The Impact Of Educational Technology Innovations In The Quality And Enhancement Of The World Ranking Of The University Of Babylon - Iraq

Asst. Prof. Salman Abood Zbar

Technical institute of Al-Mussaib, AL- Furat AL-Awsat Technical university (ATU), 51009, Iraq ,
Email: Abood99@gmail.com

Abstract

The study sought to identify the extent of the impact of educational technology in the quality of education and to enhance the level of world ranking of the University of Babylon (study population) on a sample of its teachers, which consisted of (90) person from the university to express their opinions through a questionnaire developed for this purpose, descriptive statistics were used and simple linear regression to enterprise the relationship between the variables. The study reached that there is an effect relationship. In the use and employment of educational technology (independent variable) in the dimensions of the quality of higher education (dependent variable) (quality of curricula, quality of scientific research, quality of libraries, and quality of university teachers). Which has an impact on enhancing the level of world ranking of the University. The study recommends that the University of Babylon should pay more attention to the use and employment of educational technology and its innovations, as it has not achieved a high level in this field. It is also a national project that can be invested in its.

Key words: Educational technology, world ranking, innovations teaching, E-learning

Introduction

Life has changed in all fields, especially the social and economic imposed by the Corona pandemic (Covid-19). It is that the old scenarios that governed our way of life have changed. Despite this, the effects caused by Covid-19 represented, at the same time, a new opportunity to rethink the future of our economic, social and service activities Including education activities, which have been affected more and more deeply than other sectors, as a process linked to the future of generations, which needs treatments of another kind.

Education trends and interest in the educational process have changed, and perhaps the most prominent of these trends is the emergence of the concept of education technology as the most important entry point that helps overcome the challenges of this era that contribute to achieving added value that enables it to compete and continue to face the developments brought about by that technology and the extent of its contribution to the field in which it operates. The information and technology revolution in the process of intellectual communication with the world had its reflection on the performance of higher education, as researchers realized the importance of educational technology to raise the level of education and improve the performance of higher education institutions and achieve their goals and

interest in improving the quality of education through the use and employment of that technology to move from traditional education to use and employment of technological innovations .The concept of education technology appeared as (the integration of information technology in the educational field, which enhances and expands educational opportunities, improves the results of the educational process, and gives students and teachers the skills to deal with various devices and electronic programs) (**1**), which poses a challenge for Iraqi universities to work on developing and supporting to raise its competitiveness among global universities he level of ranking and obtaining an arrangement between them, which can be defined (as a mechanism for arranging universities according to specific evaluation elements, with a comparison of universities with each other on the basis of performance). (**2**)

The first topic:

study methodology : The study was presented as follows:

First: Study problem: It has been noticed recently that world ranking focus on the extent to which universities use educational and information technology and their ability to use and employ them in the service of researchers and faculty members in publishing their research products on the global level to achieve a kind of integration with the global intellectual production in various scientific fields and the scientific advancement of the researcher and the university, and the extent of its ability to merge that technology into the educational process, moving from traditional methods of education to the use of modern method In light of the foregoing, the study attempts to answer the following questions:

1. What is the level of impact of educational technology on the quality libraries in University of Babylon ?

2 .What is the role of educational technology on the quality scientific research in University of Babylon

3.What is the degree of availability of educational technology on the quality teacher in University of Babylon ?

4. Are Babylon university working to employing educational technology in enhancing the   of teaching curricula ?

5.Does this technology have a role in activating the quality of higher education in Iraq and raising the working rankingin University of Babylon ?

Second: Study Objectives: This study aims to achieve the following:
1.Identifying the nature of educational technology and its role in improving the quality of higher education inIraq .

2.Attempting to know the role of educational technology in raising the level of world rankings of universities.

3.Shedding light on the concept of the most important world ranking.

Third: The importance of the study

The importance of this study comes as a contribution to the reform of the educational system in Iraq, considering that educational technology is one of the indicators of education quality and its development add to this what is included in the role of educational technology, the transition from traditional education to electronic or blended education, which enhances the improvement of the quality of education in line with the technological developments taking place in the world

Fourth: Study Method: The study relied on the analytical descriptive approach to test hypotheses and answer questions related to evaluating the impact of educational technology in raising the world ranking of Iraqi universities and the quality of their education. It was applied on a sample of (90) individuals at the University of Babylon.

Fifth: Study variables: The study consists of two main variables:

After completing the preparation of the observation questionnaire in its initial form, the researcher verified the validity of the content of the questionnaire by presenting it to a group of arbitrators, numbering (6) arbitrators , this tool was developed based on the opinions of the arbitrators, where the wording was modified and put in its final form, and thus the questionnaire becomes valid for use, and taking their notes is considered as the logical validity of the tool.

The stability of the note questionnaire

The stability of the questionnaire was calculated for the exploratory sample independently for each teacher in the sample, whose number was (5), according to the number of times of agreement Percentage of the agreement coefficient of observers = _____ *100 the number of times of agreement + the number of times of disagreement .

Table(1)The coefficients of agreement of the observations of the respondents

survey sample	Observers agreement coefficients
1.	86.7
2	84.4
3	90.1
4	86.3
5	91.7
Total	439.2
Averge	87.84

The average coefficient of agreement is (87.84), which is a high coefficient of agreement that can be reassured about the stability of the questionnaire.

Table (2) study variables and their measur

Item	Variable		Paragraph	From-To	Cronbach alpha coefficient
	Main	sub			
1.	**Education technolog**	role university in the use and employment of educationl technology	13	1-13	0.912
2.	quality of education and raising the level of world ranking	- quality - libraries	5	14-18	0.882
		scientific research	5	19-23	
		- quality - cirrcula	5	24-28	
		quality teacher	8	29-36	

Overall, the study questionnaire achieved a high consistency coefficient between its paragraphs, which amounted to (0.897) according to the (Alpha - Cronbach) equation, and its stability was tested by the split half method.

Sixth: Society and study sampling represents the study sample community at the University of Babylon, as it is one of the universities that seek to enhance its position in the world rankings of universities. opinions have been take through a questionnaire form prepared for this purpose, where (128) questionnaires were distributed, out of which (38) questionnaires were not valid, as the study sample became represented by (90) questionnaires, (70%) percentage .

Table (3) the characteristics of the study sample at the University of Babylon

College	Scientific Title				size	Percentage
	Teacher Assistant	Teacher	Assistant Prof	Prof		%
Information technology	2	4	4	3	13	%10
College of Science	1	3	4	2	10	%10
College of Engineering	2	2	4	2	10	%10
College of Dentistry	1	4	2	1	8	%10
College of Pharmacy	4	2	3	-	9	%10
College of Education	2	3	4	1	10	%10
College of Law	2	1	4	3	10	%10
Science for girls	1	2	4	3	10	%10

College of Basic Education	3	2	3	2	10	%10
Total					90	

The second topic: This research consists of two requirements :

First requirement:**First: The concept of educational technology:** The term educational technology appeared as a result of the scientific and technological revolution that began in 1920 when the scientist (finn) gave this name. It means planning, preparing, developing, implementing and evaluating the entire educational process from its various aspects and through technical means, working with it and in harmony with the human elements to achieve the goals of education . (**3**) (UNESCO) defined it as "a systematic approach to designing, implementing and evaluating the educational process all in accordance with specific objectives stemming from research results in the field of education and human communication, using human and non-human resources in order to make education more effective or to achieve better and more effective learning" (**4**)The International Encyclopedia of Information Science and Libraries has defined it as "the electronic technology necessary for collecting, storing, processing and communicating information"(**5**)There are two categories of educational technology:1 .which is related to the processing of information such as computerized systems 2 . those related to the transmission of information such as remote communication systems, the term generally includes systems that combine the two categories . It was **defined by the British National Council and the US Presidential Committee** (the media that are used for educational purposes as it is a systematic

method for planning, implementing and evaluating the overall processes of education, and teaching in order to obtain more effective learning). (**6**)Thus, educational technology in its broadest sense is a planning, preparation, development and complete presentation of educational processes and an innovation of processes and sources of solutions from its various aspects, and through various technical tools and environments, all of which work in harmony with human elements to achieve the best learning objectives . (**7**)

The most important trends in educational technology:

Big data, machine learning, and the Internet of things (IoT) are the biggest trends in education technology in 2019. However, distance learning is becoming a trend that is dominating everything. The COVID-19 pandemic has completely changed the way we teach and learn. Due to social distancing, students must now get used to distance learning through digital platforms. Even if some college reopen, this trend may continue, a look at the ten latest trends in educational technology.

Advantages of educational technology:

There are many reasons why teachers are turning to educational technology to replace the traditional pen and paper method of teaching. Here are some common advantages of educational technology: (**8**)

1.Innovative teaching methods : The teacher's ability to use technology in teaching is an innovation in teaching

methods. Education technology provides teachers with a variety of med|ia to respond to different learning styles, such as animation, live video, and so on. In addition, education technology is enabling educators to create online courses, allowing students to learn in their own space .

2.Improving Collaborative: Teaching technology allows everyone to stay connected. Students and teachers communicate, discuss, share their views and take action collaboratively. 3.Teaching and learningprocess **A.** Education technology can help students learn online or offline. It is not always necessary to go to a specific class at a specific time, students can study anytime and anywhere. **B** .Educational technology has changed the way students learn. It has made student learning more interesting and exciting. When we feel involved in learning, we learn better, we remember better and we can use knowledge better. we pick the 10 latest education technology trends to know.: (**9**)

1) E-Learning: Due to the rapid spread of COVID-19 and the closure of schools, distance learning has become the main trend for education in 2020. This has led to an increase in the demand for online educational platforms. E-learning is education or training delivered electronically. It can be online presentation-based activities, Through e-learning, educational content is delivered to learners via computers, laptops, tablets or smartphones. It not only saves time, but also opens many doors for interactive learning. Learners can choose what they need, and no matter where they are, they can learn quickly and easily. They can also learn by directly interacting with the information displayed on the screen, for example by moving content from one location to another. In addition, eLearning

encourages learners to make their own choices about what they learn next.

E-learning has changed the way content is presented to students. Many e-learning courses include animation, podcasts, and videos, which create multimedia learning experiences. The last point is that although e-learning has been around for a long time, it is still evolving. Teachers use the benefits of technology to make learning more effective. This is the reason why more and more blended learning courses are being produced online. Diversity is the main feature of online learning platforms. You can use Zoom or Microsoft Teams to teach students in real time (synchronously) through live broadcasts or group meetings, or you can use (asynchronous) recording methods with extensive digital media and capabilities to enrich the course. Online educational platforms can also be integrated with a Learning Management System (LMS), so you can track student learning outcomes

2) Video-Assisted Learning In recent years, video-assisted learning has become more and more popular. This trend is also thriving in distance learning, where students can learn through computer screens. Videos, especially animated videos, are very useful for enriching the course and making the content easy to understand. It can improve students' performance and reduce teachers' workload

3) Blockchain Technology: Distributed Ledger is a popular concept in the field of blockchain that brings many benefits to education, especially data storage. . (**10**) Every time new data is added, another "block" is added to the system, so the storage is technically unlimited. At the same time, the data will be encrypted and distributed to multiple computers in the system. It makes data processing decentralized and transparent. Blockchain technology is used in open online courses

(MOOC) and e-portfolio to verify skills and knowledge. The DLT system will answer questions about certification, size, and cost for e-learning institutions. In addition, it can help job seekers publicize their achievements during the job search phase.

4) Big Data To meet the needs of learners, the learning experience must be customized. And with the spread of COVID-19 and the boom in online learning, we now have more data than ever before. Instructional designers have information about learners' experiences that can be used to customize and deliver courses and training appropriately. such as course topic, learner registration, learner performance (time per course, completion, test results), learner feedback assessment, questionnaire)

5) Artificial Intelligence (AI): Artificial intelligence is now the "core" of the US education technology market. People predict that by 2021, artificial intelligence will become the main trend and grow by more than 45%. So why is this trend emerging in one of the largest education technology markets in the world? First, (AI) can automate basic education activities, such as grading. Now, teachers can grade multiple choice questions and fill in the blanks automatically.In addition, both learners and teachers can benefit from artificial intelligence. (**11**) For example, when a teacher is too busy to take care of everyone, students can get help through the (AI)robot tutor. Similarly, programs based on artificial intelligence can provide useful feedback to learners and teachers. This is why some college are using AI systems to monitor student progress and warn teachers if there is a problem with student performance. Therefore, an(AI) that will become a powerful classroom teaching assistant is not far off.

6) Learning Analytics :The current field of learning analysis has expanded dramatically, especially for higher education. Through learning analysis, learning analysis enables teachers to measure and report student learning only through the internet. As a result, they can better understand and improve their learning. When teachers gain insights from students' learning process, they can improve students' knowledge and skills accordingly.

7) Gamification: (**12**) If you are looking for a way to turn learning into a more enjoyable and engaging process, then gamification is the right direction for education technology. There is no reason why students should not be actively involved in classroom games. Students can learn and practice while participating in fun game activities. Game elements help create a fun and active learning environment for learners. Gamification adoption is most common in the K-12 education sector. This is because children quickly engage in gaming videos or score high in a game. However, this does not mean that higher education or corporate training does not need fun elements to improve the level of learner engagement.

8)Virtual Reality (VR) and Augmented Reality (AR): (**13**) The classroom learning experience has undergone a massive change since Virtual Reality (VR) and Augmented Reality (AR) entered education. The high demand for experiential learning leads to the development of learning using virtual reality and augmented reality. Learning has become more interactive than traditional methods. While virtual reality provides a built reality, augmented reality provides an enhanced view of a real image. Thus, they help explain complex concepts that ordinary pictures or even laboratory practical experiments cannot show to students. For example, virtual reality is very useful when attending a medical

course. In detail, virtual reality creates an opportunity for students to experience real-world surgeries in a low-risk environment.

9)STEAM: STEAM-based programs are an improvement of STEM programs. It contains science, technology, engineering, art (new element) and math to solve real-world problems through hands-on learning activities and creative design. (**14**)   In terms of the benefits of STEAM, the first thing is that it helps students become increasingly curious about the world around them. Moreover, it also creates a safe environment for the learners to express and experiment with their ideas while thinking outside the box. Action learning also helps students to collaborate better with others.

10)Social Media: Have you ever thought that social media will become part of the learning process? When every young and mature student spends so much time on social media, why not make it a powerful tool for improving learning? This is how the idea of using social media in teaching emerged. Many educational institutions have started to use social media as a communication tool through which students can easily interact with others. Students can share learning materials, discuss with others in the group, or easily comment on other people's posts. Animation video lessons can be posted on social media. TedEd is the perfect example of this trend! The organization creates joint training courses and publishes them on YouTube, where people can easily access, find and share educational videos with their friends.

Second: The role of educational technology in improving university education
 The aspects of developing and improving educational technology can be summarized as follows: (**15**)

1. The trend towards using a quick and enjoyable method: The increase in demand for computers and related services was reflected in higher education with an increasing interest in universities and institutes publishing information about academic programs and the contents of scientific materials, This is an indicator that these universities keep pace with the development of the level of education.
2. Providing a flexible learning environment: The use of educational technology makes the student connected to the educational programs at the appropriate time, and this leads to the creation of an independent learning environment from the student's point of view, with temporal and spatial flexibility, and enabling them to use electronic discussion sessions.
3.Creating new areas of learning: The introduction of educational programs through information networks and the presence of many sources of information and the density of the volume of information presented by several parties, which differ in their credibility and suitability, which makes limiting what is useful information, which leads to the creative thinking of the user, such as the student, for example. this gives him problem-solving skills.
 4. Expanding the communication network: The use of education through the information network opens the way for a discussion of communication between a group whose members may belong to several countries or several cultures, and this expands their perceptions and opens up new horizons for them to learn, dialogue and knowledge of different cultures across the world and to see the research results published on the websites
 5.Contributes to research and development processes: research and dissemination of scientific research has developed as a result of the use of educational and communication technology

The second requirement:

First : Uses of educational technology in universities

1.University libraries: They are considered a mainstay in scientific research and university education. They are the reference for students, teachers, and researchers in various disciplines. Libraries have advanced thanks to the use of educational technology to become a distributor of knowledge for those who request it jeverywhere, as educational and communication technology enables access to it, and educational technology has goals when applied in Libraries are the most important: (**16**)

-Improving and diversifying its services to include new services.

-Expanding the number of beneficiaries by providing a sufficient number of documents and references.

-Simple search methods in the available tools, whether traditional or automated - Good control over the lending of books and documents and the followup of the lending operations.

-Ease of browsing, linking between groups, and comparing them .

-Take advantage of its services by other researchers and achieve communication with global thought .

- Browsing and interconnection between groups and comparing them to benefit from its services by other researchers and to achieve communication with global thought

2.The university teacher: Educational technology enabled the university teachers to benefit from it, and the teachers became a mentor to the prompter, an organizer, a mover of discussions, a developer and producer of educational programs. (**17**)

-Changing patterns of access, acquisition and dissemination of knowledge.

-It led the teacher to be qualified and effective in performing his work in this new environment.

-Quick access to information, organization and storage according to each   specialty .

-Contribute to the development of research activity .

- It enabled the teacher to use the Internet in scientific and inpreparing lessons .

3. **Scientific Research**: (**18**)As the scientific research centers affiliated with the university   or to which the university is a party are considered to be the ones that generate   the required knowledge, inventions and innovations by enhancement and developing knowledge, providing the environment, equipment, devices and books..., the use of modern educational technology and communications to raise the level of scientific research through the publication of research and access to pure developments, scientific research is required for all sectors and disciplines and is considered a link between local and international researchers through e-mail, the Internet and other devices and equipment.

4 -**Teaching Curriculum**

Educational technology contributes to the quality of education and teaching methods through the comprehensiveness and depth of educational programs and their flexibility and their absorption of various global challenges and the knowledge revolution and the extent of their development in line with various general variables, which makes their teaching methods far from indoctrination and exciting the ideas and minds of students through the practices and applications of those programs and methods of teaching them .

As for the quality of the curricula, this is done by defining the education strategy by

setting a framework for the educational policies followed by making a set of decisions to reach specific goals, specific stages and a period of time, using the new methods and styles provided by educational technology that facilitate the implementation process(19)

Second : **world Ranking:**

The concept of world ranking: It is a system for ranking universities in terms of academic, scientific or literary level. This arrangement depends on a set of statistics or questionnaires distributed to scholars, teacher and other experts and arbitrators, or website evaluation or other criteria. (**20**)

University classification systems are mechanism for ranking universities according to specific evaluation elements, with universities being compared to each other on the basis of performance, and aims to provide information on the quality of information . (**21**)

Below are some world ranking :

A.Shanghai Jiao Tong university: is considered the most widely accepted and accepted classification in academia and is issued by the Higher Institute of Jiao Tong University in Shanghai - China. It has been issued annually since 2003, and covers more than 1000 universities in the world, and ranks the first 500 universities at the global level. It also classifies universities according to five scientific fields (natural sciences and mathematics, engineering, information technology, computer science, life sciences and agriculture, medicine and pharmacy, and social sciences) (**22**)

The status of Iraqi universities in the ranking Shanghai: No Iraqi university appeared in the ranking. The researcher point of view on the classification: The previous criteria is considered one of the best classifications Because it is issued by a scientific research center , it is not

commercial and it included academic performance, but it distributed percentages unfairly as it gave (30%) to the individual achievements who got (The Nobel Prize and the Fields Medal), and there is no measure of academic quality (inputs and outputs of the educational institution).

B.Web Matrix classification A world-famous rankings issued by a Spanish research center (CSIC) linked to the Ministry of Education in Madrid, and aims to encourage the dissemination of information on university websites, and it classifies universities according to the information available on their websites, and has been issued since 2004 on a semi-annual , and it covers more than 17,000 higher education institutions in the world, including about 500 Arab universities, and ranks the first 6000 universities in the world, and the top 100 universities by continent or region.

Placing the Iraqi universities in the Web Ometrics ranking, (**23**)as it showed that the University of Baghdad was the first Iraqi and international (1857), while the University of ranked Mustaniriyah second Iraqi and internationa (2636),while the University of Babylon ranked third Iraqi and international(2787) and they are all outside the ranking. It measures the extent of the university's commitment to take advantage of the Internet to present **scientific research and its libraries** and programs for the purpose of benefiting from it by others globally, and depends on measuring the performance of the university through its website.

C.**The Times Higher Education classification of international universities: known as (THE)** is one of the best international standards for ranking international universities, which is based on (13) indicators distributed over five axes: education, research, citation, international outlook, industry income   .

it showed that the results announced on the Times classification site included Iraqi universities obtaining indicative competitive ranks, represented by eight universities achieving important results in terms of global competition, as the University of Babylon ranked (601-800), followed by the University of Technology (801-1000) and then the University of Anbar (1001-1200). While the universities of Baghdad, Basra, Kufa, Mosul and Al-Mustansiriya ranked in the center (1501+). (**24**)

The study of the standards and indicators focused on the greatest weights to the university's reputation. In the current situation, and Iraq's lack of security and societal stability, Iraqi universities are part of the Iraqi environment, as well as other indicators showed weakness.

D.**The well-known British Quacquarelli Symonds Ranking (QS)** is an annual classification of universities around the world and is published by the British company Quacquarelli Symonds, which was originally publishing its rankings through the publications of the Times newspaper (The Times) for Higher Education from 2004 to 2009 under the name of the World University Rankings for the Times of Higher Education and Quacquarelli Symonds(**25**) . The world ranking of universities on which this institution is based is one of the most famous international rankings of universities. QS issues an annual report in which it ranks more than 30,000 universities around the world, ranked according to academic and scientific standards, and compares the 500 largest universities .

it showed that Show the University of Baghdad at the center (801-1000), the University of Al-Mustansiriya at the center (1001-1200), the University of Kufa at the center (1001-1200), the University of Babylon at the center (1201+) and the University of Basra at the center (1201 +) ,and they are all outside the ranking. (**26**) The university size indicator represented by the number of students and teachers is the most important in this rank, while the other indicators in the scale are almost zero.

The researcher point of view: What distinguishes this ranking is that it does not deal with superficial indicators, but rather delves into the analysis of the components of these universities to assess the level of education they provide, the quality of their basic and applied research, the level of their graduates at the educational and higher levels, and their international position.

The third topic: Test and analysis hypotheses of the study :
This study deals with the results of the statistical analysis of a study field, which was obtained by analyzing the data which included in the questionnaire (the study society). the sample of the study consists of(90) individual .

A five-caliber scale was used in the distribution of grades as follows:

Classification	Strongly agree	Agree	To some Extent	Disagree	Strongly disagree
Grade	5	4	3	2	1

The closer the result of the grade (5-3.5) the greater the intensity of the approval of the expression ,represents an average level (3.49 -2.5) , while the intensity of the

opposition increases as(2.49-1) represents a low level .

First: The independent variable (educational technology)

1.Respondents' assessment of the level of the university's role in providing education technology at the University of Babylon.

Table(4) Results of the statistical analysis of the level in providing education   technology at the University of Babylon.

Item	Paragraph	Mean١	Df	Rank	Level
1	**There is actual use of educational technology in your university, which has modern devices that help keep pace with modern technology.**	**3.179**	**0.829**	**Tenth**	**Medium**
2	You believe that the educational technology system available at your university contributes to the growth and development that is taking place in raising the level of world rankings of universities.	**3.339**	**0.862**	**Forth**	**Medium**
3	**Your university provides educational technology that contributes to education throughout the life of the student.**	**3.306**	**0.856**	**Sixth**	**Medium**
4	**Your university conducts training courses on the use of modern and innovative educational technology for teachers, which contributes to mastering its use.**	**3.192**	**0.904**	**Ninth**	**Medium**
5	My university is concerned with the size of its website pages according to the periodic reports .issued by search engines, yahoo, Google and others	**3.307**	**1.007**	**Fifth**	**Medium**
6	My university calculates the number of research published electronically under the domain of the university website and international journals and the availability of reports for it.	**3.386**	**0.918**	**Third**	**Medium**
7	**My university provides external links on the university website and this information is obtained from the famous search engines**	**3.046**	**1.059**	Eleven th	**Medium**
8	**I believe that the popularity of the university's website leads to an increase in the university's global ranking**	**3.682**	**1.099**	**First**	**High**
9	**My university updates its data monthly, such as the name of the site, the academic accreditation it obtained, fellowship, information about faculty members….)**	**3.387**	**1.073**	**Secon d**	**Medium**
10	**The university provides pamphlets and books that help students and researchers on how to use the network in a peaceful and effective manner.**	**2.818**	**0.949**	Thirte enth	**Medium**

11	**Your research are published through your university's website.**	**3.019**	**1.159**	Twelveth	**Medium**
12	**There is a transition and communication between the components of the university through modemeans that depend on education and communication technology.**	**3.193**	**1.042**	Eighth	**Medium**
13	**My university provides libraries that enable me to browse their contents through the local and international network.**	**3.229**	**1.128**	**Seventh**	**Medium**
	Total	**3.237**	**0.991**		

Second: The dependent variable (the quality of education and hancing **the level of the world ranking of the university)**

1.The sample members' estimation of the quality level of university libraries

Table (5) show the level of quality of libraries at the University of Babylon

Iteam	**Paragraph**	**Mean**	**Df**	**rank**	**Level**
14	There is a digitization of the libraries in your university (electronic research), and therefore books, theses and letters are downloaded from the university website or the library website	**2.756**	**1.099**	**Fifth**	**Medium**
15	The library in your university has a database of its components that can be accessed and browsed for its contents, which is a factor in .its quality	**3.1**	**1.022**	**Second**	**Medium**
16	There is a use of computers and the Internet in the library, which enables researchers, students and teacher to complete their research .	**3.166**	**1.098**	**First**	**Medium**
17	The library in your university uses automated documentation programs used in library science, which enhances the quality of the library ..	**3.022**	**0.977**	**Third**	**Medium**
18	There is a communication network used to link between libraries and information centers .at the university	**2.9**	**1.136**	**Fourth**	**Medium**
	Total	**2.988**	**1.066**		

2. The sample members' estimation of the quality level of scientific research

Table (6) show the quality level of scientific research

Iteam	Paragraph	Mean	DF	rank	Level

Item	Paragraph	Mean	DF	rank	Level
19	In your university, educational technology is used, which helps in scientific research in a short time and at the lowest cost, which contributes to achieving the quality of education and raising the level of the university's globalranking .	3.122	0.827	Fifth	Medium
20	Technological techniques contribute to the completion of scientific research, which reflects positively on the quality of scientific research and the citation of research published by other researchers.	3.389	0.799	First	**Medium**
21	Modern educational technology and artificial intelligence are used as an enhancer to accomplish your scientific research	3.233	1.044	Third	**Medium**
22	All research conducted at your university is published on the university's website, which raises the level of the university's global ranking.	3.278	1.333	Second	**Medium**
23	The level of spending on scientific research and the lack of confidence in scientific research methods and reliance on traditional methods negatively	3.233	1.164	Fourth	**Medium**
	Total	**3.251**	**1.033**		

3.Estimation of the sample members of the level of education quality teaching curricula.

Table(7) the level of education quality teaching curricula.

Item	Paragraph	Mean	DF	rank	Level
24	The introduction of new technology methods used in teaching contributed to the achievement of the quality of higher education.	**3.222**	**0.891**	**Third**	**Medium**
25	Educational technologies play afundamental role that helps achieve the objectives of the curriculum, which are cognitive (Cognitive Domain), skillful (Psychomotor Domain), and affective (Affective Domain).	**3.133**	**0.858**	**Fifth**	**Medium**
26	There is communication between the administration and the student through electronic messages, especially with regard to exams and final results	**3.3**	**0.959**	**Second**	**Medium**

27	The university supports augmented reality and virtual reality to implement the curriculum efficiently.	**3.344**	**0.908**	**First**	**Medium**
28	Your university has developed new teaching curricula that are in line with the changes taking place in the field of educational technology	**3.2**	**1.024**	**Fourth**	**Medium**
	Total	**3.239**	**0.928**		

4. Estimation of the sample members of the quality level of the university teacher .

Table (8) shows the quality level of the university teacher .

Item	Paragraph	Mean	Df	Rank	Level
29	I convert the content of the subject to teach into simple and attractive electronic lessons	3.455	0.990	Second	Medium
30	Participate in continuous training and improvement programs on the latest educational technology, such as file transfer, archiving, databases and electronic publishing, which increases their proficiency	3.433	0.760	Third	Medium
31	I have the ability to design the production of some educational technologies.	3.233	0.849	Sixth	Medium
32	Choose the appropriate technique for the topic of the lecture and the number of students.	3.367	0.9	Fourth	Medium
33	The university sets teaching strategies and leaves to the teacher how to implement them by giving lectures to students, which stimulates the teacher's creativity.	3.278	0.907	Fifth	Medium
34	The number of citations from my research is more than 10 by Google scholar or others	3.166	1.128	Seventh	Medium
35	I am trying to consolidate my searches in the Scoups database	3.778	0.974	First	High
36	I received international awards for my research products by publishing them on well-known websites	1.944	0.947	Eighth	Low
	Total	3.206	0.931		

5. Estimation of the sample members for the level of the total quality of education and hancing the level of world ranking of the University of Babylon

Table (9)show For the total variables of the quality of education at a university of Babylon

Item	Paragraph	Mean	Df	Rank	Level
1.	quality level of university libraries	2.988	1.066	Fourth	Medium
2.	quality level of university scientific research	3.233	1.033	Second	Medium
3.	quality level of university teaching curricula	3.239	0.990	First	Medium
4.	quality level of university teacher	3.206	0.931	Third	Medium
	Total	**3.166**	**1.005**		

Table (9) shows that the general average of the sample members' assessment of the total level of education quality, which amounted to (3.166), and the dimension (level of quality of teaching curricula) ranked first with an average of (3,239), while it came (level of quality of university libraries)) ranked last with an average of (2.988), which indicates that the respondents' answers to the level of total quality of education and hancing the level of the world ranking of the University of Babylon at an average level.

Third: Measuring the influence relationship between the study variable :
This requirement deals with measuring the impact of the efficiency of the use and employ of educational technology in hancing the level of world rankings of

universities and the quality of higher education at the University of Babylon
And the sub-hypotheses that emanate from it, the sub-hypotheses have been tested as follows :
 Test the first sub-hypotheses: This hypothesis reported the existence of a significant effect relationship at the level (a≤ 0.05) for the dimension of the role of the University of Babylon in the efficiency of the use and employ of educational technology in the quality of libraries in them, and the F-test was used to analyze the significance of the simple linear regression model, :formula $Y = a + \beta_1 X_1$
As for the estimates of the values of the model variables, they are: that (a) is a constant value $Y = 0.594 + 00.811$

Table (10) Simple linear regression model to measure the effect of the efficiency of the use and employ of educational technology in the quality of libraries at the University of Babylon

Educational technology / Quality of libraries	Constant	β1	calculated (F)value	Tabular F value	R^2 interpretation coefficien	Level of significance
	0.594	0.811	89.359	5.69	0.957	0.003

Through the previous table, it is clear that the calculated (F) value amounted to

(89.358) is greater than the table (F) value of (5.69) at a significant level with a

degree of confidence (95%), while the value of the marginal slope of the regression angle was ($\beta_1 = 0.811$). This indicates that a change of (1) from the role of the university in the use and employ of educational technology affects by (0.811) the quality of libraries at the University of Babylon, and the rate of the coefficient of determination has reached (**$R^2 = 0.957$**), meaning that the use of educational technology interpretation rate of (95.7%).) Of the changes that occur in the quality of libraries **from the above, the hypothesis is accepted.**

The second sub-hypothesis test: The benefit of this hypothesis is the existence of a significant effect relationship at the level ($a \leq 0.05$) for the dimension of the role of the University of Babylon in the efficiency of the use and employ of educational technology in the quality of scientific research, and the (F) test was used to analyze the level of the simple linear regression model, as shown in Table (11), which It was built according to the following formula (the role of the university in the use and employ of educational technology) $Y = 0.897 + 0.716$

Table (11) Simple linear regression model to measure the effect of the efficiency of the use of educational technology in the quality of scientific research at the University of Babylon

Educational technology / Quality scientific research	Constant	β2	calculated F value	tabular F value	R^2 interpretation coefficient	Level of significance
	0.0.897	0.716	30.542	5.69	0.911	0.012 Sig

Through the results of the previous table, it becomes clear that the calculated (F) value amounted to (30.542), which is greater than the table (F) value of (5.69) at a significant level of confidence (95%), and this indicates the strength of the regression model. As for the value of the marginal slope of the angle the regression reached ($\beta_2 = 0.716$), which indicates that a change of its amount (1) in the use of educational technology affects the quality of scientific research at the University of Babylon, while the coefficient of determination (**$R^2 = 0.911$**), that is, the use of educational technology interpretation its rate (91.1%). Of the changes that occur in the quality of scientific research. **From the above, the hypothesis is accepted**

The third sub-hypothesis reported the existence of a significant effect relationship at the level of ($a \leq 0.05$) the role of the university in the use and employ of educational technology in the quality of teaching curricula, and the (F) test was used to analyze the significance of the simple linear regression model, as shown in Table (12), which was built according to the following formula $Y = a + \beta_3 X_3$

(role of the university in the use of educational technology) $Y = 1.239 + 0.610$

(Table 12) Simple linear regression model to measure the effect of the efficiency of the use of educational technology in the quilty of teaching curricula at the University of Babylon

Educational technology / Quality scientifi r esearc h c	Constant	β3	calculated F value	Tabular F value	R^2 interpr etation coeffici ent	Level of significance
	1.239	0.610	39.309	5.69	0.952	0.025 Sig

Through the previous table, it is clear that the calculated (F) value amounted to (39.309) is greater than the table (F) value of (5.69) at a significant level with a degree of confidence (95%), while the value of the marginal slope of the regression angle was (β3 = 0.610). This indicates that a change of (1) from the role of the university in the use and employ of educational technology affects by (0.610) the quality of teaching curricula the University of Babylon, and the rate of the coefficient of determination has reached (R^2 = 0.952), meaning that the use of educational technology interpretation the rate of (95.2%).) Of the changes that occur in the quilty of teaching curricula **From the above, the hypothesis is accepted.**

The Fourth sub-hypothesis test: The benefit of this hypothesis is the existence of a significant effect relationship at the level (a≤ 0.05) for the dimension of the role of the University of Babylon in the efficiency of the use and employ of educational technology in the quality of teacher , and the (F) test was used to analyze the level of the simple linear regression model, as shown in Table (13), which It was built according to the following formula (the role of the university in the use and employ of educational technology) Y =0.088 + 0.960

(Table 13) Simple linear regression model to measure the effect of the efficiency of the use of educational technology in the quilty of teacher at the University of Babylon .

Educational technology / Quality teacher	Constant	β4	Calculated F value	Tabular F value	R^2 interpretat ion coefficient	Level of signific ance
	0.088	0.960	25.852	5.69	0.910	0.00 Sig

Through the results of the previous table, it becomes clear that the calculated (F) value amounted to (25.852), which is greater than the table (F) value of (5.69) at a significant level of confidence (95%), and this indicates the strength of the regression model. As for the value of the marginal slope of the angle the regression reached (β4 = 0.960), which indicates that a change of its amount (1) in the use and employ of educational technology affects the quality of teacher at the University of Babylon,

while the coefficient of determination (R^2 = 0.910), that is, the use of educational technology interpretation its rate (91.0%). Of the changes that occur in the quality of teacher **From the above, the hypothesis is accepted .**

The fourth topic: conclusions and recommendations
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The first : Conclusions

1 . The opinions of the respondents agreed that there is consistency and agreement on the paragraphs of the questionnaire and that all its paragraphs are saturated with what answers the question of the study problem, that educational technology has a role in the quality of education and hancing the level of the world ranking of the University of Babylon and that there is internal consistency for its paragraphs according to the coefficient (Alpha - Cronbach).

2.The respondents agreed that there is an average estimate of the dimensions of the efficiency of using and employ educational technology, and the most estimated dimensions were (the quality of teaching curricula) where the mean was (3.239).This interpretation that the use and employ of educational technology in its use contributed to some extent in improving the dimensions and quality of higher education and hancing the level of the world ranking of the University of Babylon.

3.There was a statistically significant positive effect of the total dimensions of the efficiency of the use of educational technology in the dimensions of the quality of higher education and hancing the level of the world ranking of the University of Babylon (the quality of university libraries, the quality of scientific research, ,teaching curricula, and the quality of university teacher).

4.Although there are significant influence relationships between the efficiency of the use of educational technology in the quality of higher education at the University of Babylon, but the most influential is (the quality of university libraries), then came the dimension (quality of curricula, quality of scientific research, quality of university teacher), respectively.

5.The results of the analysis reflect that the University of Babylon can benefit from the efficiency of educational technology in enhancing the quality of education and raising the level of the world ranking of the university, but it did not achieve a high level of use in all its variables.

The second : recommendations

1. The University of Babylon the study(population) should pay more attention to increasing the efficiency of using educational technology,the introduction of innovation in education technology and artificial intelligence its role in the quality of higher education and raising the level of world ranking of Iraqi universities, as it did not achieve a high level of use and employment.

2. Paying attention to educational technology and its innovations as a national project through which the features of the present and the future are defined, and it is an investment process in the long term, because of the human experiences and wealth it produces to meet the challenges.

3.Although the university did not obtain a global ranking, it has some opportunities that can help it strengthen its competitive position through cooperation with forums and solid scientific journals and motivate researchers to publish in the Scoups database, Google scholar, and others.

4.Forming committees in each university to evaluate and follow up on its strategies by

introducing educational technology and linking it to raising the level of the international ranking of Iraqi universities.

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