

# CORONA PANDEMIC AND ITS ROLE IN THE TREND TOWARDS ELECTRONIC EDUCATION IN THE ARAB COUNTRIES, WITH A SPECIAL REFERENCE TO IRAQ

Eman Abdal Kadhem Jabbar, Kerbala University

Huda Z. Miklif, Kerbala University

Amel Asmar Zaboon, Kerbala University

## ABSTRACT

*E-learning is a relatively modern and contemporary method, whose emergence has led to transformations in some methods of teaching and learning that have contributed to enhancing its effectiveness, and has resulted from technological developments and the educational process has been directly affected by the automation of the industry, the development of artificial intelligence technology, the Internet of things, and the information technology revolution.*

**Keywords:** E-Learning, Economics, Internet of Things, Information Technology Revolution, Artificial Intelligence.

## INTRODUCTION

The Corona pandemic that swept most countries of the world, including the Arab countries at the end of 2019 and caused the disruption of various educational institutions in them, had a great role in the direction of adopting electronic education as an alternative and the urgent necessity for the continuation of the educational process by creating a virtual environment that allows the continuation of the teaching and learning process under the conditions of social distancing.

### The Significance of the Study

The importance of this research lies in the fact that the spread of the Coronavirus pandemic has a great role in the orientation of many countries of the world towards electronic education, including the Arab countries and Iraq, in order to avoid the compulsory discontinuation of students who attend the educational institutions and to achieve the principle of social distancing.

### Objectives of the Study

1. Knowing the concept of e-learning and the most important goals and obstacles facing its application.
2. Learn about the Corona pandemic, its causes, the most important effects and its role in the direction of electronic education.
3. Analyzing the reality of e-learning in the Arab countries and Iraq in light of the Corona pandemic.

### The Problem Statement

The problem statement lies in the following questions

Do Arab countries, including Iraq, have an e-learning infrastructure? What is the extent of readiness of both the professor and the student to delve into this field?

### **The Hypothesis of the Study**

The Coronavirus pandemic had a positive role in the trend towards adopting e-learning in Arab countries, including Iraq, despite the weakness and limited infrastructure needed for this approach.

### **The Concept**

E-learning is a relatively modern concept, and an important and basic necessity for all societies, whether developed or developing, especially in light of the rapid technological changes because this type of education provides educational opportunities and services that surpass the difficulties that traditional education includes. Several terms have been used to express it, including distance education and computerized electronic education. It relies on computers and internet networks to transfer knowledge and skills and takes the form of interactive meetings over the Internet, in which students can interact with teachers, and receive assignments and tasks from them at the same time through virtual classes (Ayed et al., 2010). Many definitions have been received about this concept, as both Basila & Cavafadze defined it (as an organized process aimed at achieving educational outcomes using technological means that provide sound, image, films and interaction between the learner, content and educational activities at the appropriate time) Basilaia & Kavvadze, (2020) Some have defined it as an interactive system that works on the use of information and communication technology in education and adopts an integrated digital electronic environment that works on displaying curricula, conducting electronic exams and managing resources via electronic networks. While others knew it as providing educational content and its contents of explanations, exercises, interaction and follow-up partly or comprehensively in the classroom or remotely through advanced programs stored in the computer or by a group of means, including computers, the Internet and electronic programs prepared for this purpose (Hamad & Abbas, 2018).

### **The Importance of Electronic Education (Al-Awada et al., 2012):**

1. Take advantage of the educational and learning resources available on the Internet, which may not be available in many countries and societies, especially developing countries.
2. Supporting new teaching methods that depend on the learner and focus on the importance of his abilities and capabilities.
3. Increase investment returns and reduce costs.
4. Benefiting students with special needs who are unable to come daily to school because of the high cost of transportation or disruption of public transport.
5. Benefiting residents of remote communities in the field of education and training using information and communication technology.
6. Providing education at any time and place according to the learner's ability to attain.
7. In e-learning, the learner will not stop at acquiring educational knowledge and skills, but will acquire skills to deal with modern technologies in communication and information that have become in this era a measure of development.

## Objectives of E-learning

E-learning seeks to achieve a set of goals, whether at the level of the individual or at the level of society, and among the most important goals that e-learning aims to achieve are as follows (Fernandt, 2020):-

1. It seeks to establish an infrastructure and a base of information technology based on cultural foundations for the purpose of preparing the society of the new generation for the requirements of the current century.
2. Development of the positive trend towards information technology through the network by parents and local communities.
3. Improving the level of effectiveness of teachers and increasing their experience in preparing scientific materials.
4. Providing the scientific material in its electronic form for the student and the teacher.
5. It helps the student to understand more depth in the lesson, as he can return to the lesson at any time and also helps him to carry out his school duties by referring to the various sources of information on the Internet or the electronic material that the teacher provides to his students combined with multiple examples and thus the student will keep the information for a longer period because it has become Integrated sound and image.

## Challenges Facing the Application of E-learning

There is a set of challenges and obstacles that prevent e-learning from achieving its goals fully and the most important of those obstacles are Gayel (2020):

1. Weakness of the technical infrastructure of most Arab countries needed to shift towards electronic education, including providing computer equipment and its requirements, facilitating communications, and providing permanent maintenance of the Internet.
2. Difficulty connecting to the Internet and its high fees.
3. The teacher's lack of readiness to use technology and the learners' lack of familiarity with the skills of using modern technologies such as computers and browsing in routine communication networks.
4. Fear of faculty members about reducing their role in the educational process and transferring their role to educational software designers and education technology specialists.
5. Society's view of e-learning as having a lesser status than formal education.
6. Difficulty in applying evaluation tools and methods.

## Corona Pandemic: Concept, Causes and Effects

The Coronavirus pandemic is one of the most severe health crises that the world faced in the modern era, and it is a global viral pandemic that began in Wuhan in early December 2019 and spread throughout the world and it was called (Covid-19). It was defined as an epidemic that spreads on a very wide scale, exceeding international borders and affecting a large number of individuals. And there are those who know it as an epidemic that spreads across large geographical areas covering multiple continents and the world at large (Jabel, 2020). The spread of this disease was helped by a number of factors or causes that led to its spread in all parts of the world, including human relations with the countries in which the epidemic spread (Iran, and the countries of Europe and East Asia) are among the most important reasons that helped spread it. In addition, the high population density of many countries, the scarcity of means of detecting and treating infections, and the social proximity associated with Arab cultures, in addition to the high

percentage of young people with high mobility that may contribute to the spread of the epidemic in their social and family environments (Fernandt, 2020).

The spread of this virus among the countries of the whole world had many economic and social impacts on various sectors of the economy, including:

1. **The oil sector:** as the decline in crude oil prices as a result of the decline in global demand led to a decrease in oil revenues, which greatly affected the general budgets of countries with rentier systems whose income depends on selling crude oil.
2. **The tourism sector:** It is one of the sectors that witnessed great damage, which was represented by the cancellation of many trips and tourism services, the suspension of the work of airports and cross-border transport as a measure to prevent transmission of infection, which affected many countries that rely on the tourism sector as a main source of income and job creation.
3. **Health care:** With the rapid spread of the virus and thus the expansion of the scope of infection, the arrival of countries that suffer from weakness in their health systems led to the collapse of the health sector with limited capacity and its inability to respond to limit the spread of the virus.
4. **Gross domestic demand:** demand is the most important engine of the economic wheel, and in cases of crises and wars, the demand is rationalized to the minimum and is directed only to the necessities of goods, and in the light of the pandemic, we find that the demand is directed towards medical materials such as sterilizers, masks, gloves, ventilators, medicine for treating this virus and foodstuffs.
5. **The education sector:** as the pandemic affected this sector significantly, as most schools and universities were closed in most countries of the world that the epidemic reached and resorting to the distance education process, which increased the demand for communication and Internet services and negatively affected the capacity and quality of Internet services.
6. **Unemployment and poverty:** The year 2020 witnessed the highest levels of global poverty due to the decline in incomes, demand and employment, due to the inability of the public and private sectors to provide any solutions to reduce the crisis of poverty and unemployment.
7. **Foreign Trade:** The foreign trade sector is an important economic sector, and the process of disrupting it has had a major impact on the economies of exporting countries, with a decline in growth indicators in them (Zweir & Abdul-Kadhim, 2020). It can be said that the economies most affected economically in the short term are those that suffer from weakness in their health systems or that depend heavily on the trade or tourism sector, or the remittances of workers abroad or have or exports of primary goods, but in the long term, the pandemic will lead to stagnation Acute and lasting repercussions on the potential output through reducing investment and innovation rates, erosion of human capital, withdrawal from global trade and disruption of supply chains, causing financial crises for these economies (Al-Shboul & Elyan, 2014).

### **The Role of the Corona Pandemic in E-learning**

The spread of the Corona virus has led to the declaration of a state of emergency in all parts of the world with the aim of limiting the spread of this virus, which resulted in the closure of most educational institutions and education became in real danger, which led to the trend towards electronic education in order to maintain the continuity of providing educational services (Al-Hashemi & Khaled, 2017). This required many countries to take decisive and rapid measures to mitigate the development of the pandemic, and one of them was to stop attending schools and universities and adopt the method of distance learning in most parts of the world, and this contributed to the emergence of new forms of educational innovation that call for the digitalization of education, where the epidemic was A compulsory incentive for educational institutions to search for new solutions in a short period of time while facing the spread of the virus with the inevitability of preventing direct contact between students and teachers (Al-Banna, 2020).

Through the e-learning process, most students are forced to stay at home and not come to schools and universities, and this has led to the division of society groups in two parts. The first stressed the need to resort to electronic education, especially those with specializations. The second part is the educators who were afraid of this idea because there a clear difference between e-learning and traditional education. Which can be clarified through Table 1?

S.No.	E-Learning	Traditional Learning
1	E-learning offers a new type of digital culture that focuses on processing knowledge and helps the student to be the focus of the learning process, not the teacher	Traditional education depends on the traditional culture that focuses on the use of knowledge and the teacher being the basis of the learning process.
2	E-learning needs a high expense, especially at the beginning of its process to equip the infrastructure of processing software and students	Traditional education does not require the cost of e-learning in terms of infrastructure and training of teachers and students to acquire technical competencies
3	E-learning is virtual and asynchronous education	Traditional education is synchronous education.
4	The scientific content is more exciting and motivating for students to learn, as it is presented in the form of written texts, static and moving images, video clips, drawings and diagrams, and it is in the form of an electronic course	The content is presented as a hard copy containing written texts
5	The freedom to communicate with the teacher at any time to ask questions that he wants to answer, by e-mail and chat rooms	Communication with the teacher is limited to class time and questions are asked during lesson time
6	Attention to immediate feedback technology	Feedback has no role in the traditional educational process
7	Ease of updating the provided instructional materials with all that is new.	The educational materials remain stable without change or development for many years.

**Source:** Tariq Hussein Farhan, and the difficulty of employing electronic education in Palestinian universities in Gaza as seen by professors and students, published master's thesis, Al-Azhar University, Palestine, 2012, 33-34.

The difference in opinions about resorting to the e-learning process and protecting the educational process and not making a decision about adopting this type of education will lead to damage to the educational process. This can be seen through the statistics confirmed by UNESCO, which made it clear that the number of students who were forced by the Corona pandemic to stop

attending. It is one billion and (344) million and (914) thousand students in most countries, i.e. 82.2% of the students enrolled in schools.

Therefore, most countries of the world have resorted to the e-learning process as one of the important educational means in such a crisis in the field of education and the need to enable hundreds of millions of students for the purpose of learning after they lost the opportunity to go to educational institutions due to the Corona pandemic (Al-Dawood, 2020). Several programs and applications have been used in this field, as some countries used live TV broadcasts to broadcast educational materials, and some of them used asynchronous online education tools through google-classroom and moodle and many others Which contributed to the acquisition of new digital skills, and with the increase in the spread of 5G technology in countries such as China, Japan and the United States, it was found that governments have adopted the concept (learning anytime and anywhere) that will make educational bodies adopt traditional education in new educational methods and move from direct broadcasting to Using hologram, virtual and augmented reality technologies to make education more efficient, attractive and sustainable (Nassar, 2020).

### **The Reality and Challenges of e-learning in Arab Countries in Light of the Corona Pandemic:**

The importance of e-learning has emerged in light of the Corona pandemic as the most appropriate alternative to avoid the consequences of the pandemic on the educational process and ensure its continuity, as a result of the closure of most countries in the world, including Arabic, educational institutions from schools and universities for fear of the spread of the virus despite the lack of capabilities and requirements for this transformation, such as weak infrastructure The lack of legislation and laws necessary to use these technologies (Madi, 2020).

Despite the widespread use of the Internet in the Arab countries, many of them have not previously tested the technologies provided by e-learning, and Arab experiences are still modest in this field, until the Corona pandemic came to force these countries to make a sudden transition towards distance education and the concerned ministries tried to facilitate the process by creating E-learning platforms As the Moroccan Ministry of Education provided educational platforms and free entry to them, so that the number of users of the National Education Portal increased to (600) thousand per day and the number of digital materials photographed in it reached (3000) in April 2020. As for the Egyptian Ministry of Education, it launched the Edmodo website, which allows communication between students and teachers are planning to benefit 22 million students from this site (Berg & Simon, 2018).

From Table 2, it can be noted the number of schools and universities that have been closed due to the pandemic.

<b>Country</b>	<b>Number of learners enrolled in pre-primary to secondary education</b>	<b>Number of learners assigned to the higher education decision</b>
Algeria	9,492,542	743,640
Bahrain	247,489	44,94
Egypt	23,157,420	2,914,473
Iraq	7,010,788	424,908

Jordan	2,051,840	320,896
Kuwait	632,988	116,336
Lebanon	1,510,198	375,028
Morocco	7,886,899	1,056,256
Palestine	1,404,021	222,336
Qatar	309,856	33,668
Saudi	6,789,773	1,620,491
Syria	3,491,113	697,415
UAE	1,170,565	191,794

Source: ar.m. wikipedia.org

The aim of the closure was to prevent the spread of this virus among its members, and most Arab governments sought to resort to e-learning because the process of closing schools negatively affected the course of the education process (Basilaia & kavvadze, 2020). And that this sudden transformation towards a new educational style that has not been prepared in any way in most Arab countries has led to facing many challenges, the most prominent of which are the following (Forsyk, 2019).

1. The Arab countries suffer from a weakness in the infrastructure of information technology, which is the result of the weak spread of rapid communication technologies, their scarcity and their inefficiency compared to the means of communication in developed countries.
2. Lack of awareness about the importance of distance education and a negative view of it, which limits the possibility of achieving its goals
3. The high economic costs and the deficit of the financial capabilities of the educational institutions in filling the major shortage in the main technologies needed for e-learning.
4. Weak commitment of students and their parents to follow distance education programs.
5. Lack of helping environment for e-learning at home, such as computers, the Internet, and others
6. The transition to e-learning requires amending some laws that stand in the way of its implementation.

### **The Tendency of Iraq to use-learning and the Most Important Obstacles to its Development**

It is no secret to anyone in our world today the complete closure of schools and universities due to the spread of the Corona pandemic as one of the preventive measures to limit the spread of the epidemic, which has generated a feeling of anxiety about taking alternative measures and creative ways to sustain education, and despite the global agreement on the difficulty of compensating the presence of teachers and the direct educational relationship with students, however, the general trend was towards distance education and the use of digital technologies and social networks as one of the proposed solutions (Hamdan, 2021).

In Iraq, we find that the initial cases of the epidemic have prompted the government to take measures, including closing schools and universities after weeks of regular working hours in educational institutions that have been closed since October of last year in response to the demonstrations calling for political reform and improving the economic and civil situation in the country (Al-Najjar & Amer, 2021). And the trend towards e-learning and educational platforms such as (Moodle) and (google classroom) have become the closest realistic solutions for educational and educational uses. The privileges and additions provided by Google have made a big difference to the learning platform by making it free after it was in exchange for money such as the google hangout platform. It allows the teacher to give direct lessons, record them manually, and store them in the cloud and the platform (cisco webex-meetings), in which the session time

has been made open and the number of participants increased to (100) participants, which contributed to the sustainability of education in Iraqi universities by using these platforms to communicate with students and download study materials. In the form of files and a video caption (Sunu & Al-Misrati, 2021). For example, we find that the Faculty of Engineering at the University of Mosul has completed more than 4000 electronic lectures as part of the e-learning project alternative to traditional education, with an attendance rate ranging between (65-85)%, and the completion rate in the first phase was (23%) and in the second phase (17.9%) As for the third stage, the achievement rate was about (18.9%) and the fourth (23.1%). As for postgraduate studies (diplomas, masters and doctorates), the achievement rate reached (10.9%) (Abdoun, 2020).

As for the Ministry of Education, it launched the Newton platform for distance education in order to ensure the continuation of the study in addition to the presence of educational television, which is an educational channel that provides integrated video lessons for the curricula in Iraq.

Although going to e-learning was one of the urgent solutions for the sustainability of the educational process, the process of implementing it in Iraq has faced many obstacles and difficulties, and the most important of them can be highlighted as follows (Al-Shboul & Elyan, 2014):

1. Weak information technology infrastructure in Iraq, where educational institutions in Iraq lack the technological infrastructure, due to the lack of laboratories and technical expertise that contribute to preparing an efficient educational system and monitoring errors in the event they occur.
2. The insufficient availability of electronic education supplies, such as computers and electronic display devices, Internet networks, a communication network between universities, research centers and institutions, and the lack of databases, in addition to that, a shortage of technical personnel trained in operating and maintaining communication means.
3. The negative attitude of some faculty members against e-learning.
4. Poor English language proficiency for most students and a large percentage of the teaching staff, which puts obstacles in the way of applying for e-learning, as most of the software and teachers are written in the English language.
5. Privacy and confidentiality (attack and piracy on the main websites on the Internet), which could affect the electronic courses and exams.
6. The continuing need to train and support learners and teachers on how to learn and teach using the Internet.

## CONCLUSION

Covid 19 disease is the most dangerous pandemic that affects the whole world, Arab countries, and Iraq in particular, where this pandemic came to shake the world severely. This epidemic came at a time when Arab countries, especially Iraq, were under great pressure due to weak social protection systems and high unemployment rates, especially among youth, which helped this to The emergence of demonstrations in some Arab countries, including Lebanon and Iraq in particular, and in the event of the occurrence and spread of this disease, it will have political, economic and security implications that will lead to further instability in Arab countries, especially Iraq. The Corona pandemic had an impact on the educational level, as most schools and universities in Iraq were closed, which made the government resort to electronic education, which is an alternative means for traditional education, and despite the fact that electronic education has a very great potential in giving the opportunity to education to many groups of society, especially those groups that have missed the opportunity to get an education, but education in Iraq faces many obstacles, the most important of which is the lack of infrastructure and access to the training



of administrative and educational staff. Therefore, the Iraqi government must provide material support to provide the requirements and technologies of e-learning from computers, electronic display devices, communication networks through the Internet and others, in addition to the Iraqi government seeking to establish training courses for teachers and students using information and communication technology means and software.

## REFERENCES

- Abdoun, A. (2020). The implications of the global education crisis in light of COVID-19 (the Iraqi experience) is available at <http://www.coronavirus.cihanuniversity.edu.iq>.
- Al-Awada, T.H.F. (2012). Difficulties in employing electronic education in Palestinian universities in Gaza as seen by teachers and students, *published MA Thesis, Al-Azhar University, Palestine*.
- Al-Banna, H. (2020). The economic effects of the Corona epidemic - Opinion today, 2020 on the website <http://www.raialyoum>.
- Al-Dawood, A.M. (2020). E-learning in the time of Corona 2020, on the website <http://www.alarably.net>.
- Al-Hashemi, M., & Khaled, T. (2017). E-learning in Algerian universities between reality and expectations: a field study on his own from the city of Messila, *Journal of Studies in Education Sciences*, 3(1), 11.
- Al-Najjar, A.A., & Amer, G.M. (2021). The Individual and the State - The Effects of the Coronavirus Crisis and the Expected Results, The Arab Center for Research and Studies is available at [www.acrsse.org](http://www.acrsse.org).
- Al-Shboul, M.A., & Elyan, Z.M. (2014). E-Learning, 1st Edition, Jordan.
- Ayed, H., & et al., (2010). Obstacles to using the e-learning system from the viewpoint of secondary school teachers in the Koura District. *The Jordanian Journal of Educational Sciences*, 6.
- Basilaia, G., & kavvadze, D. (2020). Transition to online Education in shehods during as ARSG0.2 cotonavirus (COVID19) pandemic Georgia.
- Berg, G., & Simon, M. (2018). Distancelarning Brigannica. <http://www.britannica.com/topic/distance.learning>.
- Fernandt, H.A. (2020). Corona virus in the Arab countries - a passing storm - an opportunity for change or a regional catastrophe, Alcanua Institute for International and Strategic Studies, Madrid.
- Forsyk, A. (2019). Corona Pandemic will cause permanent economic wars around the world Available at [www.worldbank.org](http://www.worldbank.org).
- Gayel, H.K. (2020). The Iraqi Strategy for Managing the Corona Pandemic Crisis - Concepts and Figures, Samar University, Iraq.
- Hamad, J.A., & Abbas, S.M. (2018). E-learning in Iraq and its legal dimensions, *Journal of the Babylon Center for Humanitarian Studies*, 1(1), 253.
- Hamdan, H.R. (2021). Education in the Time of Coronavirus and E-learning among the challenges and solutions available on the website [www.http://Athayat.com](http://Athayat.com)
- Madi, S.K.A. (2020). E-learning in light of the Corona pandemic (Covid 19) on the website <http://www.protat.and.my>
- Nassar, J. (2020). Distance education in the time of the Corona pandemic, 2020 on the website <http://www.turkpeess.com>.
- Sunu, S.A., Al-Misrati, S.M. (2021). "Application of e-learning in Libyan educational institutions in light of the crises and the Corona pandemic, a theoretical study". The first hypothetical international conference on the Corona pandemic, the reality and the economic and political future of Mediterranean countries. Available at <http://www.reserchgate.net/publication/345896615>
- Zweir, H., & Abdul-Kadhim, I. (2020). Trends of Human Development in Light of the Corona Pandemic, a workshop presented to the College of Business and Economics, University of Karbala.