All four definitions described here emphasize that the learner and the teacher are separated by space in distance learning, but not all of them express at the same time the fact that learner and teacher are not necessarily separated by time. Rowntree's definition of distance learning emphasizes that the learners are separated from their teachers in both time and space, which is not necessarily the case in all distance learning sessions given through the Internet today. For example, a distance learning lesson given with the help of a technology based on real time communication or video conferencing (like Interwise) enables the virtual real time contact between the teacher and learners from any place. This means that such a distance learning session can separate learners from their teachers as well as from each other in space but not necessarily in time.

Today's used technology for the delivery of distance learning is mostly based on the Internet. Since some of these technologies enable real time communication between the participants in a distance learning program it turns to be important to express that distance learning separates learners from each other and from their teacher in space but not necessarily in time. Valentine (2002) argued that the type of real time communication through live video is the fastest growing means of distance learning today. Therefore, the definition of Teaster and Blieszner (1999) seems to be the most appropriate definition for online distance learning since it is explicitly expresses the separation of place and/or time between the teacher and learners and among the learners themselves.

2.2 Distance Learning and Online Learning

With the explosion of new communication technologies, universities and colleges are increasingly using the Internet and the World Wide Web to accomplish their mission. Many universities have recognized the need for

lifelong learning and the potential of new communication technologies to respond to that need.

Online learning or online distance learning (also called web-based distance learning) involves the delivery of courses and learning components via the Internet and the creation of personal interactions among students and between students and teachers in the teaching and learning process. These courses and course components are delivered from an educational provider to a student. Distance learning can exist without online learning since it can be done through correspondence courses, and online learning is not necessarily distance learning since it can be a part or a complementary of a traditional face to face meeting (Bates & Bates, 2005).

In online learning there is usually a distinction between blended and fully online learning. The term blended (also called hybrid or mixed mode) online learning is used to designate a combination of face to face learning and online learning. On the other hand, in fully online learning students must have access to a computer and the Internet to do the course, and can take the course without having to attend any face to face classes. Therefore, fully online courses are distance courses because there are no face to face meetings in the course (Bates & Bates, 2005).

2.2.1 Technologies Used in the Delivery of Online Distance Learning

Distance learning uses various means and methods to transmit course material and education to students, who could be distributed throughout various parts of the world. For the purpose of this paper, we will focus only on computer mediated communication (CMC) tools. CMC tools can be used for the delivery of online courses and are also used in supporting the communication and interaction between teacher and students and among students themselves, which is a critical part in each online distance learning

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course. These CMC tools can be divided into the following two main categories: synchronous and asynchronous.

- **Synchronous tools:** synchronous tools require the simultaneous participation of all students and the teacher in order to communicate (Thurlow, Lengel & Tomic, 2004). The advantage of synchronous communication is that interaction is done in "real time". Thus, synchronous communication frees the participants to be "present" in a specific place but it does not free them from being online "present" at a specific time. This mode of communication requires a timetable to be organized. Chat tools and videoconferencing tools are examples that enable synchronous communication.
- **Asynchronous tools:** in contrast, asynchronous communication does not require the simultaneous participation of all students and teacher (Sabau, 2005). Students do not need to be gathered together in the same location at the same time. Rather, students may choose their own instructional time frame and gather learning materials according to their schedules. Asynchronous instruction is more flexible than synchronous instruction because it frees students to be "present" at a specific time. E-mail, discussion forums and wikis are examples for asynchronous tools.

In online distance learning, synchronous communication offers immediacy and it can increase social presence and the sense of a learning community as well as create vibrant and dynamic discussions (Johnson, 2006). The nature of asynchronous communication allows students more time to reflect on the topic or discussion, more opportunity for knowledge construction and critical thinking and thereby encourages a more in depth and constructive dialogue (Sabau, 2005; Johnson 2006; Girasoli & Hannafin, 2008). It also allows students the ability to work at their own pace (Sabau, 2005; Girasoli & Hannafin, 2008).

3. Background of the Subject

As previously mentioned, distance learning is not a new phenomena. But more and more people today find it a suitable way to master new skills and qualifications and this makes distance learning rapidly growing in the world today. The potential impact of distance learning on all education delivery systems has been greatly accentuated through new developments in information and communication technologies, which increasingly free learners from the constraints of space and/or time. At the same time distance learning have strengths and pitfalls in comparison with traditional learning. Exploring the pitfalls of distance learning is important in order to conduct research that may help in minimizing these pitfalls which in turn can make distance learning more appropriate for a larger number of people and more successful.

This section will focus on the strengths and pitfalls of distance leaning in comparison to traditional face to face learning. First the strengths and then the pitfalls of distance learning will be mentioned.

3.1 Strengths of Distance Learning

In this section the main strengths of distance learning will be discussed.

3.1.1 Flexibility

The obvious attractions of distance learning are the flexibility and the capacity to fit learning to lifestyle. The opportunity to study from anywhere at anytime makes distance learning more flexible than traditional learning. Students don't have to drive a short or a long distance to attend classes. It gives learners the greatest possible control over the time and place of learning (Barron, 1999). O'Lawrence (2005) argued that distance learning has become popular in higher institutions because of its flexibility and availability to learners and teachers at anytime, regardless of geographic location. Bates and Bates (2005) argued that students and teachers no longer

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need to be in the same time or space for effective learning to occur. They also argued that this leads to a greater flexibility and convenience for both students and teachers and probably more effective use of time on task, therefore enabling a more effective learning.

Flexibility is very important for students who are working and studying at the same time. Students can do the work at any time of the day or night, which makes it easy to fit around a full-time work schedule. It is also very important for students with limited mobility because of handicaps or obligations, such as child care or elderly care, or those living and working in remote areas where such education has never been available (Belanger & Jordan, 2000). Also employees who need to enhance their job skills, but don't have the time to attend a traditional face-to-face class will find distance learning as a great opportunity. People who are living in rural areas of a country will benefit from distance learning since it overcomes the disadvantages of geographic isolation by expanding course learning opportunities (Barker, 1987). Thus, distance learning has the capacity to reach many more people than traditional classroom instruction (Bingham, Davis & Moore, 2000) and thereby it can minimize social gaps.

Flexibility in online distance learning allows students to follow their own progression according to personal needs for combining studies with work, family and social life. This probably enables students to exercise in effective time management and determination but on the other hand it requires students to be self-regulated and motivated, since they are mostly studying alone without face to face interactions. According to Boyd (2004), the characteristics of students who enroll and successfully complete distance learning courses may be categorized as environmental, technical, and personal oriented. Environmental factors include timing and scheduling, as well as competing family or work responsibilities, while technical characteristics include computer and internet skills. Some of the most

common personal or psychological based characteristics associated with distance learning enrolment and successful completion are motivation, attribution, self-regulation, internal locus of control, preference for autonomy and self-efficacy (Wang, Peng, Huang, Hou, & Wang, 2008). Sylvia Charp (1994) notes that with greater autonomy in distance learning, student characteristics such as active listening and the ability to work independently in the absence of a live instructor become crucial for success. Thus, students who want to enroll in and successfully complete distance learning programs should be aware of the characteristics distance learners need to demonstrate.

3.1.2 Self-paced Learning

Most distance learning instructional technologies offer some form of self-paced learning. Some students need more time to master learning units while others can finish with the learning units relatively quickly. The reasons for that can vary, for instance the lack of time or lack of prior knowledge in the subject domain. However, in online distance learning students have the ability to go back and repeat the segment they are having trouble understanding it and thereby students can learn at their own pace and according to their level of understanding (O'Lawrence, 2005). In online learning students are able to navigate through course learning materials and activities at their own pace. For example, students can watch recorded video clips and hear audio clips as much as they need until they understand the content of the learning unit. Zhou (2003) mentioned that the online learning process can be self-paced, independent, collaborative and continuous. Self-paced learning is also beneficial for fast learners since they have the opportunity to learn materials which are part of the coming learning units.

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3.1.3 The Course Materials are in Variant Forms

Recent technology advances give online distance learning much enhanced multimedia capability, allowing video clips and other types of media to be embedded to facilitate learning (Wang, Xu, Chan, & Chen, 2002). Plain, text-based course materials are not enough anymore. The very recent increases in bandwidth made more expression ways possible: images, sound, animations, videos (Multimedia) are used with growing frequency (Okamoto, Cristea, & Kayama, 2000). Angulo, Schuster, Maseda, & Escallada, (1998) mentioned that online courses allow the use of different types of didactic material such as text, books, videos, sound information, etc., which increase the motivation of the learner.

Putting the materials of an online distance learning course in variant forms supported by multimedia and hypermedia elements may also help students understand the learned topics better. Barron (1999) suggested that well designed online learning courses offer learners a wide range of choices, thereby providing the optimal combinations of interaction and media. Zhou (2003) argued that using a variety of media in online courses provides a powerful tool for developing a rich and comprehensive understanding of the knowledge presented. "For example, when a biology teacher gives a class introducing horse's behavior, he might show an image to explain how the horse is like, play a clip of video to clarify the style it runs, or listen to a sound clip of horse whinnying" (Zhou, 2003 p. 230). Zhou (2003) argued that teaching this way would far exceed the practice using just plain text and oral explanation.

3.1.4 The Course Materials are always Accessible

Angulo et al. (1998) mentioned that one of the main advantages of online learning is that the course materials are always online and accessible through the information and communication networks. In a face to face meeting,

when a student does not attend a class he/she must find a way to get the learned material that was taught. In this case, students may not be able to understand all the material that was discussed in class, but in the online course students can find and follow all the material and discussions that are given in the discussion forum. Chin, Wong and Mark (2002) argued that the major disadvantage of the traditional face to face teaching and learning is that classes are delivered in a pre-set order, venue and time; a student cannot re-attend a class if he/she misses it.

3.1.5 Interactivity

Contrary to popular opinion, online distance learning can offer increased interactions among the participants. Students have the opportunity to interact and discuss the learned topics with the help of CMC tools through the whole week and not just when they meet in a face to face class. In particular, introverted students who are too shy to ask questions in class will often "open up" when provided the opportunity to interact via discussion forums or other CMC tools (Franklin, Yoakam, & Warren, 1996). Through the increased interactions, teachers can better meet individual student's needs (Franklin et al., 1996). While in traditional classroom the instructors often transfer the knowledge directly to the students and this does not reflect the students' understanding of knowledge effectively, the dynamic nature in the online courses supports better communication such as self-reflections and peer-to-peer review (Zhou, 2003). Bates and Bates (2005) argued that online distance learning increases quality through stronger interaction between teachers and students without losing the flexibility of distance delivery. Successful online distance learning programs should involve interactivity between teacher and students, between students and the learning environment, and among students themselves (Moore, 1989; Sherry, 1996).

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3.1.6 Gaining New Social Skills

Willis (1993) suggested that distance learning enables the contact with other students from different social, cultural, economic, and experiential backgrounds. Opperman (2001) mentioned that distance approaches are also very effective in group setting, since the use of distance learning technologies allows for a broader sharing of views and ideas. As a result, students can gain not only new knowledge but also new social skills, including the ability to communicate and collaborate with widely dispersed colleagues and peers whom they may never have seen (Sherry, 1996).

3.1.7 Reducing Costs

Online Distance learning allows institutions to educate a larger number of students with relatively fewer instructors, thus providing a cost-effective method of delivering higher education (Belanger & Jordan, 2000; O'Lawrence, 2005). This in turn may reduce the costs of education for students. On the other hand, increasing the number of students in online courses in order to make education cost-effective may impact the quality of instruction and learning negatively (Twigg, 2005), since the instructor may not have enough time to communicate with all the participants in the course as it is required. Twigg (2005) argued that very few people in higher education believe that it is possible to reduce cost and increase quality at the same time.

3.2 Pitfalls of Distance Learning

Despite the strengths and obvious advantages of distance learning, there are pitfalls and problems that need to be addressed. These pitfalls like: quality of instruction, student isolation and misuse of technology have an effect on the overall quality of distance learning as a product. In the following subsections each of these pitfalls will be described separately.

3.2.1 Quality of Instruction

One major issue of concern is the quality of instruction that is given through distance learning programs. Data collected in a 1999 study by Elliot Inman and Michael Kerwin in Valentine (2002) showed teachers had conflicting attitudes about teaching distance education. The report addresses that after teaching in a distance learning course, instructors rated the quality of the course as only equal or lower when compared to campus classes and were willing to teach another course. This may be caused in part by the belief that the technology itself will improve the quality of the instruction. Palloff and Pratt (1999) noted that "technology does not teach students; effective teachers do" (p. 4). They argued that the issue is not technology itself, but how it is used in the design and delivery of online distance courses. Valentine (2002) mentioned that too often teachers do not design their lessons to take advantage of the technology presented. This may impact the quality of the instruction and learning. Such revelations underline the fact that the technology must be used in a way that facilitates the needs and aims of the students and instructors, in order for such online distance learning programs to be successful. Research suggests that, the effectiveness of online distance learning is based on preparation, the instructor's understanding of the needs of the students, and an understanding of the target population (Omoriegic, 1997). Omoriegic (1997) argued that distance learning can be an effective instructional academic delivery system for adult learners if all the key players are involved in the process. O'Lawrence (2005) mentioned that many studies have attempted to find out whether distance education differs from traditional modes of instruction when referring to facilitating student success. The majority of these studies reported no significant differences between the distance and traditional delivery modes (O'Lawrence,2005).

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3.2.2 Lack of Face to Face Interaction

Most online learning courses do provide interactive elements, such as discussion forums and chat rooms. However, this is not the same as seeing classmates and teachers on a weekly basis (O'Lawrence, 2005), where teacher and students interact directly with each other. Ocker and Yaverbaum (1998) argued that one of the potential negative effects of online courses is a loss of social relationships and of the sense of community that is usually present on traditional courses. Among students, the lack of interaction with other students and teachers is a major concern. Ocker and Yaverbaum (1998) suggested that proximity and eye contact are important factors in education, but these physical indicators are limited in the distance learning environment. It has also been noted that, in distance learning environments teachers are unable to observe the emotions of students and thus cannot detect any anxiety in the students which limits the instructor's ability to respond to the student needs (Ocker & Yaverbaum, 1998).

Issues such as these seem to indicate that students' primary concerns about distance learning programs are focused on the ability of such programs to facilitate their learning and social needs. Due to the lack of face-to-face contact with teachers and peers, students may feel lonely and have less motivation to learn (O'Lawrence, 2005).

Ocker and Yaverbaum (1998) suggested that collaborative learning strategies, which require relatively small groups actively mentored by an instructor, are necessary in order for online courses to be as effective as traditional classroom courses.

3.2.3 Lack of Immediate Feedback

Since most online learning courses are asynchronous, there can be a lack of immediate feedback or responses from the teacher as it is in a face to face meeting. In asynchronous online courses, students may need to wait for

replies from the teacher, which makes the direct interaction difficult and the teaching and learning process less effective (Chin, Wong, & Mark, 2002). Galusha (1997) noted that one concern for the distance student is the perceived lack of feedback or contact with the teacher. Because there is not a weekly face to face contact with teachers, students may have trouble in self-evaluation (Galusha, 1997). Keegan (1986) believes that the separation of student and teacher removes a vital "link" of communication between these two parties and therefore this link must be restored. This missing interactivity can be mitigated through synchronous and asynchronous technological tools which enable the student to receive prompt feedback (Keegan, 1996).

3.2.4 Social Isolation

In distance learning much of the social interactions that would be present in traditional learning environments are taken away. Students participating in online distance courses are usually learning alone. Therefore, distance learners may have the feelings of alienation and isolation because they miss the social physical interaction that comes with attending a traditional classroom. The isolation that results from the distance learning process can complicate the learning process for adult students (Galusha, 1997). Galusha (1997) argued that one way to help solve this problem is through the use of tutors that communicate with students either electronically or by phone. However, this impersonality has been lessening with advances and use of communication technologies such as discussion forums, chats, and conferencing (O'Lawrence, 2005). "Because the student in isolation often has no one to practice with, to watch and learn from, his/her progress may be slower" (Egbert, 2001, p.4). Students of all kinds want to be part of a larger learning community and for many traditional students; this is an important part of their social lives (Galusha, 1997). Therefore, efforts should be made

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in online distance learning for the purpose of minimizing the feeling of isolation by the students and in order to support their social interaction.

3.2.5 Misuse of Technology

Besides the previously mentioned pitfalls, it is possible not to utilize the potential of technology and to misuse it. Some of these problems arise from a lack of training, some from the instructor's attitudes about using the technology and still others by software and hardware problems (Valentine, 2002). Instructors as well as students should be trained to work with the online learning environment in order to earn the proper skills to use it. Computer skills are much required in online distance learning. Since students will typically be offered with digital information, the use of this information can be a problem for some non-technical students (Galusha, 1997). Thus, students must be taught how to manage, not only their study time, but the materials presented as well (Galusha, 1997) and take a preparation course about online distance learning.

Here, the role of the technicians is important in supporting the participant. Olesinski et al. (1995) found in their study that technicians could indirectly influence the learning environment by “orientating participants to the technology, reducing the anxiety of the participants and by advising the instructor on instructional techniques” (p.3). Technical problems may create confusion and frustration for the instructor and students (O’Lawrence, 2005). Galusha (1997) argued that if distance learning is to be successful, technical barriers must be made a non-issue.

3.2.6 Problems with Equipment

In consequence of the last point, hardware and software malfunctions can be a great detriment to the effectiveness of distance learning (Valentine, 2002). When a problem occurs in a virtual class, for example if a compressed video presentation has problems, the entire class must be stopped until the problem

is resolved. On the other hand, if an overhead projector goes out during a face to face presentation, an alternative way of delivering that information can easily be found. Carter (2001) found, in a study of students taking courses by compressed video in the Mississippi Gulf Coast Community College program, that only 42% of the students agreed with the statement that the equipment and technology operated correctly. The failure of hardware and software components in the learning environment can be a very frustrating thing for all involved in distance learning (Valentine, 2002). This kind of failure is more difficult in synchronous meetings than it is in asynchronous meetings, since in synchronous sessions the delivery is in real time and technicians must resolve the problem immediately. Therefore, it is recommended to relay on an additional mode of delivery when using compressed video for delivering distance learning. Moore (1989) wrote that "the main weakness of many distance education programs is their commitment to only one type of medium" (P. 5).

3.2.7 Not all Courses are Suitable for Online Delivery

It seems to be that not all subjects are suitable for online delivery. Subjects that require less discussions and interactions are easier for online delivery than other subjects that need more interactions (Frank, 2004). On the same time, there are courses that require from the learners to make experiments in the laboratory with different instruments which are not available anywhere outside of the University. For these cases also simulation programs may not be helpful and therefore face to face meetings are necessary to accomplish these tasks.

4. Discussion

The emergence of the Internet and the evolving new technologies have made it easier for distance learning to become popular. According to Mehrotra, Hollister, and McGahey (2001), "distance learning, or distance education, is

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not a future possibility for which higher education must prepare, it is a current reality creating opportunities and challenges for educational institutions; a reality offering students expanded choices in where, when, how, and from whom they learn; a reality making education accessible to ever larger numbers of persons” (p. ix).

As previously mentioned in the background section, distance learning has strength and pitfalls. The biggest benefit of online distance learning is flexibility, which enables students to learn from anywhere, at anytime, in a convenience way and on their own pace (O’Lawrence, 2005). This advantage of distance learning made it possible for a large number of people to participate in educational programs (Bingham, Davis & Moore, 2000). Since many distance learning students have jobs and families they have the opportunity to coordinate between the different areas of their lives and their study.

On the same time, distance learning requires the student to have some specific characteristics like self-regulation and self-efficacy as well as to be motivated and able to work independently (Wang et al., 2008) in order to successfully complete distance learning programs. Such characteristics are important in every day's life and therefore distance learners have the possibility to reinforce these characteristics and benefit from taking distance learning programs. Students without such characteristics may find distance learning not appropriate for them. Therefore, it is recommended that students learn about the nature of distance learning before they decide to enroll in a distance learning program. In addition, distance learners can gain not only new knowledge but also new social skills, like the ability to communicate and collaborate with other peers (Sherry, 1996) from different areas and maybe with different social and cultural backgrounds (Willis, 1993).

In distance learning, students usually don’t have face to face contact with each others and with their teachers. The motivational factors arising from the

traditional classroom meetings with the teacher and other students are absent. Also, the lack of immediate feedback and support of the teacher is another concern for the distance learner (Galusha, 1997). As a result, students may feel isolated and less motivated to learn (O'Lawrence, 2005) and this is the major pitfall of distance learning.

In order to help solve the problem of students isolation and let students feel more as a part of a learning community, distance teachers are required to use different CMC tools such as e-mail, discussion forum, chat, and video conferencing properly for increasing the interaction between the participants in the online distance learning environment. Also, collaborative learning activities are important in making online learning more effective (Ocker & Yaverbaum, 1998) and have the potential for increased student interaction, debate and reflection (MacKnight, 2000).

Bates and Bates (2005) and Zhou (2003) argued that online distance learning can offer increased communication and interaction between teachers and students and among the students themselves. However, some students will continue to feel lonely without face to face contact with other students and teachers, no matter how much they may communicate with others by CMC tools. Therefore, students who are uncomfortable with online communication may find themselves equally uncomfortable with their distance learning course (O'Lawrence, 2005). O'Lawrence (2005) added that students who are uncomfortable with their reading and writing skills may also find distance learning not appropriate for them, since online distance learning courses in particular rely more on reading and discussion.

In online distance learning interaction between teachers and students and among the students themselves is important in promoting online learning. Moore (1989) distinguished between the following three most common types of interactions that support learning in distance education:

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- Learner-content interaction, the ability of learners to interact with the content or the subject of study that can be displayed in multiple formats;
- Learner-instructor interaction, the ability of learners to communicate with and receive feedback from their instructors;
- Learner-learner interaction, the ability of learners to communicate with each other around content to create an active learning community.

In online courses, none of the three kinds of interaction function independently and therefore, it is important to plan for all three kinds of interaction (Moore, 1989; Swan, 2002), in order to minimize the pitfalls of distance learning and make online distance learning and teaching more successful.

In order to set up a supportive learning environment for online distance learners, the instructor needs to give well-designed course materials and strong academic and tutorial support. Besides the instructor, also the librarian plays an important role in supporting online learners. For the librarians online distance learning has posed new challenges. Online learners and traditional learners now have access to a universe of digital information through the Internet. As access to online courses grows, an increasing number of online learners are dispersed around the globe, often in parts of the world where physical access to the collections of a large academic and research libraries is impossible (Johnson, Trabelsi & Tin, 2004). These learners are largely dependent on the electronic services and resources that the library can offer. Therefore, libraries today are required to redefine their services, collaborate with their users and approach their tasks creatively (Johnson et al., 2004) in order to meet the challenges of online distributed learners.

5. Conclusion

Distance learning is more visible today than ever before because of the way the Internet has become embedded in our life. Distance learning has strengths that can benefit many people. But, there are also some pitfalls that people need to take into consideration before deciding to enroll into a distance learning program.

The continuous development in information and communication technologies and continuous research in the field of distance learning and teaching will minimize the disadvantages of distance learning and will bring new strategies and instructional tools and models that will promote this kind of education. Research on topics such as: what types of technology works best with what type of learning styles, which theories best explain quality of distance education, and what instruction methods help students learn regardless of location, will help answer some of the questions surrounding distance education.

We think that distance learning will continue to grow, but it will not entirely replace the traditional face to face learning.

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ملخص:

في عصر التطور المستمر في مجال تكنولوجيا المعلومات والاتصالات لم تعد تنحصر عملية التعليم والتعلم ضمن جدران الصف أو حتى ضمن اليوم الدراسي العادي. النماذج العديدة لتكنولوجيا المعلومات والاتصالات ضمن هذا المجال تعطي مرونة في تحديد وقت، مكان وطريقة التعليم والتعلم. يفحص هذا المقال نقاط القوة ونقاط الضعف للتعلم عن بعد في نظام التربية والتعليم الرسمي.

تقديم:

بعيداً عن التفتتات الحياتية المتمسكة بتخوم تكنولوجيا المعلومات والاتصالات، الهوراها واللميداه اينم يوتر تخوميم بتون اربعت الكירות شل الكيتاه او شل اليوم الليمودي. كيمومت سكونولوجيات رבות الماפשרوت لميشوت لگبى زمون، ميکوم ودركي الهوراها واللميداه. الماممر النوكحي بونون ات نكودوت الخوق ووات نكودوت الخولشه شل اللميداه مروحون بمعركت الخيونون الفورمائلت.

