



Activating E-Learning in Schools in Libya Case Study: Bashir Solah High School

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Abstract

This study aimed to reveal the importance of e-learning in light of the spread of the Coronavirus from the point of view of the faculty members at Bashir Solah School. They taught during the period of the spread of the Coronavirus through the e-learning system, and the necessary data were collected using a questionnaire whose reliability coefficient was (0.804) and was applied to the study sample. The results of the study revealed that the study sample's evaluation of the importance of e-learning in light of the spread of the Coronavirus from their point of view was average, and their evaluation of the field of e-learning continuity, the field of obstacles to the use of e-learning, the field of interaction of faculty members with e-learning, and the field of students' interaction in the use of e-learning was medium. The researchers recommend holding training courses in the field of e-learning for both faculty members and students, and to help get rid of all obstacles that prevent benefiting from the e-learning system followed, and the need to combine traditional education with e-learning in educational institutions in the future.

Keywords: e-learning, coronavirus. Bashir Solah School.

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I. Introduction

Due to the widespread nature of the Corona pandemic, all schools and universities around the world have been closed, and students have been told to stay at home and complete their education via e-learning or distance education (Alqurshi, 2020).

It's no secret that there's been much debate and discussion regarding whether or not remote learning (also known as Open Distance Learning, or ODL) or electronic learning (EL) should be incorporated into the classroom. E-learning emerged as a result of technological advancements before the Corona pandemic and became an alternative and urgent necessity for the continuation of education in conditions that impose physical distance, especially after the educational process was directly affected by the automation of industry and the development of "Artificial Intelligence" and "Internet of Things" technology and the information technology revolution (Abdullah et al., 2019).

This study aimed to evaluate the efficacy of e-learning in light of the spread of the Coronavirus from the perspective of its teaching members at Bashir Solah High School, which was one of the Libyan schools to experience e-learning in response to the crisis (Elberkawi, Dakhil, et al., 2020).

Study Problem

E-learning is an essential part of the success of the education process. This is because of how much technology has changed and how many modern ways of communicating have become available, such as a computer, the Internet, and multiple media like audio, image, and video. These are ways that have helped a lot of people get an education with less time and effort. In light of the global crisis posed by the spread of the Corona virus, however, schools have had no choice but to implement distance learning strategies, including the use of electronic media like the web, smartphones, and computers, to maintain continuity in the classroom.

Some teachers at Bashir Solah High School, one of the schools that were suddenly forced to adopt e-learning, questioned the results of electronic tests due to a lack of concrete indicators of students' commitment to

the instructions of the tests, and as a result, doubts about the efficacy of e-learning were voiced among teachers and students alike. This is on top of the fact that e-learning already has a shaky foundation due to the need for specialized software and the provision of internet connections, smartphones, and computers for each student. Therefore, it was crucial to assess whether or not e-learning is efficient and whether or not it succeeds in meeting educational goals and student needs while eliminating the need for traditional classroom instruction.

Study Questions

The study seeks to answer the following questions:

What is the effectiveness of e-learning in light of the spread of the Corona virus from the point of view of teachers at (Bashir Solah High School)?

From this main question, the following questions arise:

1. What is the level of continuity of the e-learning process at Bashir Solah High School?
2. What are the obstacles to the use of e-learning in Bashir Solah High School?
3. What is the level of interaction of faculty members with e-learning at Bashir Solah High School?
4. What is the level of students' interaction with e-learning at Bashir Solah High School from the point of view of the faculty members?

Purpose of the Study

This study aims to reveal the activation of e-learning in light of the spread of the Corona virus from the point of view of the faculty members at Bashir Solah High School. Teaching staff with e-learning at Bashir Solah High School.

Importance of Study

The importance of this study can be summarized as follows:

The results of this study indicate Bashir Solah High School and educational institutions in Libya in improving the performance of the e-learning system, developing human cadres, material capabilities and trends in selecting the educational patterns used and setting plans for e-learning as an alternative to face-to-face learning. The study tool can also be used to measure the extent of The effectiveness of the e-learning system in educational institutions, and the research derives its importance as it is contemporary with a realistic phenomenon, which is the spread of the Corona virus.

The limits of the Study

The results of this study can be generalized in light of the following limitations:

- Human limits: This study was applied to (50) faculty members.
- Spatial boundaries: This study was applied at Bashir Solah High School in Al Maya City.
- Time limits: This study was applied in the first semester of the academic year (2021-2022).

II. Literature Review

E-learning is defined as the education provided on the Internet, through the use of modern electronic technologies to access everything related to educational materials outside the boundaries of the traditional educational classroom. The researchers believe that e-learning is the process of replacing distance learning by using electronic means of communication with face-to-face interaction in the classroom to achieve the planned educational outcomes (Altawaty et al., 2020; Elberkawi, Ateeyah, et al., 2020).

There are many benefits and features offered by e-learning, which make it superior to traditional methods of education, as follows:

- Reducing costs, as it saves the costs of establishing new classes to conduct educational courses and workshops, and provides electricity, water and other materials used in the school, in addition to the fact that there is no need to go to schools and educational centers, and this would reduce transportation costs (Ncube et al., 2014).

- Available for all individuals and age groups, whereby all individuals, regardless of their age, can benefit from the meetings, meetings and courses offered on the Internet, and acquire new skills and experiences far from the restrictions of traditional schools (Alqurshi, 2020).

Flexibility is not tied to a specific time, so individuals can learn at any time they want according to the time convenient for them.

- Investing time and increase learning, as useless interactions between students are reduced by reducing chatting and excessive questions that waste time, so the amount of what the student learns increases without any disruptions or obstacles (Contreras and Hilles, 2015).

Making education more orderly and impartial, in addition to evaluating tests impartially and fairly, and meticulously tracking the achievements of each student.

Environmentally friendly, as there is no use of paper and pens that may harm the environment when disposed of. In addition, e-learning will be the dominant mode of education in the future. The current generation is characterized by its attachment to smartphone devices and the use of various applications. Therefore, integrating technology into the educational process has become a global trend, and interaction with educational activities through mobile devices has become a catalyst for learning rather than being satisfied. with the traditional study (Alqudah et al., 2020; Contreras & Hilles, 2015).

Despite the many benefits of e-learning, it has some disadvantages as follows (Agboola, 2006):

It is highly dependent on technology. Although e-learning is available to all individuals, many of them may not have smartphones, computers or a network.

Low level of motivation and organization, because e-learning is subjective, some people may find it difficult to motivate themselves to learn, resist playing and organize the learning process.

Isolation and loneliness, arise due to the interaction of students with computers and smartphones instead of their direct communication and interaction with each other.

The researchers believe that e-learning can be effective if teachers do the following (Al-Alak & Alnawas, 2011; Sathishkumar et al., 2020):

1- Organizing educational content: teachers may resort to adopting an educational design to prepare educational material that effectively achieves the goals, studying the educational needs of students, defining the appropriate goals and means to achieve them, and choosing tools for measurement and feedback.

2- Choosing the appropriate educational aids: In e-learning, the choice of educational aids is determined by choosing the appropriate educational software for communication, and the effective and widespread means of communication among students.

3- Determining measurement tools: Because e-learning suffers from a weakness in the reliability of assessment and the difficulty of controlling the implementation of tests, and the monitoring process is impossible to avoid cheating, teachers have resorted to formative assessment during interaction with students, or using real assessment.

4- Individualizing learning and meeting different learning needs and styles: by taking into account the diversity of learning styles among students, their computer competencies, their circumstances in terms of study times and the different quality of their networks and devices.

5- Professional growth: the teacher constantly improves his electronic competencies, and improves his level of readiness to use modern technology in the education process.

The new "Covid 19" virus is part of a new strain of the family of "Corona" viruses that have not previously been discovered in humans, it is a viral disease that affects the respiratory system of humans at different ages, and the people most affected and vulnerable to it are the elderly and those with chronic diseases, and it may spread among People by mixing with infected people, and flying droplets during coughing, sneezing and touching the tools of the injured or the victim himself, and its prominent symptoms are as follows: fever and high temperature, cough, shortness of breath and general fatigue, vomiting and diarrhea, runny nose, in addition to a sore throat. The Red Crescent stated that among the preventive measures and methods of protection that help reduce the risk of infection with this virus are the following (Jadoo et al., 2021; Abidah et al., 2020):

- Avoid close contact with anyone who has symptoms of the common cold or flu, and avoid touching the eyes, nose or mouth.
- Clean hands with soap and water frequently, or use an alcohol-based hand sanitizer when leaving the house, or touching public facilities and others.
- Use a tissue when coughing and sneezing and dispose of it immediately after use, or use the upper part of your sleeve or your bent arm in the absence of tissue.
- Sterilization of all necessities that are purchased before entering the house, and continuous disinfection of surfaces in the home and office.

III. Study Methodology

This study relied in its procedures on the descriptive analytical approach, which depends on collecting data from the study sample of faculty members using the questionnaire prepared for this study, and studying and analyzing the responses of faculty members (Alhumaid, 2020). This study was applied to a sample of (50) teaching staff members at Bashir Solah High School, where the study sample was randomly selected from the study population consisting of (330) faculty members at Bashir Solah High School in the second semester of 2021- 2022 from various disciplines in the school.

IV. Result

The questionnaire was applied electronically to an exploratory sample other than the study sample consisting of (20) faculty members at Bashir Solah High School. The Cronbach's Alpha test was used to test the stability of the questionnaire. The values of the stability coefficients for the resolution axes are between (0.895)

and (0.731). The results were presented and for the analysis of this questionnaire, the arithmetic means and standard deviations of its four domains were calculated, and the results were as follows:

Table 1: Arithmetic averages and standard deviations of the domains of the e-learning questionnaire

	Domain	Number	Mean	Standard Deviation	
1	Continuity of e-learning in light of the spread of Corona	50	2.55	0.90	Medium
2	Students' interaction with e-learning in light of e-learning	50	2.47	0.82	Medium
3	Teachers' interaction with e-learning in light of the Corona crisis	50	2.43	0.67	Medium
4	Obstacles to e-learning	50	2.35	0.34	Medium
5	The effectiveness of e-learning in light of the spread of the Corona virus from the point of view of teachers: Bashir Solah High School	50	2.45	0.57	Medium

Table (1) shows that the arithmetic mean of the effectiveness of e-learning in light of the spread of the Corona virus from the point of view of the faculty members at Bashir Solah High School amounted to (2.45) with a standard deviation of (0.57) with a medium degree and that the field of "e-learning continuity in light of the spread of Corona" had a mean (2.55) and a standard deviation (0.90) in a medium degree, followed by the field of "student interaction with e-learning" with a mean (2.47) and a standard deviation (0.82) with a medium degree as well, while the field of "teachers interaction with e-learning" came in The Corona crisis shaded "with an arithmetic mean (2.43) and a standard deviation (0.67) with a medium degree, and finally the field of "e-learning obstacles" came with arithmetic mean (2.35) and a standard deviation (0.34).

The results of the first question: "What is the level of continuity of the e-learning process at Bashir Solah High School?"

The researchers extracted the arithmetic averages and standard deviations for the continuity of the e-learning process at Bashir Solah High School as follows:

Table 2: Arithmetic averages and standard deviations of the items in the field of "e-learning continuity in light of the spread of Corona"

	Domain	Number	Mean	Standard Deviation	
1	Students were trained by the school to use an e-learning by giving them some qualifying courses during the pandemic.	50	3.22	1.35	Medium
2	The techniques used in e-learning are effective and cover all aspects of the curriculum.	50	3.16	1.44	Medium
3	There is a smooth transition from traditional education to e-learning in light of the Corona crisis.	50	3.04	1.39	Medium
4	I feel satisfied with using the e-learning system as an alternative to the traditional education system in light of the Corona crisis.	50	2.83	1.44	Medium
5	Sending and receiving educational materials remotely was without technical obstacles.	50	2.70	1.55	Medium
6	The school provides training indicative electronic courses that explain the mechanism of using the e-learning system for teachers during the Corona crisis.	50	2.64	1.39	Medium
7	Teachers have sufficient skills to design and produce effective online content.	50	2.62	1.41	Medium

Table 3: Arithmetic averages and standard deviations of the items in the field of "e-learning continuity in light of the spread of Corona"

	Domain	Number	Mean	Standard Deviation	
8	The website design provided by the school for e-learning to facilitate the presentation of the material in an interesting way.	50	2.50	1.40	Medium
9	The e-learning system provides direct communication between the members of the educational system (administration, teacher, and student).	50	2.28	1.34	Poor
10	The school provides appropriate technical support to facilitate the use of technology in the educational material.	50	2.26	1.35	Poor
11	E-learning technology effectively contributes to the	50	2.18	1.33	Poor

	continuity and success of the educational process in light of the Corona crisis				
12	Logistical support from the school is available to follow up on the educational process.	50	2.16	1.33	Poor
13	A guide for using the site has been provided for the educational material for students.	50	2.08	1.35	Poor
14	The school administration is constantly evaluating the mechanism of distance teaching.	50	2.08	1.24	Poor

Tables (2, 3) show that the paragraphs of the field of “e-learning continuity in light of the spread of Corona” ranged between a weak and a medium degree. The first rank with an arithmetic mean of (3.22) and a standard deviation of (1.35) in a medium degree, and the paragraph “The school administration conducts a continuous evaluation of the mechanism of distance teaching” and the paragraph “A guide for using the site for the educational material for students” came in the last rank with an arithmetic average of (2.08) with a standard deviation of (1.24) (1.35), respectively, with a medium degree.

The results of the second question: What is the level of obstacles to the use of e-learning in Bashir Solah High School?

Whereas, the researchers extracted the arithmetic averages and standard deviations of the field of obstacles to the use of e-learning in Bashir Solah High School as follows:

Table 4: Arithmetic averages and standard deviations of the paragraphs of the second field "E-learning Obstacles"

	Domain	Number	Mean	Standard Deviation	
1	The e-learning system is compatible with the type of subjects, both theoretical and practical	50	3.90	0.93	High
2	All teachers have sufficient and appropriate experience and skills to use computers and the Internet	50	3.30	1.09	Medium
3	The speed of the internet is suitable and I can give any lesson without any interruption	50	3.20	1.47	Medium
4	Training courses were held and teachers prepared before the Corona crisis for the mechanism of using e-learning	50	2.62	1.48	Medium
5	A power outage occurs while you are in the learning process	50	2.42	1.34	Medium
6	There is difficulty in direct communication between teachers and students (where ideas and opinions can be exchanged through personal confrontation)	50	1.74	1.04	Poor
7	Teachers are having problems preparing video lessons	50	1.70	0.95	Poor
8	There is difficulty for teachers in following up on the large numbers of students through the available e-learning tools	50	1.60	0.98	Poor
9	The student faces problems and obstacles when studying the material electronically	50	1.54	0.83	Poor
10	Students' interaction with e-learning and courses was affected due to difficult or special living conditions	50	1.52	0.78	Poor

Table (4) shows that the paragraphs on the field of "e-learning obstacles" ranged from a weak degree to a large degree. The paragraph "the e-learning system is compatible with the type of materials on both the theoretical and practical sides" came in the first place with an arithmetic mean of (3.90) and a standard deviation of (0.93) to a large degree, and the paragraph “the interaction of students with e-learning and courses was affected by difficult or special living conditions” came in the last rank with an arithmetic mean of (1.52) and a standard deviation of (0.78) in a medium degree.

The results of the third question: "What is the level of faculty members' interaction with e-learning at Bashir Solah High School?"

The researchers extracted the arithmetic averages and standard deviations of the field of interaction of faculty members with e-learning at Bashir Solah High School as follows:

Table 5: Arithmetic averages and standard deviations of the paragraphs of the third field "Faculty members' interaction with e-learning in light of the Corona crisis"

	Domain	Number	Mean	Standard Deviation	
1	I think that remote tests are an appropriate way to assess students' achievement.	50	3.74	1.12	High
2	E-learning is more time efficient than traditional education.	50	3.42	1.32	Medium
3	There is high credibility in evaluating students through the e-learning system	50	3.20	1.41	Medium
4	The teacher at Bashir Solah School is satisfied with the e-learning system.	50	2.92	1.44	Medium
5	The evaluation methods used are appropriate and done in a variety of ways.	50	2.60	1.48	Medium
6	The student is continuously evaluated during the distance learning process	50	1.90	1.28	Poor
7	The educational material is attached to the students easily and conveniently	50	1.78	1.21	Poor
8	The teacher answers easily the students' inquiries about the attached scientific material.	50	1.76	1.13	Poor
9	You are committed to the e-learning system based on the school plan.	50	1.48	0.64	Poor
10	The educational content includes exercises and assignments to help you learn.	50	1.46	0.93	Poor

It is evident from Table (5) that the paragraphs on the field of "faculty members' interaction with e-learning in light of the spread of Corona" ranged between a weak and a large degree. (3.74) and a standard deviation of (1.12) to a large degree, and the paragraph "the educational content includes exercises and assignments that help to learn" came in the last place with an arithmetic mean of (1.46) and a standard deviation of (0.93) with a weak degree.

The results of the fourth question: "What is the level of students' interaction with e-learning at Bashir Solah High Secondary School from the point of view of faculty members?"

Whereas, the researchers extracted the arithmetic averages and standard deviations of the domain of students' interaction with e-learning from the point of view of the faculty members at Bashir Solah School as follows:

Table 6: Arithmetic averages and standard deviations of the items in the field of "students' interaction with e-learning in light of e-learning"

	Domain	Number	Mean	Standard Deviation	
1	I am satisfied with the extent to which students benefit from e-learning	50	3.32	1.30	Medium
2	Students interact with the e-learning system on an ongoing basis	50	3.20	1.46	Medium
3	The e-learning method helps in understanding the scientific material clearly and smoothly	50	2.92	1.35	Medium
4	Viewing the material electronically provides the student with additional skills	50	2.26	1.45	Poor
5	The student can ask any questions and inquiries through e-learning	50	1.76	1.15	Poor
6	The e-learning system allows the student to access the educational material at any time	50	1.36	0.75	Poor

According to Table 6, "students' interaction with e-learning in light of the proliferation of Corona" is only addressed in paragraphs of low to medium quality. with an arithmetic mean of (1.36) and a standard deviation of (0.75) at a poor degree, and the paragraph "The e-learning system allows the learner to access the educational content at any time" ranked the lowest.

V. Conclusion and Recommendations

Training programs in the field of e-learning are provided to both students and teachers, and money is invested in supportive policies and programs for students and teachers. Because many students already have access to the Internet at home, it is important to train and encourage teachers to use electronic sites and e-mails to communicate with pupils. It is crucial that schools prioritize implementing e-learning in secondary education and promoting culture among students so that they can have the most successful learning experience possible. It has permeated the system from elementary school onwards, across disciplines. More research and studies are needed to determine whether or not e-learning can be successful in challenging environments, and the institution should also host conferences and seminars to further the growth and improvement of e-learning. Finally, looking

ahead, it is evident that digital education has become a strategic choice for every country that consciously appreciates the importance of the educational sector in the prosperity and development of society, and an indispensable alternative not just in exceptional circumstances, as it is now to face the repercussions of the "Covid 19" pandemic, but also to build a new generation that can benefit, and possesses the knowledge and skills necessary to face the challenges of the future. Finally, we see that, given the right conditions, remote education may fulfill its aims; this allows us to develop effective scientific policies to cope with the future of education.

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