

# E-learning challenges faced by faculty members and the use of a systems-based approach to problem solving

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**Abstract:** The aim of this paper is to shed light on the experiences and challenges of E-learning in Iraqi universities. It identifies the most important obstacles and problems faced by the teaching staff (faculty members). The sample of the study includes (166) teaching staff. The results of the research are based on the answers of the respondents and the assessment of questionnaires to come up with the appropriate solutions to those obstacles and problems. The study stated the most important advantages of E-learning which has become the only way to curb the spread of the pandemic. E-learning is a self-learning process through mobile phones and computers. This process resulted in the learner learning anytime, anywhere. E-learning includes the presentation of texts, videos, audio clips, animations and virtual data, thus creating a very rich learning environment. The idea of the study came for the purpose of providing an educational environment rich in information, limiting the spread of the Corona epidemic, and limiting the challenges facing the faculty in Iraqi universities. Given the importance of the topic, which saves time and money because learners can access it from anywhere and they do not need to leave their homes to attend lessons, which makes it easier for learners to remember information, syllabuses, curricula and concepts and apply them in practice. E-learning also provides the continuity and stability of the learning process and that it meets the needs of learners easily and quickly in the time of the Corona epidemic to limit the spread of the epidemic. The researchers applied the descriptive analytical method, being an organized systematic method by which the researchers studied a subject from its all aspects. This approach helped in collecting the appropriate data and information; then clarifying the relationship between the research variables in the form of questions or hypotheses, and the use of statistical analysis tools that fit the nature of the research data. The online questionnaire consists of two axes and it was adopted after verifying its authenticity, validity, reliability, and stability. Then it was distributed to a sample of faculty members in the Iraqi universities by using (Google Form). After analyzing the data collected from the questionnaire, the researchers reached the most prominent results and recommendations.

The researchers have come up with the following results: The lack of infrastructure that uphold the use of E-learning such as slow Internet connections and the absence of devices, equipment and educational programs. And the lack of educational material constitutes a major obstacle to E-learning, especially when universities do not provide programs or E-learning requirements for teaching staff. Thus, the teachers are forced to rely on free programs which do not provide many of the sober features that completely govern the management of the E-classroom.

The researchers reached the most prominent recommendations: Developing the skills of the teaching staff (faculty members) by training them how to use computers and mobile devices (personal digital assistants cell phones, etc.) and E-learning platforms. Universities should provide teachers with paid programs and material facilities to help them cope with E-learning.

**Keywords:** E-learning, online learning, distance learning, Information Technology, obstacles of E-learning.

## I. INTRODUCTION

E-learning is one of the ways and means that support the educational process and transform education into the stage of creativity, skill development and interaction from the stage of indoctrination. It is known as an interactive educational system provided to the learner using information and communication technologies. It relies on an integrated digital electronic environment that displays all courses through electronic networks. It also provides ways of guidance and counseling, organizing exams, in addition to managing and evaluating resources and processes.

E-learning is characterized by the use of the Internet and the synchronous and asynchronous software as tools of communication and interaction between faculty members and their students. As a structured course or learning experience delivered electronically, E-learning is used to share educational resources represented by (books, audio, video,

graphic presentations, etc.); so, a faculty member can communicate and interact with his/her students while they are at home and take online classes via the Internet. E-learning has become an urgent need imposed by the exceptional circumstances of the Covid-19 pandemic. The importance of E-learning has been clearly demonstrated, so that Iraqi universities have taken all necessary measures to provide "online distance education services" in light of the inability of the student or faculty member to reach his university. The importance of this paper originates from the fact that it addresses one of the thorny topics. E-learning is one of the latest global trends in education technology. What makes the study viable is that it identifies the obstacles and problems that Iraqi university professors face during the application and implementation of the E-learning experience. By getting to know the opinions of faculty staff, it would be easier for decision-makers to work on finding solutions so as to overcome difficulties faced by Iraqi university professors (faculty members) to efficiently implement E-learning for benefit of the educational process. The Iraqi universities have

moved towards a strategy to implement E-learning and started using synchronous and asynchronous software (E-learning applications and software) to share educational resources with students, communicate and interact with them. Students are urged to attend online classes instead of the traditional in-person classes that were inaccessible due to the risks associated with the spread of the epidemic.

## II. problem statement and research question

Information and communication technology (ICT) has encouraged some teachers to choose technological learning environments to support teaching and education. E-learning grew and became a necessary component of our educational institutions. Despite all these investments in E-learning departments, academics (faculty members) face challenges that discourage them from changing this situation, and the study problem starts in answering the following questions:

1. What is the attitude of university professors towards E-learning?
2. What are the challenges faculty members face using E-learning?
3. What is the effect of the professor's inefficiency in using information and educational technologies and applying techniques in e-learning?
4. What is the relationship between the obstacles in using E-learning that faculty members face in Iraqi universities and the academic specializations?
5. What are the methods of preparing digital content in E-learning for Iraqi universities?

## III. OBJECTIVES OF THE STUDY

1. Study the attitude of Iraqi university professors towards E-learning.
2. Identify the obstacles that limit the implementation and application of E-learning in the Iraqi universities.
3. Identify the impact of technical skills on the implementation of E-learning.
4. Know the impact of academic specialization on the obstacles and problems that faculty members face.
5. Learn about the methods of preparing digital lectures in Iraqi universities.

## IV. THE CONCEPT OF E-LEARNING

E-learning is a contemporary and relatively modern terminology. The term has witnessed a great development with the widespread use of the Internet in all fields of life (Rakhyoot, 2015).

We should know that learning process is a result of the external and internal processes that lead to a change in the ability of the learner. The purpose of the educational system is to facilitate intended learning and to support the learner to achieve the intended learning. What we used to do in an

educational system is to provide an educational environment that identifies and supports education by learning the operating model (Pinpathomrat, 2013).

E-learning is defined as a type of education in which the student relies on the use of electronic media in communication, receiving information, gaining skills, and in communicating with professors and educational institutions. It is known as an innovative way to provide an interactive environment that focuses on learners. It is well-designed, easily designed and accessible environment for any individual, anywhere and anytime. It uses the characteristics and resources of the Internet and digital technologies that comply with the appropriate educational design to provide an open, flexible and distributed learning environment (Sangrà, Vlachopoulos, & Cabrera, 2012).

E-learning is also defined as a source of education that include all activities and events which are related to education and learning through various electronic media which can be the Internet or internal networks, external networks, educational television, video, audio and CD (Aguti, 2015).

As the general education teachers (faculty members) and students communicate via the Internet easily and effectively by using software and educational systems to exchange information, these applications need to ensure security and privacy (HEINZE, 2008), since E-learning is the process of communicating and receiving information using modern technology such as computers, telecommunications network and mobile phone (cellphone) for the purposes of education, training and knowledge management. However, E-learning does not eliminate traditional education, but rather enhances traditional education when used in an ideal way. The development of technology speeds up the transfer and circulation of information via the Internet. The availability of computers, their systems and programs has helped increase the opportunities for the use of collaborative educational environments (AbdEl-Gawad, 2011).

## V. E-LEARNING GOALS

The aims of E-learning are as follows:

1. Provide multiple sources of information and allow exchange of educational experiences between learners and professors (faculty members) (Al-Fadhli, 2008).
2. Inaugurate multiple means of direct and indirect communication between professors and students (Kisanga, 2015).
3. Create an educational learning environment through the application of new electronic technologies.
4. Present lessons in an effective educational plan that can be repeated (Dare, 2011).

## VI. ADVANTAGES OF E-LEARNING

E-learning is useful for education, educational institutions, and all types of learners. E-Learning cost is significantly lower as compared to in-person learning because it can save money and time. It achieves measurable results and can be done in any geographical location. It has the advantage of taking the class

anytime and anywhere. Education is available when and where it is needed. E-learning can be done in the office, at home, on the road, 24 hours a day, seven days a week.

E-learning also contains measurable assessments that can be created by professors (faculty members) who will know what students have learned and when they have completed the semester (Blake Short, 2016). E-learning accommodates different types of learning styles where students take full advantage of learning as quickly as they fit. Students can also learn through a variety of activities that cope with many different learning methods and styles owned by learners. E-learning encourages students to look up and access information using hyperlinks and websites on the World Wide Web. In E-learning, students are able to find information relevant to their interests. E-learning allows students to choose educational materials that meet their level of knowledge, interests to perform their tasks more effectively. E-learning focuses more on the learner and it is more interesting to the learner because it provides information he/she wants to learn. E-learning also helps students develop their knowledge of the Internet. This knowledge will help learners throughout their careers. E-learning encourages students to take personal matters into account for their own learning. When learners are successful, they build self-knowledge and self-confidence (Afaneh, et al., 2006).

## VII. E-LEARNING TECHNIQUES

We live in a time that has witnessed continuous developments in the technological means which can be used in the educational process. These techniques fall under three main categories (Chau, 2017):

First: - Sound-based technique which is divided into two types, the first is interactive, such as audio conferencing and short-wave radio, while the second is static that involves audio tools such as audio tapes and video (Azeta, Ayo, Atayero, & Omoregbe, 2010).

Second: - Video technique (video) where the use of video in education varies and is considered one of the most important means for direct and indirect interaction. It includes fixed forms such as slides and moving shapes such as films and video tapes. It also contains forms produced in real time and combined with audio conferences via video that are used in one direction or two directions with audio accompaniment (Harakchiyska, 2010).

Third: Computer and its network: It is the most important and basic element in the E-learning process. It is used in the learning process in three forms, namely:

1. Computer-based learning, which is represented by the interaction between the computer and the learner only.
2. Computer-assisted learning in which the computer is a source of knowledge and a means of learning, such as information retrieval or review of questions and answers.

3. Learning in computer management, where the computer works to guide the learner (Balaji, Al-Mahr, & Balaji, 2016).

## VIII. E-LEARNING TOOLS AND TECHNIQUES

Each of the producer, the professor (faculty members), and learner need to be furnished with three forms of techniques - hardware, network connectivity and software. The learner may need a personal computer to have access to the educational content when connected to the network at least moderate speed. The learner may also need additional functions such as a web browser and media players. The professor should equip himself/herself with a network server and a high-speed network connection so that he/she can convey information to many learners at the same time. It is necessary that he/she have special programs and tools of cooperation and multimedia. He should have experience in high technology, the field of design and programs to create interactive presentations and lectures the enable him/her in designing graphics, animations, symbols, videos, audio clips and other required media (Horton & Horton, elearning tools and technologies, 2003).

## IX. FACULTY MEMBERS ROLE IN E-LEARNING

The role of professors (faculty members) in E-learning is manifested in the following:

1. An explainer since he/she uses technical means and various techniques to present the lecture and then students rely on these techniques and technology to solve assignments and do researching.
2. A stimulator as he encourages interaction in the educational process by asking questions and contacting other students and professors in different countries.
3. A facilitator for putting the generation on the right path of knowledge and creativity as that urges students to use the technical means and solve the educational programs they need. It allows them to control the academic subject by presenting their opinions and points of view (Ellaway & Masters, 2008).

## X. THE QUALITY OF E-LEARNING

The quality of E-learning is improved through learner-focused content. E-learning curricula should be relevant to the learners' needs, roles and responsibilities in professional life. Skills, knowledge and information should be provided to achieve this end goal. E-learning content should be divided to facilitate the assimilation of new knowledge and provide a flexible schedule for learning and designing attractive content. Educational methods and techniques should be used creatively and attractively to develop an interactive learning experience with the students (Horton & Horton, Op.Cit).

## XI. RESEARCH METHODOLOGY AND PROCEDURES

This practical aspect includes a presentation of the procedures that the researchers followed in order to achieve the following objectives:

### 1.1. First: - Research approach

The researchers followed the descriptive analytical method, being consistent with the nature of the research and its objectives. The descriptive analytical method does not only identify the features of the problem and describe it scientifically, but goes beyond that by finding its real causes. since it studies the phenomenon as it actually exists in reality. The approach is described precisely and accurately to express qualitative or quantitative expressions. The qualitative expression describes the phenomenon by showing its characteristics, while the quantitative expression gives us a numerical description of the amount of the phenomena.

### 1.2. Second: Research Procedures

Research procedures include:

**Research community:** It is intended for all individuals who are interested in a particular field of study. The subject of the research problem is faculty members from various scientific and human disciplines.

**Research sample:** The researchers intentionally chose faculty members in Iraqi universities, where the research sample consisted of (166) male and female faculty members. Due to the quarantine conditions and the absence of faculty members in universities, the sample size was limited to (166).

**Research tool:** In order to achieve the research objectives, a tool must be available with which data related to the research can be collected so as to reach accurate results. The research tool is the means used by the researchers to obtain the required information from the reliable sources. Online questionnaire has been chosen as it is the best method that suits the study due to the country's health conditions and the curfew. The questionnaire is defined as a tool for collecting data related to the research topic. It is defined by means of a form to be filled out by the respondents.

### 1.3. Tool Validity (Instrument Validity)

The authenticity of the test is measured by the objectives intended to be achieved, and one of the characteristics of a good test is consistency. A valid test (the honest test) should actually measure the ability, trait, or direction that the test is designed for. In order to achieve tool validity, the researchers relied on extracting its apparent validity by presenting it to a number of arbitrators and experts in order to express their opinions and suggestions in judging the validity of the paragraphs of the questionnaire.

## XII. PRESENTATION AND INTERPRETATION OF RESULTS

This aspect includes a presentation of the results of the current study and then its interpretation according to the responses of the study sample which involves faculty members in Iraqi universities. The researchers followed these steps to present and interpret the results:

1. Presenting the obstacles related to the teaching staff (faculty members) within the paragraphs of the questionnaire.
2. Calculating the frequency of the sample answers for each paragraph of the questionnaire.
3. Weighing the percentage to determine both verified and unfulfilled items in all areas of the questionnaire.

The following is a presentation of the results of the questionnaire, along with the interpretation:

### The first axis: general information interpretation

**First:** The sample of the study includes (166) teaching staff (faculty members) of Al-Iraqia University in Baghdad. Because of the quarantine, the size of the sample is small as faculty members are not present in Al-Iraqia University at the time of sampling.

**Second:** The second paragraph of the questionnaire shows the highest qualification obtained as in Chart (1) below.

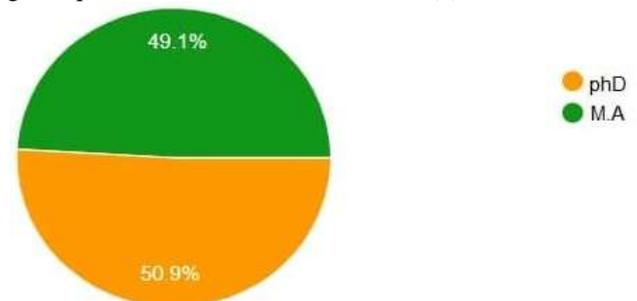


Chart 1. shows the highest qualification obtained.

In Chart (1), the percentage of doctoral qualifications (PhD) reached (50.9%) and master's degrees (M.A) (49.1%).

**Third:** The third paragraph of the questionnaire shows the academic degree of the faculty members according to Chart (2).

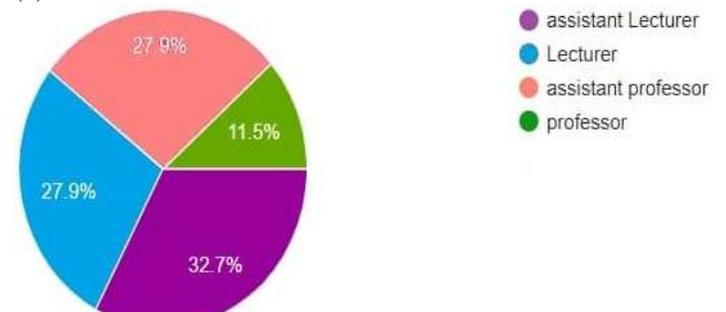


Chart 2. shows the scientific title of the faculty members.

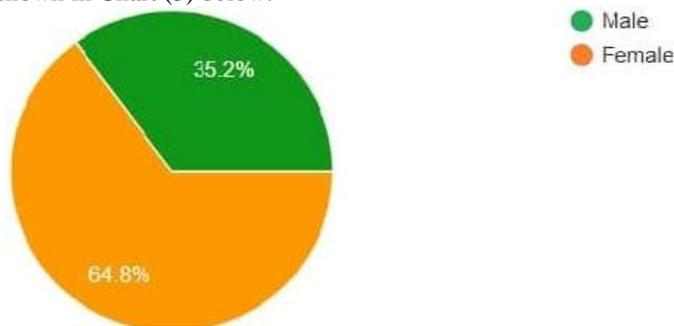
In Chart (2), shows the percentage of faculty members with the title of professor is equal to (11.5%), the title of assistant professor is (27.9%), the title of lecturer is (27.9%) and the title of assistant lecturer is (32.7%).

**Fourth:** The fourth paragraph of the questionnaire explains the years of service as described in the table.1 below.

**Table .1. Shows years of service ranging from one to forty-four years**

years of service	Sample size	years of service	Sample size
1-5 year	26	21-25 year	10
6-10 year	18	26-30 year	4
11-15 year	66	31-35 year	3
16-20 year	36	36- 40	3

**Fifth:** The fifth paragraph of the questionnaire shows the percentage of females and males of the sample study, as shown in Chart (3) below:

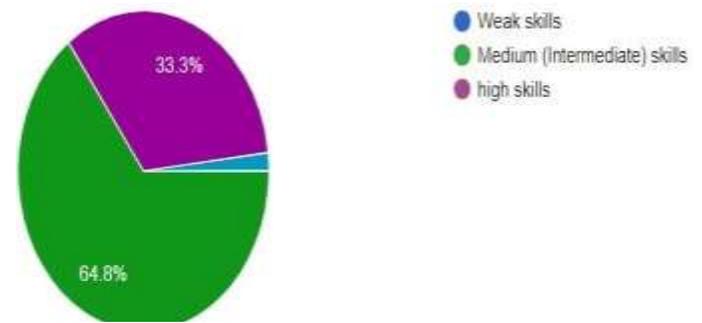


**Chart 3.shows the percentage of males and females in the sample.**

In Chart (3), shows the percentage of males is 35.2% and 64.8% is females.

**Sixth:** The sixth and seventh paragraphs of the questionnaire explain the general and precise specialization, where the sample covers various scientific and humanitarian disciplines. According to the answers of the sample with the scientific specializations such as medical, engineering, pure sciences, and human specialties, they do not prefer E-learning because of the many obstacles and problems that prevent achieving the educational goals mentioned in the study.

**Seventh:** The eighth paragraph of the questionnaire explains skills needed to deal with the computer. Chart (4) shows the results.



**Chart 4.shows the Computer skills.**

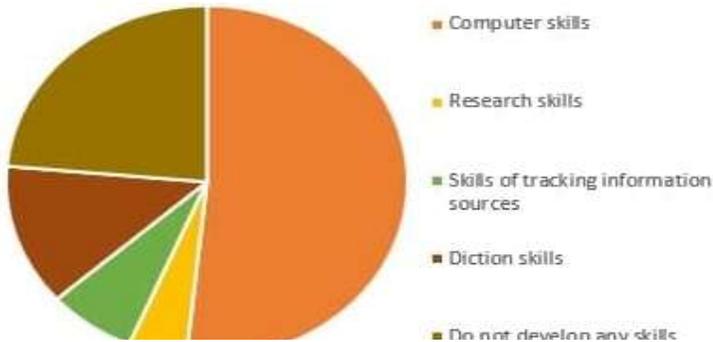
In Chart (4), shows knowledge of computer skills for the sample of faculty members, weak skills by 3.1%, medium skills by 64.8% and 33.3% for high skills.

**Eighth:** The ninth paragraph of the questionnaire explains the educational applications and programs use by the teaching staff to communicate with their students and deliver the scientific material. Faculty members use various applications and programs such as Google Classroom, Google Meet, Zoom, FCC, YouTube, Telegram, and WhatsApp. It was found that the teaching staff adopted synchronous programs in education and the delivery of scientific material to their students.

**The second axis: E-learning:**

**First:** The first paragraph of the questionnaire clarifies the sample's opinions about E-learning. Most of the answers dealt with a number of obstacles accompanied with the process of E-learning, including poor infrastructure, lack of availability of computers by faculty members, limited access to internet networks and lack of technical skills dealing with E-learning programs as E-learning needs efforts and time to prepare digital lectures. As a result, E-learning has not achieved its educational goals since the students' enthusiasm in attending classes, communicating and interacting with faculty members was weak. Besides, students' commitment to timing and attendance schedules during the whole lecture was weak due to the interruption of the Internet, which affects the student's receiving of information from the faculty members. One of the sample suggested that E-learning should be promoted and not to be a substitute for traditional education. Because of the outbreak of COVID-19 virus and its repercussions, the faculty members were not prepared for specific planning and strategy, a move that affected the efficiency of lectures in E-learning.

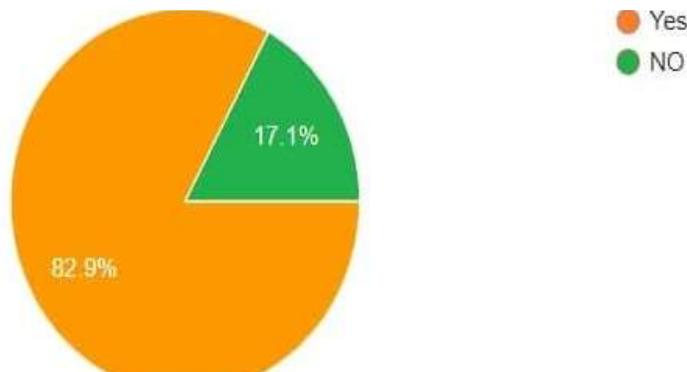
**Second:** The second paragraph of the questionnaire shows the skills that E-learning has developed. See Chart (5) below.



**Chart 5.**shows the skills that E-learning has developed.

Chart (5) shows that E-learning helps developing computer skills by 55.2%, research skills by 5.1%, as the student depends entirely on the faculty members to obtain the scientific material and is considered as obstacle in the application of E-learning. Information stalking skills by 7.5% and diction skills by 14% but it does not develop education skills to achieve educational goals, including the skill of diction and searching for information sources. It only improves computer skills.

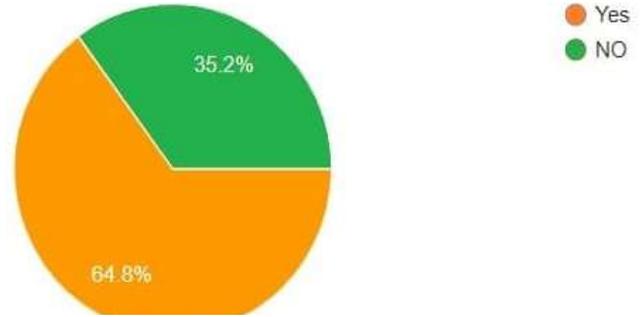
**Third:** The third paragraph of the questionnaire shows that E-learning provides flexibility in the time and space as it is shown in Chart (6).



**Chart 6.**shows the that E-learning provides flexibility in the time and space.

Chart (6) shows that E-learning provides flexibility at 82.9% and does not provide flexibility by 17.1%. E-learning gives flexibility in the time and place of education where lectures can be attended from anywhere, whether at home, in the office or anywhere, giving greater opportunity for learning and education.

**Fourth:** The fourth paragraph of the questionnaire indicates that E-learning provides different teaching methods according to the sample in Chart (7).



**Chart 7.**shows the E-learning provides different teaching methods.

Chart (7) shows that E-learning provides 64.8% different teaching methods and does not provide 35.2%.

**Fifthly:** The fifth paragraph of the questionnaire shows the viewpoint of the selected sample, whichever prefers E-learning or in-person learning, and the answer is shown in table.3 below.

**Table .2. Shows E-learning or in-person learning**

The percentage preferring E-learning	The percentage preferring in-person learning	Integration between E-learning and in-person learning
10.3%	75.1%	23.1%

According to Table. 2, the sample preferring to rely on E-learning is 10.3%, the percentage of those preferring to rely on in-person learning is 75%, while 23.1% prefer to have integrated learning. The answers show that it is because of poor infrastructure and poor interaction between the student and the faculty members during E-learning, the sample prefers attending classes in person for the purpose of interaction and direct communication with students.

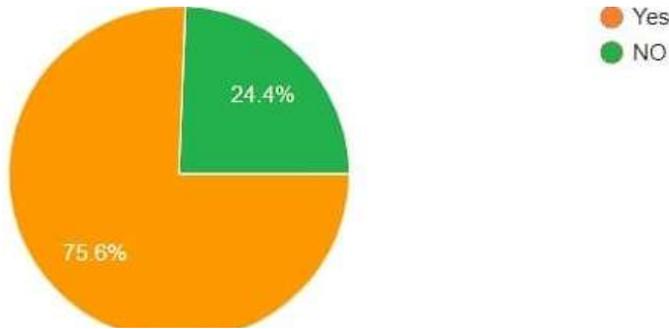
**Sixth:** The sixth paragraph of the questionnaire shows that E-learning is as efficient as education in the classroom. Table .3 below shows the sample answers and the percentage.

**Table .3 Shows that E-learning is as efficient as in-person classroom teaching**

The percentage of E-learning efficiency	The percentage of classroom teaching efficiency
24.4%	75.6%

According to Table.4, those who prefer E-learning represent 25% while 75% prefer to study in the classroom.

**Seventh:** The seventh paragraph of the questionnaire clarifies the opinions of the sample which state that E-learning causes boredom due to the abundance E-learning. This is shown in Chart (8)below.



**Chart 8.**shows the opinions of the sample of the faculty that E-learning causes boredom.

In Chart (8), answers of 75.6% of the sample show that E-learning causes boredom among students, 24.4% say it does not cause boredom among students. As E-learning and electronic programs cause boredom among students, which minimize their interaction and communication with faculty members.

**Eighth:** The eighth paragraph of the questionnaire explains whether E-learning could replace traditional education in the classroom or not. This is shown in Chart (9).



**Chart 9.**shows the E-learning replace traditional education in the classroom.

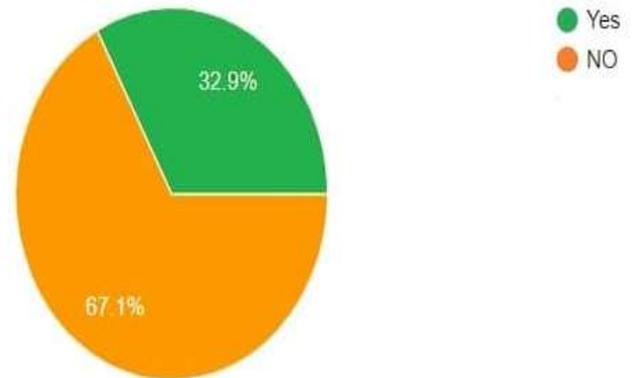
In Chart (9), and according to the sample answers, it was found that E-learning does not replace classroom education by 78.1% and that it compensates for classroom education by 21.2%. Throughout the study, it was found that E-education does not compensate for classroom education. The opinions of the sample indicate that there is poor interaction between the student and the faculty members and that the student does not commit to listening throughout the lecture. Other opinions say that it is impossible to cut off the Internet and it is hard to have visual communication with the students. These are all obstacles that lead them not to use E-learning.

**Ninth:** The ninth paragraph of the questionnaire shows most of the problems and obstacles faced by the teaching staff (faculty members) according to the opinions of the sample which are mentioned below:

1. Slow Internet.
2. The weak interaction between the students and the faculty members, students' lack of actual attendance

3. Collective cheating of students and the deterioration of their educational and scientific level.
4. Lack of financial assistance offered by universities to support educational programs and that the majority of universities rely on free programs where there are advantages and features that could not be offered.
5. Poor E-learning infrastructure.

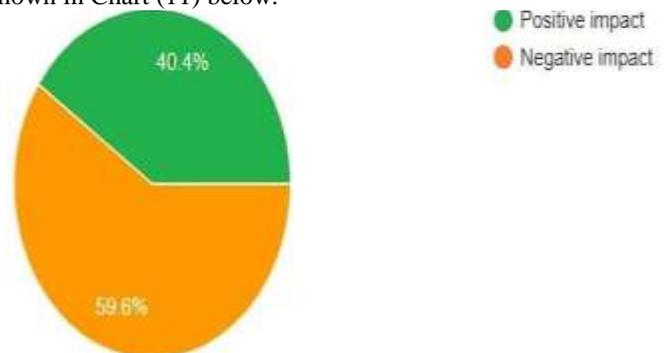
**Tenth:** The tenth paragraph of the questionnaire shows that E-learning provides interaction between the students and faculty members as per Chart (10) below.



**Chart 10.**shows the E-learning provides interaction between the student and faculty members.

Through Chart (10), it was found that E-learning does not provide interaction between the students and their teachers by 67.1% and that it is characterized interactive by 32.9%. So, E-learning is not interactive according to the opinions of the sample.

**Eleven:** The eleven paragraph of the questionnaire shows the extent of influence of higher administrations and the ministry's decisions on the educational process with regard to E-learning as shown in Chart (11) below.

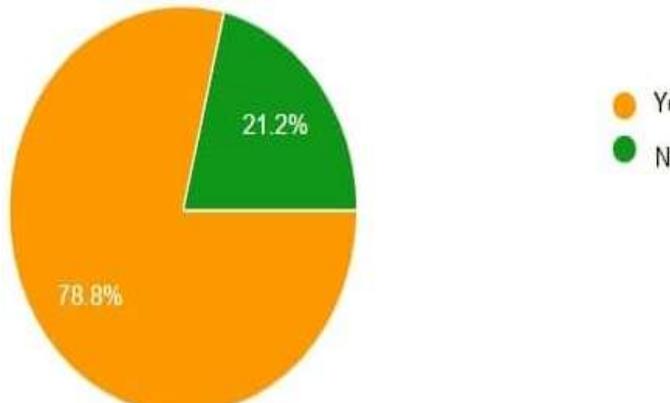


**Chart 11.**shows the influence of higher administrations and the ministry's decisions on the educational process in E-learning.

Through Chart (11), it was found that the decisions of higher administrations negatively affect the course of the educational

process in E-learning, according to the response of the sample, which is 59.6%, and that it is considered an obstacle in the application of E-learning.

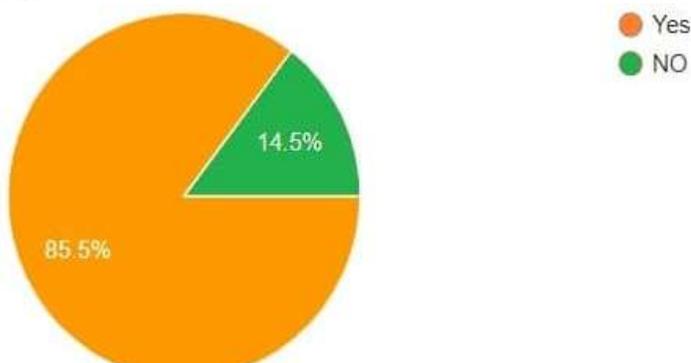
**Twelfth:** The twelfth paragraph of the questionnaire clarifies that E-learning weakens students' faith and belief in the educational trends and values that the university is working to impart to them according to Chart (12) below.



**Chart 12. shows the E-learning weakens students' faith and belief in the educational trends and values.**

In Chart (12), the answers of 78.8% of the sample show that E-learning weakens students' belief in the educational values that the university is working to give students while 21.2% believe it does not weaken the educational values of students. Thus, it was found that E-learning weakens the educational values of students and that it is considered an obstacle to the complete transformation of E-learning.

**Thirteenth:** The thirteenth paragraph of the questionnaire shows that E-learning reduces the social coexistence between the students and the faculty members according to Chart (13) below.

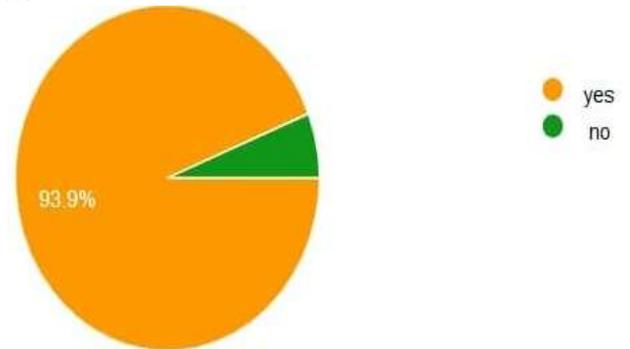


**Chart 13. shows the E-learning reduces the social coexistence between the student and the faculty members.**

In Chart (13), and according to the responses of the sample, E-learning reduces the coexistence between the students and the teachers by 85.5% and that it does not reduce the coexistence between the students and the faculty members by 14.5%. It

proves that E-learning reduces the coexistence between the students and the faculty members.

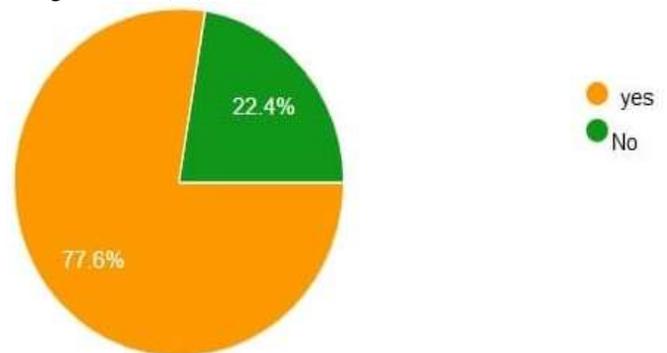
**Fourteenth:** The fourteenth paragraph of the questionnaire explains the difficulty of applying E-learning in some subjects that require practical and applied skills, according to Chart (14) below.



**Chart 14. shows the difficulty of applying E-learning in some subjects.**

In Chart (14), responses of 93.9% of the sample consider that some subjects are difficult to be implemented in E-learning and that 10.6% of the sample see there are not difficult subjects to be implemented in E-learning. It turns out that E-learning cannot be applied to all subjects that need practical and applied skills.

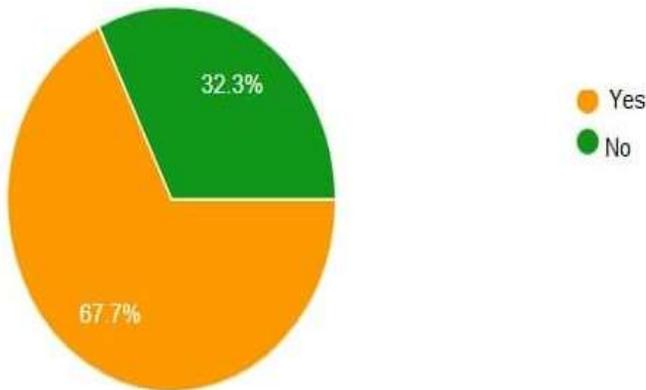
**Fifteenth:** The fifteenth paragraph of the questionnaire shows the students' weak response to the E-learning pattern according to Chart (15) below.



**Chart 15. shows the students' weak response to the E-learning pattern.**

In Chart (15), demonstrates that the responses of 77.6% of the sample agree that the students' response to the E-learning pattern is weak, and that there is no weakness in the students' response to the E-learning pattern by 22.4%. It turns out that there is a weakness in students' response to the pattern of E-learning.

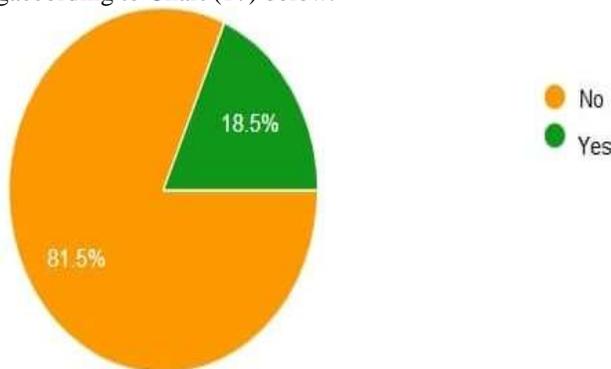
**Sixteenth:** The Sixteenth paragraph of the questionnaire indicates that E-learning weakens the centrality of faculty members according to Chart (16) below.



**Chart 16. shows E-learning weakens the faculty members centrality.**

In Chart (16), and according to the answers of 67.7% of the sample, E-learning weakens the centrality of faculty members, while 32.3% of the responses see that E-learning does not weaken the centrality of faculty members. It turns out that E-learning weakens the centrality of faculty members in its management of E-classroom.

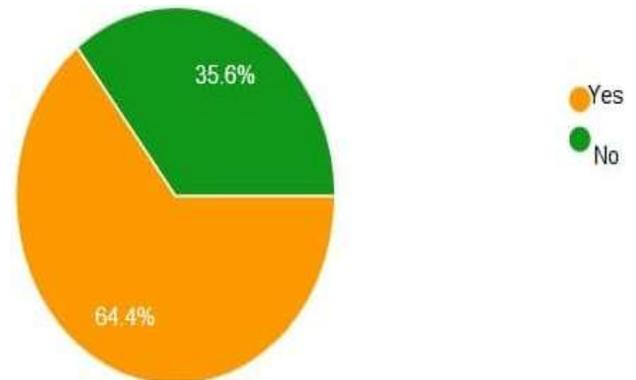
**Seventeen:** The seventeenth paragraph of the questionnaire highlights argues that the university provides programs and financial facilities to support the teaching conduct of E-learning according to Chart (17) below.



**Chart 17. showsthe university provides programs and financial facilities for teaching.**

In Chart (17), and according to 81.5% of the sample's answers, the university does not provide materials that enhance E-education programs for E-learning process and that 18.5% of the answers indicate that the university provides facilities and programs. It turns out that most Iraqi universities do not provide materials that help faculty members enhance E-education programs and keep them rely on free programs where most of the advantages are not available. This is considered an obstruction to E-learning.

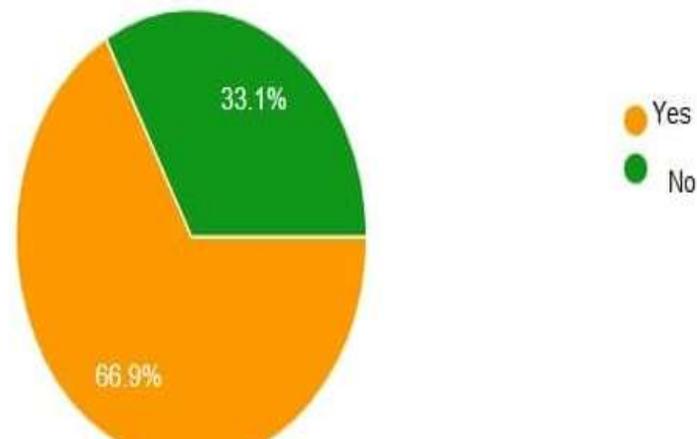
**Eighteenth:** The eighteenth paragraph of the questionnaire talks about that the use of free programs meeting the requirements of E-learning as per Chart (18) below.



**Chart 18. showsthe use of free programs meets the requirements of E-learning.**

In Chart (18), and according to the responses of 64.4% of the sample, free programs do not meet most of the basic requirements of E-learning and while 35.6% believe that free programs meet the teaching needs of E-learning. It turns out that free programs do not meet all the needs of faculty members in E-learning and E-classroom management.

**Nineteen:** The nineteenth paragraph of the questionnaire demonstrates the weakness of the faculty's trust in using synchronous and asynchronous platforms as per Chart (19) below.

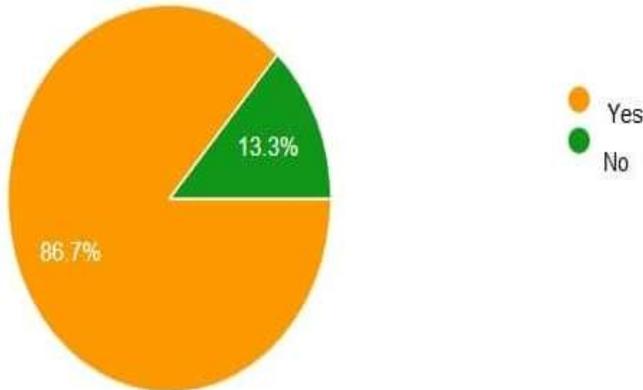


**Chart 19. showsthe faculty members is not satisfied with the use of synchronous and asynchronous platforms.**

In Chart (19), and according to the responses of 66.9% of the sample, the confidence of faculty members in using the platforms, whether synchronous or asynchronous, is weak, while 33.1% of the sample's answers prove that the faculty members are content with using synchronous and asynchronous platforms. The results show lack of conviction and satisfaction of the faculty members in using the synchronous or asynchronous platforms and that causes obstruction in moving towards E-learning.

**Twenty:** The twenty paragraph of the questionnaire points out that E-learning does not provide human and social experiences

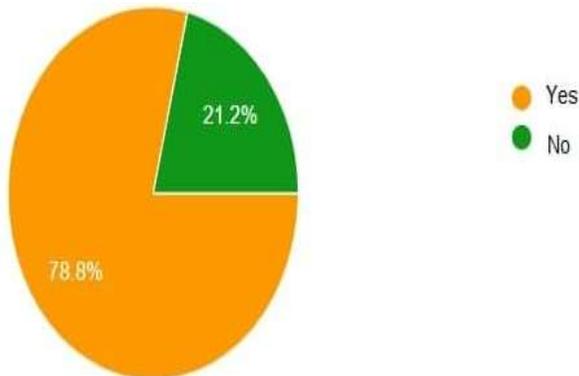
that traditional education provides according to Chart (20) below.



**Chart 20. showsthe E-learning does not provide the human and social experiences that traditional education provides.**

In Chart (20), and according to the sample answer of 86.7%, E-learning does not provide the human expertise provided by traditional education while the answers of 13.3% denotes that human expertise is provided by traditional education. It is clear that E-learning does not provide the human experiences that traditional education provides, and this is considered an obstacle ahead of E-learning.

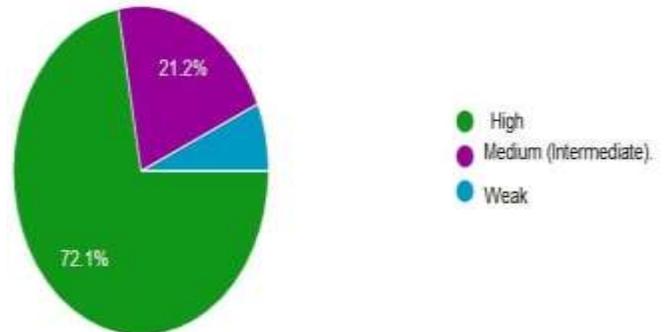
**Twenty-first:** according to the twenty-first paragraph of the questionnaire, the intellectual and cultural maturity of the students and the acquisition of practical and applied skills cannot be achieved through E-learning according to Chart (21) below.



**Chart 21. showsthe intellectual and cultural maturity of the student.**

In Chart (21), and according to the responses of 78.8% the sample, E-learning does not provide the student's intellectual and cultural maturity and does not help them acquire practical and applied skills while 21.2% see that E-learning develops and improves the maturity of the intellectuality of the students. The study shows that E-learning does not develop the intellectual and cultural maturity of the students and the acquisition of practical and applied skills.

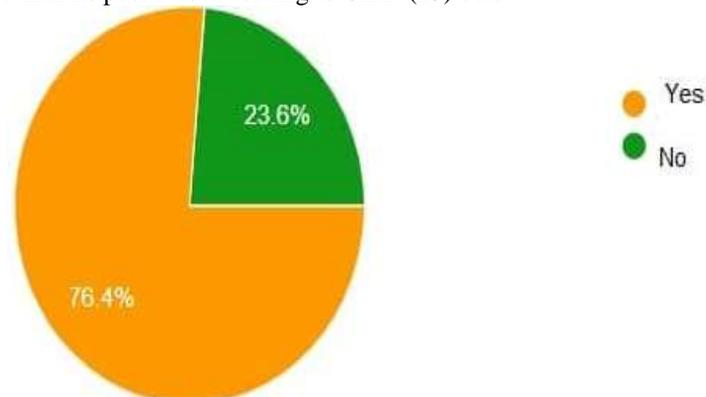
**Twenty-second:** The twenty-first paragraph of the questionnaire explains the extent of experience faculty members get from designing electronic educational content. See Chart (22) below.



**Chart 22. showsthe extent of the faculty members experience in designing electronic educational content.**

In Chart (22), the sample's answers of 72.1% illustrate the medium experience in designing electronic educational content, 21.2% of the responses refer to high skills in designing educational content, and 11.6% of the responses express weakness in designing electronic educational content. This is considered as obstruction to the use of E-learning due to the lack of skills among faculty members in designing electronic educational content.

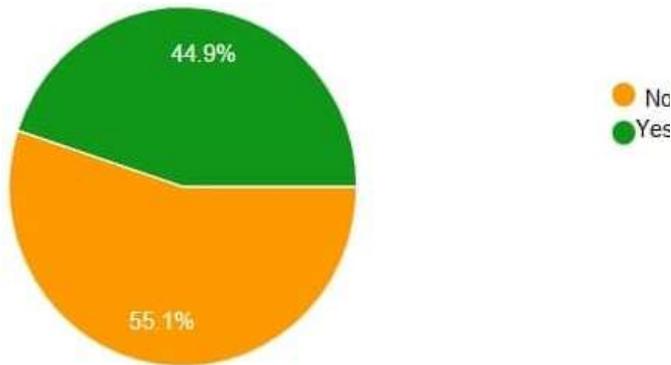
**Twenty-third:** The twenty- third paragraph of the questionnaire clarifies that the negatives of E-learning are more than its positives according to Chart (23) below.



**Chart 23. showsthe disadvantages of E-learning are more than its positives.**

In Chart (23), the answers of 76.4% of the sample reveal that the disadvantages and negatives of E-learning are more than the positives, and that the answers of 23.6% indicate that the positives of education are less than the negatives. This proposes that the disadvantages of E-learning are more than its positives.

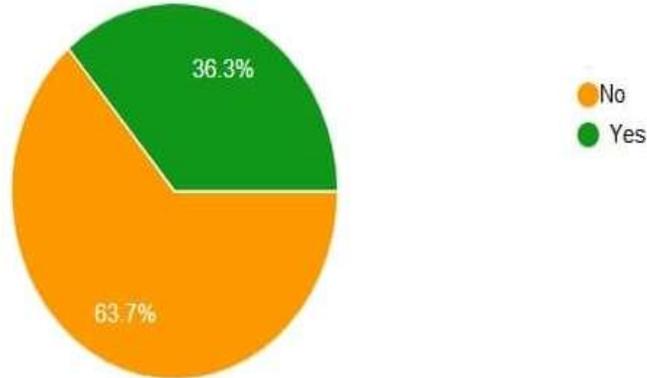
**Twenty-fourth:** The twenty- fourth paragraph of the questionnaire talks about the role of faculty members in providing digital educational content for the curriculum according to Chart (24) in below.



**Chart 24. showsthe provision of digital educational content for the curriculum by the faculty members.**

In Chart (24), and in accordance with the answers of 55.1% of the sample, faculty members do not provide electronic educational content for the curriculum and that 44.9% of them provide electronic educational content for the curriculum. Most teachers do not provide digital educational content to improve the curriculum because of the poor skills of faculty members in designing digital content, which causes an obstacle in the use of E-learning.

**Twenty-fifth:** The twenty-fifth paragraph of the questionnaire examines the extent of educational resources in support of the curriculum in digital forms according to Chart (25) below.



**Chart 25. showstheprovision of educational resources in support of the curriculum in digital forms.**

In Chart (25), and based on answers of the sample, 63.7% think that educational resources are not provided in support of the curriculum in a digital form, while 36.3% see that educational resources are provided in support of the curriculum in a digital form. Most teachers do not provide digital educational content to support the curriculum because of the poor skills of faculty members in designing digital content, which causes an obstacle in the use of E-learning.

### XIII. CONCLUSION

After analyzing the results of the questionnaire which was distributed to a study sample consists of 165 male and female teaching staff (faculty

members) from most Iraqi universities, the researchers have come up with the following results:

1. Faculty members rely on synchronous programs to deliver scientific material to their students such as Google Meet, Zoom, Fcc and asynchronous programs such as telegram, Whatsapp, and Google Classroom.
2. Most of the sample has intermediate skills in the use of computers and mobile devices(personal digital assistants cell phones, etc.), especially within the humanitarian specializations.
3. The lack of educational material constitutes a major obstacle to E-learning, especially when universities do not provide programs or E-learning requirements for teaching staff. Thus, the teachers are forced to rely on free programs which do not provide many of the sober features that completely govern the management of the E-classroom.
4. The lack of a coherent strategic plan and a clear methodology for E-learning. Most of the decisions of the Ministry of Higher Education and Scientific Research negatively affect the actual evaluation of the student's performance, as there are many unexpected decisions that affect both the student and the teaching staff (faculty members).
5. The lack of infrastructure that uphold the use of E-learning such as slow Internet connections and the absence of devices, equipment and educational programs.
6. The difficulty of evaluating students in E-learning.
7. Teaching staff (faculty members) lack skills in designing digital educational content for students.
8. Insufficient educational resources to support improving the curriculum for the students.
9. Students lack the knowledge of backing up E-learning, seriousness in attending, interacting and communicating with the teaching staff (faculty members) during the lectures of E-learning, besides the student's failure to listen to the entire lecture due to the interruption of the Internet.
10. Student feel bored during E-learning and lack commitment to attend classes and interact.
11. E-learning does not achieve educational objectives nor does it develop the educational values that the university is working to develop among students.
12. E-learning provides flexible learning opportunities to students in terms of time, place and pace of learning whether they are at home, in the office or anywhere, giving greater opportunity for learning and education.
13. E-learning reduces travel expenses to obtain certification and education.
14. E-learning influences the interaction between the students and the teachers, thus reducing social coexistence

15. The teaching staff is not satisfied with the use of synchronous and asynchronous methods during E-learning.
16. E-learning does not endorse human and social experiences provided by in-person education (traditional education).
17. E-learning provides different teaching methods.

#### XIV. RECOMMENDATIONS

In the light of the results of the study, the researchers recommend the following:

1. Developing the skills of the teaching staff (faculty members) by training them how to use computers and mobile devices (personal digital assistants cell phones, etc.) and E-learning platforms.
2. Training teaching staff so as to be qualified in designing electronic educational content to provide educational resources in support of the curriculum.
3. Universities should provide teachers with paid programs and material facilities to help them cope with E-learning.
4. Universities should adopt a clear strategic plan to enhance E-learning.
5. Education higher authorities should take sudden and quick decisions about E-learning because that causes confusion for the teaching staff (faculty members) and the students.
6. Educate students and guide them to invest in E-learning to develop their knowledge.
7. Urging the Ministry of Communications and Internet service providers to strengthen the Internet signal and not to interrupt it.

#### REFERENCES

- [1]. Abdel-Gawad, T. S. (2011). Investigating the efficacy of e-learning for Egyptian higher education. Ph.D. thesis. Southampton, England., United Kingdom: University of Southampton. Retrieved from <https://eprints.soton.ac.uk/194231/1/thesis.pdf>
- [2]. Afaneh, M., Basile, V., Bennett, J., Berman, P., Bond, M., Border, J., & et al. (2006). E-Learning Concepts and Techniques. Bloomsburg, Pennsylvania, USA: Bloomsburg University of Pennsylvania's Department of Instructional Technology. Retrieved from [https://engineering.futureuniversity.com/BOOKS%20FOR%20T/E%20learning%20%20\(2\).pdf](https://engineering.futureuniversity.com/BOOKS%20FOR%20T/E%20learning%20%20(2).pdf)
- [3]. Aguti, B. (2015). A Model to facilitate effective E-learning in technology-enhanced learning environments within universities. Ph.D. thesis. Southampton, United Kingdom: University of Southampton. Retrieved from <https://eprints.soton.ac.uk/409713/1/Aguti.pdf>
- [4]. Al-Fadhli, S. (2008). The impact of E-learning on student's critical thinking in higher education institutions Kuwait University as a case study. Ph.D. thesis. Salford, Greater Manchester, United Kingdom: University of Salford. doi:10.1080/02602930802117032
- [5]. Azeta, A., Ayo, C., Atayero, P., & Omeregbe, N. (2010). INTELLIGENT VOICE-BASED E-EDUCATION SYSTEM: A FRAMEWORK AND EVALUATION. International Journal of Computing, 9(4), pp. 327-334. Retrieved from <http://eprints.covenantuniversity.edu.ng/3570/1/10AAFAAE.pdf>
- [6]. Balaji, R., Al-Mahr, F. A., & Balaji, M. (2016). A Perspective Study on Content Management in ELearning and M-Learning. arXiv. Retrieved from <https://arxiv.org/ftp/arxiv/papers/1605/1605.02093.pdf>
- [7]. Blake Short, H. J. (2016). The Hidden World of e-learning in Small and Medium Enterprises. Ph.D. thesis. Hampshire, Hampshire, United Kingdom: University of Portsmouth. Retrieved from [https://researchportal.port.ac.uk/portal/files/6597196/Heather\\_Short\\_PhD\\_Thesis\\_Final\\_2.pdf](https://researchportal.port.ac.uk/portal/files/6597196/Heather_Short_PhD_Thesis_Final_2.pdf)
- [8]. Chau, Y. (2017). What predicts workplace self-paced e-learning outcomes?: an exploratory study of motivation, self-regulated learning characteristics, and organisational contextual factors. EdD thesis. Nottingham, United Kingdom: University of Nottingham. Retrieved from <http://eprints.nottingham.ac.uk/51641/1/Thesis%2020180509-%20%20-%20Yat%20Kwong%20CHAU%20-%204090999.pdf>
- [9]. Dare, F. (2011). A NOVEL METHODOLOGY FOR E-LEARNING SPACE DESIGN IN HEI CAMPUSES. Ph.D. thesis. Staffordshire, England: University of Wolverhampton. Retrieved from [https://www.researchgate.net/publication/261626921\\_Fadeke\\_Taiye\\_Dare\\_PhD\\_THESIS\\_-\\_A\\_Novel\\_Methodology\\_for\\_E-Learning\\_Space\\_Design\\_in\\_HEI](https://www.researchgate.net/publication/261626921_Fadeke_Taiye_Dare_PhD_THESIS_-_A_Novel_Methodology_for_E-Learning_Space_Design_in_HEI)
- [10]. Ellaway, R., & Masters, K. (2008). e-Learning in Medical Education. Dundee, UK: Association for Medical Education in Europe (AMEE). Retrieved from [https://amee.org/getattachment/Covid-19/eG32\\_Electronic.pdf](https://amee.org/getattachment/Covid-19/eG32_Electronic.pdf)
- [11]. Harakchiyska, T. (2010). learning objects and their role in enhancing the quality of web-based teacher training courses. the 6 in international scientific conference elearning and software for education, (pp. 4-5). bucharest. Retrieved from [https://www.researchgate.net/publication/229046340\\_LEARNING\\_OBJECTS\\_AND\\_THEIR\\_ROLE\\_IN\\_ENHANCING\\_THE\\_QUALITY\\_OF\\_WEB-BASED\\_TEACHER\\_TRAINING\\_COURSES](https://www.researchgate.net/publication/229046340_LEARNING_OBJECTS_AND_THEIR_ROLE_IN_ENHANCING_THE_QUALITY_OF_WEB-BASED_TEACHER_TRAINING_COURSES)
- [12]. HEINZE, A. (2008). BLENDED LEARNING: AN INTERPRETIVE ACTION RESEARCH STUDY. PhD thesis. Salford, Switzerland: University of Salford. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?jsessionid=D23470CF7351420D511B7236C707AADA?doi=10.1.1.399.8791&rep=rep1&type=pdf>
- [13]. Horton, W., & Horton, K. (2003). elearning tools and technologies. (R. M. Elliott, Ed.) Canada: John Wiley & Sons. Retrieved from [https://www.academia.edu/39818898/Horton\\_2003\\_E-learning\\_Tools\\_and\\_Technologies](https://www.academia.edu/39818898/Horton_2003_E-learning_Tools_and_Technologies)
- [14]. Kisanga, D. (2015). Investigation of attitudinal factors towards the transition from face-to-face e-learning in Tanzanian higher learning institutions : a mixed methods approach. Ph.D. thesis. Nottingham, United Kingdom: Nottingham Trent University. Retrieved from [http://irep.ntu.ac.uk/id/eprint/97/7/220969\\_Dalton\\_Kisanga.pdf](http://irep.ntu.ac.uk/id/eprint/97/7/220969_Dalton_Kisanga.pdf)
- [15]. Pinpathomrat, N. (2013). A model of e-learning uptake and continuance in Higher Educational Institutions. IADIS

- International Conference e-Learning (pp. 423- 427). International Association for the Development of the Information Society. Retrieved from <https://files.eric.ed.gov/fulltext/ED562355.pdf>
- [16]. Rakhoot, W. A. (2015). Institutional and individual barriers of e-learning adoption in higher education in Oman: academics' perspectives. Ph.D. thesis. Glasgow, Scotland: University of Strathclyde. Department of Computer & Information Sciences. Retrieved from [http://digitool.lib.strath.ac.uk/webclient/StreamGate?folder\\_id=0&dvs=1627069972681~718&usePid1=true&usePid2=true](http://digitool.lib.strath.ac.uk/webclient/StreamGate?folder_id=0&dvs=1627069972681~718&usePid1=true&usePid2=true)
- [17]. Sangrà, A., Vlachopoulos, D., & Cabrera, N. (2012). Building an Inclusive Definition of E-Learning: An Approach to the Conceptual Framework. *International Review of Research in Open and Distance Learning*, 13(2), pp. 145-159. doi:10.19173/irrodl.v13i2.1161