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## **Research Paper**

# eLearning as a Means of Improving Education in Libya and the Difficulties It Faces

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#### Abstract

eLearning is one of the types of contemporary education, which aims at modern educational techniques, which depend on communications and information technology, to improve the educational process and achieve its goals and future goals, so this study came to highlight the identification of eLearning in terms of its concept, goals, benefits and the most important techniques used in it The challenges facing eLearning in Libya and the difficulty of switching from the traditional method of education to eLearning. Most educational institutions seek to implement this type of education, but there are many obstacles to its application.

**Keywords:** eLearning, types of eLearning, the importance of eLearning, eLearning techniques, benefits of eLearning.

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#### I. Introduction

eLearning is witnessing a growing interest in Libya, at the level of education, to benefit from its data, and exploit it in the best possible way. eLearning opens new horizons for education and the dissemination of knowledge with unprecedented efficiency and effectiveness(Alkhalaf et al., 2012). eLearning in Libya suffers from several problems, as it is still the same as it was, which necessitates thinking about finding alternatives to modernize traditional education. In light of the developments that the world is witnessing today, we must ask ourselves where we stand during these scientific and industrial revolutions.

The field of education in Libya still adopts traditional teaching methods that do not correspond to modern life and the thinking of the student and teacher in the era of technology and development. Also, traditional education at present did not add new to the educational content for generations because it alone cannot keep pace with modern thought. Therefore, traditional education needs a quantitative and qualitative leap for students and constantly searches for the best ways and means to provide an interactive learning environment to attract students' interest and urge them to exchange opinions and experiences. Information technology represented in the computer and the Internet and the various media attached to them are among the most successful means to provide this rich educational environment. Therefore, the researchers found that the tendency to apply educational mechanisms that support traditional education, such as eLearning, can improve, support and build a distinguished generation is one of the most important challenges that we must work on at this time(Salloum and Shaalan, 2019).

## Research Problem

Given the importance of eLearning and its inclusion in the educational process, this paper came to identify eLearning and the difficulties facing its application in Libya.

# **Search Objective**

It is to put forward the idea of eLearning as a basic solution to develop the educational level in educational institutions and raise them to the highest levels to keep pace with the tremendous technological development and work to build a successful and effective society. And work to identify the obstacles to eLearning in general

in Libya and to increase the community's awareness of the importance of this education as a contemporary technological challenge.

### What is eLearning?

eLearning is the education in which Internet technologies are used for communications and information, and it includes online education, web education, computerized education, and Internet education. ELearning in that it allows us to use the Internet and its various applications, computer networks and other electronic technologies for use in the management and measurement of education, and the comprehensive concept of eLearning as any use of web technology and the Internet to create learning(Noesgaard and Ørngreen, 2015). After, education using the Internet, it can be defined eLearning as the use of learning systems and content management programs using Internet technology, according to specific criteria for learning. It is an educational system that uses information technologies and computer networks to support and expand the educational process through several means, including computers, the World Wide Web.

## Types of eLearning

eLearningis a modern technology that activates education, increases its level of performance and improves its outputs. eLearning has two types:

#### **Direct or simultaneous eLearning**

In which the teacher or the learner meets and is present at the same time and communicates directly to communicate between them, but this presence does not have to be physical, such as instant conversation, text, or lessons through the classroom(Noesgaard and Ørngreen, 2015).

#### **Indirect or asynchronous eLearning**

It is not necessary for the teacher or the learner to be present at the same time or the same place where the learner receives intensive lessons or lessons according to a planned study program. Teaching without simultaneous contact with the teacher, in which he selects times and places that suit his circumstances(HUSAM et al., 2021).

## The importance of eLearning

eLearning is one of the most important modern methods of education, as it helps in solving the problem of the knowledge explosion, the increasing demand for education, expanding opportunities for admission to education, being able to train, educating and rehabilitating workers without leaving their jobs, and educating housewives, which contributes to raising the percentage of learners, and eliminating on illiteracy. eLearning has the wide ability to access both resources and individuals, as many educational opportunities have become available to individuals (Rhema et al., 2013).

## **eLearning Objectives**

- 1. eLearning aims to support the educational process with interactive technology in the best ways that help in facing many challenges faced by the traditional system, such as overcrowding of classrooms, lack of capabilities and places, inability to provide an atmosphere conducive to creativity, and the inability to take into account individual differences. among the educated(Elkaseh et al., 2015).
- 2. The possibility of compensating for the shortage of academic and training cadres in some educational sectors through virtual classes.
- 3. Helping to spread technology in society and giving a broader concept of continuing education.
- 4. Providing support services in the educational process, such as early registration, classroom management, building study schedules, testing and evaluation systems, and guiding the learner through internet portals(HUSAM et al., 2021).
- 5. Preparing a generation of teachers and learners capable of dealing with technology and the skills of the times and the tremendous developments the world is witnessing.
- 6. Providing an interactive environment, technical and multiple sources that serve the educational process in all its aspects.
- 7. Developing the role of the teacher in the educational process to keep pace with the continuous scientific and technological developments(Alkhalaf et al., 2012).
- 8. Supporting the process of interaction between learners, teachers and assistants through the exchange of experiences.

There are a set of requirements and needs imposed on us by the current era, which make eLearning an inevitable and irreplaceable necessity. These needs include the need for continuing education, the need for flexible education, and the need for communication and openness to others. In addition to the current trend to make education unrelated to space and time, life-long learning, need-based learning, self-paced learning, and discussion-enabled learning elearning provides an interactive learning environment, allows the learner to study at the time and place he prefers, allows direct and simultaneous interviews and discussions via the Internet, and

provides the latest knowledge that meets the needs of learners, in addition to simulation programs, animations, interactive exercises and practical applications (Essadi, 2021).

## **Benefits of eLearning:**

There is no doubt that the justifications for this type of education are difficult to enumerate, but we can say that among the most important advantages and benefits of eLearning are the following(Ramadan et al., 2019; Salloum and Shaalan, 2019; Kenan et al., 2011):

- 1. Increasing the possibility of communication between students among themselves, and between students and the professor.
- 2. Contribute to the different points of view of the students.
- 3. A sense of equality.
- 4. Ease of access to the teacher.
- 5. The possibility of modifying the teaching method.
- 6. Adequacy of different teaching methods.
- 7. Availability of curricula throughout the day and on all days of the week.
- 8. Not relying on actual attendance.
- 9. Ease and multiplicity of methods for assessing student development.
- 10. Maximum use of time (time management).
- 11. Reducing the administrative burden for the teacher.
- 12. Reducing the workload.

## **eLearning Technologies**

There are continuous developments in the technological means that can be used in the educational process, which fall under three main technologies:

Audio-based technology: is divided into two types, the first is interactive, such as audio conferencing and short-wave radio, and the second is static audio tools such as audio and videotapes.

Visual technology (video): The use of video in education varies and is considered one of the most important means of direct and indirect interaction, and includes static forms such as slides, and animated forms such as films and videotapes, in addition to forms produced in real-time that combine with audio-video conferences used in the direction of One or two way with audio accompaniment(Kim, 2006).

Computer and its networks: It is the most important basic element in the eLearning process, as it is used in the learning process(Ramadan et al., 2019).

# eLearning and the Challenges Facing its Application in Libya

In general, it can be said that many challenges may be faced in limiting the spread of eLearning and benefiting from it in the field of education in particular and the shift from traditional education to eLearning in Libya, and they can be identified in four categories (Abbasi et al., 2020; Hoerunnisa et al., 2019; Somayeh et al., 2016):

## From the educated side

- 1. The difficulty of switching from the traditional method of education to a modern method of learning, and students' resistance to this new learning style and their failure to interact with it.
- 2. Difficulty obtaining computers for some students.
- 3. The language, as only those who are proficient in the English language, can benefit from many websites.
- 4. Sitting the learner in front of the computer for a long time may affect his health and nervousness.
- 5. The computer does not provide direct opportunities for learning manual skills or for social interaction between colleagues during learning.

#### On the teacher's side

- 1. Difficulty in dealing with learners or trainers who are not cooperative and trained in self-learning.
- 2. It is difficult to ascertain the student's ability to use the computer.
- 3. The lack of computer-trained teachers, in addition to the negative attitude of some faculty members against eLearning.
- 4. The continuous need to train and support learners and teachers on how to learn and teach using the Internet.
- 5. Some teachers, amid interest in eLearning, may feel frustrated because they believe that it is not important and that it has become worthless.

# In physical terms

- 1. The material cost of providing eLearning requirements.
- 2. The continuous development in computer technologies and programs may represent another burden in following up on these developments and benefiting from all that is new.

3. Lack of appropriate high-level computer programs because of the great effort they need to design. *Technically* 

- 1. The extent to which the beneficiary student's personality is verified, especially when applying the various tests and assessment methods.
- 2. A sudden malfunction occurs in the network or computers, which leads to the interruption of the service during searching, browsing or sending messages, which may cause the teacher, learner, or researcher to lose a lot of the data he wrote or collected.
- 3. The rapid development of international standards requires many modifications and updates in electronic courses.
- 4. The need to publish electronic courses at a high level of quality, as competition is high.

# In terms of society

- 1. Lack of awareness of community members about this type of education and negative attitudes towards it.
- 2. Lack of specialized cadres in the educational computer field in the Ministry of Education.

## Obstacles to applying eLearning in Libya

The researchers stress the importance of eLearning and motivating and training workers to use modern technology, given the ordeal the world is going through in these difficult times in the face of the Corona pandemic, and it was a strong obstacle to completing traditional education. these times. The most prominent obstacles that prevent the application of eLearning in our beloved country are the following(Somayeh et al., 2016;Bezhovski and Poorani, 2016;Kenan et al., 2011):

- 1. Obstacles related to the teacher: such as his lack of eLearning mechanisms, the large number of burdens required of him, and the lack of incentives.
- 2. Obstacles related to the curriculum: such as the density of courses, the incompatibility of the curriculum with the rapid development of programs.
- 3. Technical obstacles: such as the lack of readiness of the information infrastructure, the lack of connections to the high-speed network.
- 4. Administrative obstacles: such as the number of students in one class, the lack of computers.
- 5. Organizational obstacles: such as unavailability of the right place, shortage of human cadres.
- 6. The high material cost of this type of education.
- 7. Continuous and long-term power outages are an obstacle to the application of eLearning in Libya.

# Factors That May Cause the use of the eLearningSystem to Fail

- 1. Lack of experts in the management of eLearning.
- 2. Weak legislative environment and approved standards for eLearning in the Ministry of Education(Meyer, 2014).
- 3. The difficulty of changing the idea of shifting from the traditional education method to the eLearning method(Bezhovski and Poorani, 2016).
- 4. The high cost of designing and producing educational software.
- 5. The traditional view of eLearning ranks it in a lower position than formal education.
- 6. Weak infrastructure.
- 7. The spread of technical illiteracy in society: to eradicate it requires an intense effort to train and rehabilitate professors and students in particular in preparation for this experiment.
- 8. The link of eLearning with other technical factors such as the efficiency of communication networks, the availability of hardware and software, and the ability to produce content well(Conkova, 2013).
- 9. eLearning also requires students to have a computer connected to the Internet and a good experience in the use of information and communication technology. And this was what prevented the application of exams online (online) this semester as a result of the Corona pandemic crisis in Libyan universities, due to the weak capabilities of some students(Samir Abou El-Seoud et al., 2014).

### II. Conclusion

eLearning does not mean canceling the role of the teacher, but rather his role becomes more important and more difficult. He is a highly qualified creative person who manages the educational process ably and works to achieve the aspirations of progress and technology. In the light of eLearning, the role of the teacher will change from a tutor of information to a guide and facilitator of the educational process, where the students search for information and reach the results themselves. The role of the teacher is to guide the learner through the dialogue that takes place between them during the education process. It is not possible to switch from traditional education to eLearning except in the light of an interactive technology that takes into account that the

student is the center of the educational process, supported by the professor. For the professor and the student alike, and to ensure the success of eLearning applications in Libya, the research reached several results, the most prominent of which are the following requirements:

- 1. The need for academics to contribute to the education industry.
- 2. Providing the infrastructure for eLearning.
- 3. Develop programs to train students, professors, and administrators to benefit from eLearning. Therefore, education must be addressed at all levels of public and higher education and the dissemination of eLearning culture among all segments of society to improve the educational process and benefit from eLearning.
- 4. Building a vision and plan for eLearning according to the philosophy of the curriculum and capabilities.
- 5. Infrastructure equipment such as computers, software and communication networks such as the Internet and the local network.
- 6. Developing the human element in terms of qualifying supervisors, managers, teachers and learners.
- 7. Developing an interactive educational portal on the Internet that contains educational management systems.

#### III. Recommendations

eLearning in Libya suffers from many obstacles, beginning with the lack of infrastructure and the training of the administrative and educational staff. The research also came out with a set of recommendations through which it is possible to overcome some of those obstacles so that in the future, eLearning can be better benefited from, especially since knowledge and science are the basis of knowledge.

In light of the concepts presented by this paper, the reality requires the modernization of eLearning in Libya, given the circumstances that the country and the whole world are going through as a result of the Corona pandemic crisis, and education must continue and should not falter as a result of these circumstances. We recommend the following:

- 1. Developing and raising the standard of living quality in Libya through the use of technology.
- 2. Building a knowledge economy in Libya and developing advanced national cadres and a strong private sector.
- 3. Working on raising awareness and educating the community in the form of holding meetings, organizing conferences, and workshops, which contribute to the development of eLearning and distance learning.
- 4. Conducting a comprehensive survey of educational institutions to implement eLearning in Libya.
- 5. Encouraging scientific research in the field of eLearning by allocating financial support for conducting and circulating such research.
- 6. Providing infrastructure, represented in preparing trained human cadres, and providing rapid communication lines and equipment.
- 7. The need for educational institutions to offer materials that will give the student the skills to use information technology, and this will facilitate the process of interaction and use by students of the educational materials presented electronically.
- 8. Starting to apply eLearning on an experimental basis by developing a limited number of electronic courses as a model.
- 9. The transition towards eLearning for academic subjects requires encouragement from institutions and to invest in the communications and information technology sector to improve network performance and communication speed, and reduce the cost of communication to reduce network connection problems.
- 10. The need for educational institutions to provide an appropriate number of computers connected to the information network to reduce the pressure on these devices so that the student can access the scientific material on the website, and this is very necessary for the scientific study materials available electronically.
- 11. The necessity of supporting electronic libraries and information centers by providing resources and references for learners in the eLearning system.
- 12. Developing students' skills and abilities and building their personalities to prepare a generation capable of communicating with others and interacting with the changes of the times through modern technical means.

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