



The Role of Digital Education in Developing University Students Learning Under Circumstances and Challenges

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Abstract

The study aimed to emphasize the role of digital learning in developing university students under hard circumstances and challenges. The descriptive analytical approach was used. The study tool was a questionnaire distributed to (306) students in institutions of higher education and scientific research. The study concluded that the reality of applying digital learning management to achieve competitiveness in higher education institutions from the viewpoint of its employees was of a moderate degree. Also that the role of digital learning in developing the learning of university students with a medium degree. However, there are a number of obstacles in the application of digital learning, which differ in their proportions. In addition to that there are no statistically significant differences at the level of significance ($0.05 \geq \alpha$) between the average scores of the sample members' assessment of the role of digital learning in developing university student's learning due to the variables (practical qualification).

Key words: digital education, conditions and challenges, digitization

Introduction:

Technology becomes a fundamental requirement of the modern era, and technological advancement involves in all areas of life. The education field is one of the most significant areas that; affected by technological development and progress. At the same time; It is considered one of the pillars of developing educational work, which made it the concern of educators and those interested in the educational process. Today, technology becomes one of the elements of the modern curriculum.

The rapid acceleration of technology and the rapid growth of the Internet and digital technologies, the network has become a democratic, economic, and interactive medium. Where the revolution of information directly affects the process of teaching and learning .

The knowledge explosion of increasing the quantity and quality of knowledge makes it necessary for educational institutions to reconsider the foundations for selecting, planning, and building curricula, academic content, and methods of learning. Therefore, it was necessary for each society that wants to catch up with the information age to help the generations to learn computers and deal with its technologies, and prepare them to face the rapid changes in this era. The trend towards deep learning that is related to the life of the learner and dependent on it is prevalent, Technology was a conduit for academic achievement, and the adoption of knowledge through it, as it led to an amazing development in the educational process, as it affected the way the teacher and the learner performed in the classroom, and learning became linked to the learner, as it leads to making decisions about learning: When will he learn! And how to learn! Which made learning more continuous and steady. Many developed countries have relied on modern technical media, the Internet, and computers to implement teacher preparation programs, which led to this be reflected on the performance of the teacher and made learning more enjoyable, and encouraged teaching in modern ways and methods using them. Technology provides an element of excitement and excitement, where the presentation is with sound, images, and movement, which supply more experience than traditional methods, and reduces boredom among learners, and broadcasts in them the desire to search for knowledge. Which concerns teachers in the era of globalization to keep pace with changes and progress in all fields, and this requires a double effort from teachers, so

they are required to strive hard to learn the technology so that they do not suffer from information illiteracy, which makes them not contemporary to what is happening in the world.

Developments in the field of technology and informatics have created a global climate that calls for aspiration to found new methods for educational and training programs that focus on communication skills, decision-making, self-direction, teamwork skills, and continuous self-learning, and have helped maintain the impact of learning and make the learning process more enjoyable. Therefore, the current era relied on integrating students into meaningful learning activities and motivating them to learn better.

The digital technology has revolutionized the global economy, as many countries of the world enjoy a large number of developmental benefits of digital technology, such as comprehensive and sustainable growth and improvement in public administration, rapid response in service provision, the magnitude of the change in competitive advantage, and achieving high levels. Of transparency, accelerating the pace of productivity, and increasing economic opportunities for all, especially the youth population.

Smart digitization is not a technology treatment, a basic business plan, or a one-size-fits-all strategy. It is a continuous social learning process in which the various teams participate, and the ultimate goal of which is to benefit from the global digital revolution to meet specific social and economic priorities convenient for each country. It is a process driven by vision, leadership, innovation, learning, and partnerships between governments, business, and civil society. There are many names for different learning methods that depend on communication and information technology; some called digital learning, some called e-learning, and some

are called distance learning. Digital learning will be adopted in this study, as it is defined ‘the purposeful and structured use of electronic systems or computers in support of learning processes’ (Al-Zamil, 2009).

The Rationale for Using Digital Learning

1. Population explosion
2. The cognitive explosion
3. Development of the behavioral and educational sciences
4. The development of technological development in the media
5. Decreased efficiency in the education process
6. Lack of faculty members
7. The evolution of modern technologies in the physical and intellectual aspects
8. Diversity of knowledge sources
9. The crisis of education renewal (Abed & Bayoumi, 2020)

With digital education, electronic content can be presented through integrated educational platforms that facilitated the presentation and interaction of the learner with the curriculum, as it is an interactive educational environment that employs web technology and combines the advantages of electronic content management systems, and social networks, and among its benefits is the development of individual and social skills, development of analysis skills, information gathering, and ability. On putting them into practice, the theoretical knowledge acquired in the school (Condruz-Bacescu,2013:597).

Digital learning platforms are one of the technological innovations in the field of teaching and education, Hamed and Hijazi (2015) define it as an integrated interactive educational software system with multiple sources on the Internet to provide academic courses, educational programs,

educational activities and electronic learning resources for learners at anytime and anywhere, simultaneously or asynchronously. Using educational technological tools and interactive communication information, in a way that enables the teacher to evaluate the learner. Morscheck (2010) defines it: "interactive online services that allow students, teachers and parents to access classroom work, information, tools, and resources to support learning and teaching processes and management".

Mahous (2015) indicated that the most popular platforms are due to the virtual learning environment and can be called a decided management system. The educational platforms are also known as a touch screen display that is used by storing and programming the educational material and dealing with it according to a web system so that it is linked to the Internet and other computer devices and is managed through touch and the use of electronic learning. It is also known as an interactive educational environment that employs web technology and combines the advantages of content management systems with social networks and enables learners to publish lessons and goals, set assignments and educational activities, and communicate with teachers through multiple technologies, as it enables teachers to conduct electronic tests, distribute roles and divide students into Working groups help to exchange ideas and opinions between students and teachers and share scientific content and allow parents to communicate with teachers and see the results of their children, which helps to achieve high-quality educational outcomes (Al-Anizi, 2017, 200).

It is also known as one of the web applications, and it is considered one of the types of micro-blogging and it can be used in education as a mini educational platform used by the teacher and students in many activities without the need for expensive infrastructure and the need for knowledge

of programming languages, but for the simplicity of its use, it can move between its interfaces and take advantage of what It provides a variety of services and multitasking, such as giving assignments and following them up, uploading files, making polls, setting alerts, posting topics and news feeds on the sites. Also, electronic platforms are self-organizing communities managed by a platform operator, and although some functions can be designed and implemented to work on a decentralized basis, electronic platforms are central structures where the platform operator plays a critical role in creating and maintaining the platform, and the scope is defined. The extent of the operator's functions in each case according to the membership agreement, upon joining the main system, each user agrees with the operator called a membership agreement, after which the registered users negotiate and conclude contracts between them according to the internal policies (the articles of the statute) (Al-Ghamdi, 2019).

Educational Digital Applications in Learning Management Environments:

Learning methods evolved and moved from traditional learning to e-learning. It found many institutions dealing with e-learning and distance learning, where the teacher's role changed from a mentor and source of information to a coach, mentor, and guide. Thus, many advanced learning and teaching methods appeared in the educational process, which enabled the educational environment to form highly prepared generations to keep pace with the developments of the current era, and one of the most prominent modern trends in the current era is self-learning, which is represented by increasing the ability of the learner to rely on himself, and create Positive trends in the way he interacts with and participates in the educational environment. (Basw, 2016)

Many modern teaching strategies that depend on the integration and use of modern technological technologies in communication and communicational have appeared in the educational process system, such as the blended learning strategy, the cognitive journeys strategy, the reverse learning strategy, The applications of the enhanced learning method on the web in educational curricula and curricula have become an approach that is increasing in general education institutions, as the method of enhanced learning on the web refers to the integration of live, direct educational activities in the traditional classroom education.

Learning Management System is a software application built on a web server whose mission is to facilitate the control and management processes related to the educational process presented over the Internet through the multiple features included in it. Among the most prominent of those advantages offered by such systems is the ease of use and the ability to download educational materials It is it to support the information provided to learners in the traditional learning style, especially after some educational literature has proven that the use of multiple educational materials on the web has worked to improve learning in the courses presented in this way. (Al-Freeh and Al-Kandari, 2014).

Jawdat (2015), on the other hand, states that the diversity of educational applications according to the requirements of their operation and employment, and according to the goal that was prepared and produced for and according to the target group, as follows:

1. Class Management Apps are applications on smart and tablet devices that are used by the teacher to attend classes and goals, record activities, and keep notes from these applications (teacher kit).

2. Applications for communication and presentation management are teacher-led and participatory applications, Chat between the teacher's device and the learners' devices during the presentation, and the exchange of files between his device and their devices. The (ear-pod) is one of its most popular.
3. Content development applications are applications that allow the teacher to create educational content and presentations And spread it to learners. Among the most prominent applications is the Educations app, which works on the iPhone and iPod devices. This application allows the teacher to prepare a presentation directly from his tablet device, using the Screen Casting method with adding sound and recording for learners.
4. Learner Tools: It is a category of educational applications directed at learners and trainees to aid them in their learning, and it varies between lecture recording programs, notes writing programs, calculator programs, and several general applications.

Additionally, Jawdat (2015) also indicates that some successful practices in education through educational applications can be summarized as follows:

- 1- Organizing classroom matches between groups of learners, and the answer is by learners' smart devices, tablets, or from the laboratory apparatus, and the results are shown immediately through the learning management system.
- 2- Sharing presentations with the trainees once they are presented, so that the learners can enter and review them.
- 3- Sharing screens between the teacher and the learners, which allows for increased interaction and enjoyment of the learners during the lesson.

- 4- Communicating with the learners through social media programs outside of lessons times, by informing them of the letters And coordination concerning the next class.
5. Instructing learners to use databases such as the digital library without the need to refer to devices the lab.
6. The teacher can make an immediate test for the learners and send the test result immediately through the learning management system to their devices.
7. Conducting video conference sessions with remote learners to take advantage of learners' devices and applications the occasion is like the Hangouts app.

Advantages of Digital Learning

1. Communication and interaction Increase the possibility of communication and interaction between students, as online forums such as discussion boards and dialogue rooms are opportunities to exchange views on the topics presented, which increases the chances of benefiting from the opinions and proposals put forward, and expands the creative capabilities, which helps in forming solid critical and creative thinking among students, as well as raising students' sense and sense of equality in the distribution of opportunities in the learning process, and breaking They have a barrier of fear and anxiety, enabling them to express their thoughts, and search for facts and information in more and more meaningful ways than in the traditional classrooms, and by electronic learning, the student will be able to communicate with the teacher outside the ordinary school time.
2. The possibility of changing the teaching method: it is possible to receive the scientific material in a way that suits the student, some students are fit with the visual methods, other students are fit with the audible or

reading method, and some students are with the practical method. E-learning and its sources allow the possibility of applying various sources of different methods that can be modified to be the best for the student.

3. Appropriateness of different learning styles: E-learning allows the student to focus on main ideas while writing and compiling the lecture or lesson, and also give students who suffer from difficulty concentrating and organizing the material because it is arranged and coordinated in an easy way, and the important elements in it are limited.
4. Maximum utilization of time: Providing the element of time is very useful and important for both parties, the teacher and the student. The student has immediate access to information in the specified place and time, and the teacher can keep time from being lost. The ability to send what the student needs via instant communication.
5. Reducing the administrative burden for the teacher. E-learning allows the teacher to reduce the administrative burden that was previously It takes a lot of time from him in every lecture, such as receiving assignments, correcting written work, and others. E-learning has dried up from this burden, as the teacher sends it through electronic tools with the ability to know the student has received all the documents.
6. Reducing the workload in the school by providing tools that analyze grades, results, and tests, As well as setting statistics for her.
7. Evaluating learning: it facilitates learning to evaluate students in a variety of more accurate and fairways.
8. Providing teachers with the opportunity to share experiences with their peers in other countries and regions, which provides some sites.
9. Educational opportunities for participation in teachers' ideas, tests, and educational activities, as well as the opportunity to meet with experts

on specific topics, such as Google Plus forums that allow members to communicate with each other regarding educational consultations, as well as requesting an expert on a specific topic to communicate with a teacher's students anywhere through the application (Skype classroom), as well as achieving learning goals in a short time, which allows for enjoyment in watching visuals and smart activities. What traditional education does not allow in a long time, and e-learning is the language of the age, and students are integrated into it in various walks of life, and it is good for the teacher to live his time (Al- Hareeb, 2009).

The Importance of Digital Learning Applications

1. Learners can interact with each other and with the teacher.
2. It is easier to place a lot of mobile devices in the classroom than desktops, which take up a large area.
3. Most personal digital devices (PDAS) or PC tablets that carry notes and e-books are lighter, smaller, and easier to carry than bags full of files and books, or from laptops as well.
4. Handwriting Using the Stylus Pen is much more intuitive than using the keyboard and mouse.
5. Plans and maps can be drawn directly on the screens of smart devices using standard software
6. Handwritten notes or Voice can be taken directly on the Device during external lessons or trips.
7. The possibility of conducting Electronic Registration and inputting data, during practical or external lessons, when the Desktops are not suitable, or the lack of use of scientific trade, cooking lessons, and visiting farms.

8. Participating in the implementation of operations and tasks in group work (participatory), where many learners and the teacher can pass the device between them or use the Infrared Function option in personal digital devices or use a wireless network such as Bluetooth.
9. Teachers can use to distribute work to learners easily and naturally using the thin pen.
10. These devices can be used at any time or place at home or in hotels.
11. Attract learners, especially children who haven't access to education, they can enjoy using smart devices and Games Devices such as Gameboys in learning.
12. increasing Personal motivation and commitment toward learning; when the learner takes the device home, it helps him to take responsibility.
13. Personal digital devices and mobile phones may bridge the digital divide because these devices are less expensive than desktop computers.
14. SMS services can use to obtain information easier and faster than Telephone or e-mail services, such as schedules of lectures or exam schedules, especially with an emergency amendment to these schedules.
15. It uses as an assistive technology for learners who do not encounter the Learning Difficulties.

Digital or E-Learning Requirements and E-Learning Team in the Governorate

- ✓ Infrastructure
- ✓ High capacity network
- ✓ System dependent structure (This system mainly depends on the centralization of processing by harnessing high-capacity cloud

servers and storage capacity, and cheap peripheral devices with limited capacity and such a system require a high-capacity network to ensure the speed of the application and the contents when it is needed instead of entering The complexities of downloading and maintaining software on peripheral computers, and this type of system requires a large investment in establishing a high capacity educational network, but it is Long-term economic viability.

- ✓ Educational software that provides applications for learning management.
- ✓ The teacher and requires the ability to teach.
- ✓ The learner: the following characteristics required for the skill of self-learning, and the competencies of using smart technology, the competencies of using online and computer applications.
- ✓ Technical support staff

Direct Demands

- ✚ Computers for teachers, students, school classes and laboratories.
- ✚ Internet networks in computer and language tests.
- ✚ Local computer networks.
- ✚ Classroom management systems.
- ✚ Help software for learning resources.
- ✚ creating a system for managing interactive scientific content in a fast manner, and electronic scientific content.
- ✚ Digital electronic book.
- ✚ Interactive electronic learning board.
- ✚ A specialized educational portal that works through the Internet or through the school's internal network of computers.
- ✚ Educational administration system that associated records.
- ✚ System for electronic interactive tests.

- ✚ Electronic classes system to achieve a direct dialogue communication environment.
- ✚ Requirements for using digital learning resources.
- ✚ Interactive electronic laboratory use and management systems.
- ✚ A direct electronic link system between schools of each educational region with each other and with the Education Department.
- ✚ A direct electronic link system between education departments in all cities of the Kingdom and the relevant departments in the Ministry of Education Method and procedures.

Indirect Demands

- Teachers, administrators, and all workforce participating in the education environment should take Continuous training programs for the best use of the application and activation of e-learning technology systems.
- Provide an appropriate educational environment that meets the technical requirements of teachers and students.
- Preparing learners and training them on how to deal with technology.
- link Digital learning resources to the digital education system.
- Subscriptions to electronic libraries. (local and international).
- Apply educational tools and systems that enjoy international specifications and standards.
- Systems and software that meet the requirements of learners with special needs.

The higher education sector in Jordan has witnessed remarkable development and growth during the past two decades. confirmed by the increase in the number of higher education institutions, the preparation of

registered students, faculty members, and the increase in the size of government spending and support for this important educational sector, as the number of public universities has reached ten universities, twenty private universities, and forty-one. An intermediate community college in addition to the International Islamic Sciences University.

The pride of the extending and growth puts us in front of many challenges. That encourages us to do more to overcome the difficulties and obstacles that stand before us to achieve a balance between the spread of higher education and the establishment on the one hand, and its level and content on the other hand, which requires us to focus more on the content of the educational process. Its aspects, reviewing, evaluating and modifying the line and curriculum and reviewing the law of public universities and private universities, the law, and standards of higher education, as well as scientific research, the greater interest in preserving the bright image of education, higher education and the outputs of the quality we desire, enhancing competitiveness and enabling it to accommodate the largest possible number of our youth in our Jordanian universities according to the system Goals consistent with the national goals.

Policies that Lead to Success In Implementing E-Learning or Digital Education Systems, Including The Following

Proving the information and communication infrastructure.

1. Providing training to provide digital education service effectively.
2. Providing the necessary support for human resources, especially to technology and budget issues.
3. Developing the means through digital education programs will be promoted and advertised.

4. Schools and universities must be organized among themselves in terms of providing special services to education in terms of content and procedures for enrollment and the salaries of teaching staff.
5. Ensuring that the differences between face-to-face (direct relationship) and digital education are clarified.
6. Working to develop the materials applied by the educational curriculum, to provide educational content by the Internet, to develop and improve methods and means of evaluation, and to cooperate with students.
7. Establishing an industrial, governmental, cooperative system for creating websites and providing content and curricula through these sites to teach in all areas of specialization.
8. Establishing centers to provide educational and teaching materials to provide students with websites for the decisions
And the contents that they will study in order to facilitate enrollment in digital or e-learning programs.
9. Providing financial support to universities that provide this type of education.

The Most Important Points that the Educational Institution Relies on to Achieve Efficiency in Higher Education Outcomes

1. The existence of a specific general and clear vision, mission, and goals for the educational institution.
2. The existence of a strategic plan for the educational institution and a clear annual plan based on scientific foundations.
3. The existence of a clear, specific, integrated and integrated structure of the educational institution.
4. Availability of a job description for each department in general and for every employee within the educational institution.

5. Adopting cooperative teamwork, developing the capabilities of academics, and attracting people with diverse experiences, talents and competencies.
6. Focusing on improving the quality of the final product (which is a graduate) for any major, regardless of
Their number, so the dependence of nuclear is in efficiency, not quantity.
7. Establishing a long-term philosophy and strategy, the result of the efforts of highly qualified and experienced academics, and evaluation of the role of the extent of its success in achieving the goals.
8. Using innovative methods, generating new ideas and optimal planning to reach the required level of competence, and always looking forward to excellence.
9. Creating a continuous need for the student for research and learning, which drives the continuous desire to develop capabilities to achieve the best.
10. Defining responsibilities for the private person, developing clear plans for the environment to monitor them and review the extent of implementation system by management, and a clear plan to correct the agreements in achieving the goals.
11. That the educational institutions be characterized by flexibility and possibility of renewal in their programs, objectives and organizational structure and its administrative processes to accommodate a new variable affecting the process of societal development.
12. Modification of the organizational structure of the institution in line with developments in its current situation.

13. Motivating workers in educational institutions and encouraging them to contribute to improving the level of performance. By enabling them to make appropriate changes and making decisions, giving them opportunities for creativity, and ensuring teamwork and the participation of all.

The researcher believes that the use of digital learning in higher education institutions helps to achieve the previous points in educational institutions, thus it allows institutions to develop students' learning so that this is only due to the necessity of creating active and qualified leadership management that works on the success of using digital learning to follow technological changes formm during the preparation of human cadres capable of dealing effectively with modern technologies. Also, establishing dedicated centers that do not prepare educational courses, working to create a database in Arabic and English, and linking it to the global network for the exchange of experiences, views and new ideas, and holding virtual seminars, courses and conferences and transferring them remotely using the Internet to serve the educational process.

The Appropriate Pattern of Education in Light of Emergencies, Disasters, Epidemics and Exceptional Situations

Perhaps planning to face the general and emergency conditions, including a matter that should occupy the thinking of governments and thus thinkers who present studies to their officials to take appropriate decisions at the right time, and since the reality of the situation is imposed on governments, including the UAE government, to take urgent decisions to save educational situations in a record time, the choice was focused on (Distance education) But this does not excuse the challenges that this study has reached to the following results:

1. Education serves under conditions of emergency, disaster, epidemic, and exceptional cases
2. Communication in the previous educational stage.
3. It builds for the next stage of education in normal, emergency, unverified, and uncertain circumstances.
4. This type of smart education accepts the rapid transition to traditional and e-learning without much effort
5. Addressing all aspects of educational gaps.
6. Achieves a high percentage of educational quality with flexible methods.
7. Accept the ideas of students without feeling the gap.
8. Satisfaction of the traditional and contemporary educational body.
9. The participation of students with lower rates than the currently applied education.

The higher education sector in Jordan has expanded continuously since the beginning of the last quarter of the twentieth century. The educational system has played a fundamental role in transforming Jordan from a country predominantly agricultural and pastoral into a country predominantly industrial and service, and the education sector in Jordan occupies the first rank in the Arab world, as it is one of the best educational systems that deal with the reality of education and its future aspirations according to the technological revolution, despite the challenges it faces. Higher education institutions and those in charge of them must search for radical solutions that raise the efficiency of the graduate and that ultimately lead to more employment. The educational product must have the specifications that meet the desire of the recipient and the beneficiary of it, and the feasibility of higher education is even linked to its outputs, from this case it is supposed to meet the needs of the various productive sectors

and the compatibility between the outputs of education and the requirements of the labor market, which have become a global problem facing all countries. And to enable the graduate to deal with the future efficiently and competently.

To achieve the requirements of the quality of university education, it is necessary to focus on the university student level, meaning that he moves from the university curriculum (just a means of reception) to an effective element in the formation of the curriculum and the dialogue of the scientific material, and at the level of the faculty member must keep pace with the accelerating scientific changes, and improve his performance at the academic levels. The technologist uses modern technological means in teaching and contributes to publishing refereed scientific research and holding conferences, seminars, and workshops that can be adopted in the culture of total quality.

Defining the desired goals of education can be summarized in three main issues: knowledge, digital skill, and a positive attitude in life, knowledge is variable, and skills are multiple, and modern, such as the use of technology and the way of speaking and presentation, so some faculty members do not have any technical skills and about the idea of linking Education in the labor market. We must think strategically and link the labor market with education so that the culture of society is not so much the testimony as to the acquired knowledge. Education affects the administration, the teacher, and the curriculum.

Previous Studies

- In the study (Al-Arabi, 2008), the virtual university project is discussed from an economic point of view through the study (The Virtual University Project: Benefits and Costs). The researcher mentions that

university education is witnessing major developments, the most important of which are related to the employment of information technology and its application in the educational process. That is in the so-called virtual university. Studies have shown that universities in developed countries view information and communication technologies as a tool. The strategy for communication between the university administration, faculty, and students. This motivates those universities to be present in cyberspace via the Internet with the same strength as its traditional physical presence. Thus, the study analyzes the motivating factors for the expansion of e-learning applications from both the supply and demand sides. In addition to presenting a model for the virtual university that is based on the web with an explanation of its basic functions and then explaining the expected benefits for each student, faculty member, university administration, and society in general. The study of (Al-Arabi) tends to provide economic benefits in achieving the study's objective in a theoretical manner, through extrapolation and tracking of studies and statistics results.

- The study (Al-Zamil, 2009) aimed at evaluating the experience of e-learning at the Arab Open University (Riyadh) and the General Organization for Technical Education and Vocational Training in the Kingdom of Saudi Arabia from the students' point of view to identify the feasibility of applying e-learning in the country, its obstacles, and the extent of student interaction in e-learning and their relationship In the professor, and the results of the study were the presence of some factors that contribute to the possibility of applying e-learning more, and the older age group interacts with e-learning better. In addition to the presence of some problems that affect students' interaction with e-learning, including the lack of a clear vision for students about e-learning and the material costs of connecting to the Internet. Most of the study

sample believes that e-learning does not weaken their relationship with the professor. They depend on him to follow the curriculum, which affects their ability to self-learning.

- Ahmed's study (2015) entitled The “Digital Library” Study, Its Role in the Development of E-Learning in the United Arab Emirates. This study aimed to uncover the role of the digital library in developing electronic education in the United Arab Emirates, and not to make the best use of it despite its importance and role in supporting e-learning in smart learning applications. The study adopted a questionnaire to evaluate the educational digital library project in the United Arab Emirates, and this study reached the following results: The use of interactive educational electronic content suffers from a lack of adequate awareness, lack of training and its limitations, and the lack of continuous field follow-up to monitor feedback for users of smart applications. The need for a unified national strategy to activate use by linking these applications to educational situations and classrooms, lack of clarity of vision about adopting digital books for smart applications associated with them instead of educational patterns using traditional printed books. The results of the current study could be the start of other future studies to diagnose the reality of the transition towards smart learning, and then suggest the best ways and proposals to improve the educational process, and support the Ministry’s initiatives aiming at developing education in the United Arab Emirates, on the map of educational developed countries and adopting the initiatives that It achieved leadership in this field.
- In a paper presented by Badran (2016) entitled “Private university education policies in Jordan,” she outlined the policies of higher education and the role of private universities, through which he reviewed the number of universities in Arab and foreign countries, the problems

of legislative, administrative and economic education, members of the teaching staff and higher education institutions, and an indication of the reasons for the decline in the educational reality. Through questions raised, is it the improvised and floundering politics in universities? Is it the governance and bad management of universities' human and financial resources by incompetent presidents? Or is it robbed of the powers in the field of trustees? He stressed that the reason why countries have risen is their adherence to education by the methodology of adopting creative minds to face challenges, and the elimination of unemployment among graduates, as it rose among young people to reach 25% of the unemployment rate.

- Sousa and Rocha (2019) study This study aimed to discuss the effective digital transformation of enterprises based on the latest skills trends. It also intends to analyze individuals' perceptions regarding the challenges faced by organizations and the opportunities for new acts of sabotage. A literature review was conducted on digital education contexts and identified the skills needed for the digital transformation of organizations. Moreover, an online questionnaire was launched to determine the importance of skills for an effective digital transformation. As a main result, the main skills identified were artificial intelligence, nanotechnology, robotics, the Internet of things, augmented reality, and digitization: the main digital education contexts were technologies of mobile devices, tablets, and smartphone applications - which became more and more popular among employees. This study will help organizations to rethink their strategies according to skill development to respond to the challenges of digital transformation.

The researcher concluded that all previous studies confirm the role of digital learning in developing students' learning in all their stages in light

of circumstances and challenges. Most of the previous studies have overcome material and human obstacles that prevent the application of digital education.

The Study Problem

The matter of university education in Jordan is considered a community issue, and it faces many difficulties and challenges facing and even impeding Jordanian universities from accessing global ranking centers, quality, and excellence in their outputs, and in light of the increasing demand for higher education in all governorates of the Hashemite Kingdom of Jordan, the expansion of institutions and their efforts to search for mechanisms to achieve competitiveness, and to develop their work mechanisms to achieve further progress for them. And advancement and keeping abreast of developments in the local and regional arena at a time when the Jordanian people are living in a state of weak stability at the political, economic, and social level in light of the current circumstances. The study came to answer the following main question: What is the role of digital learning in developing university students 'learning under conditions and challenges?

Study Objectives

The current study aims to answer the following terms:

1. What is the degree of application of digital learning in higher education institutions from the viewpoint of the study sample?
2. What is the role of digital learning in developing university students 'learning from the point of view of its workers?
3. What are the obstacles that prevent the application of digital learning from the viewpoint of the study sample?

4. Are there statistically significant differences at a significant level at ($0.05 \geq \alpha$) between score averages the evaluation of the sample respondents to the role of digital learning in developing university students' education is attributed to the variables (Practical qualification - generals - years of service).

The Importance of the Study

1. The importance of the study is materialized in the need for Jordanian universities to activate the role of digital learning and its standards in managing their affairs, especially in light of the current crisis, which enables them to achieve their goals and to pursue development prospects for change to excel and innovate in performance to ensure outputs.
2. Providing a scientific material that will be a reference for researchers in the field of digital learning from an applied point of view.
3. Motivating decision-makers in higher education and scientific research institutions to support and recognize digital learning.

Study Tools

A questionnaire to find out the opinions of students in university institutions about the role of digital learning in facing the challenges of education in light of emergency circumstances.

Study Boundaries

The study limited to:

- **Objective boundaries:** The role of digital learning in developing university students' learning under conditions and challenges.
- **Temporal boundaries:** 2019-2020.
- **Spatial boundaries:** Jordanian public and private universities.

- **Human borders:** a sample of students in public and private universities.

Procedural Terms and Definitions:

- Digitization UNESCO defines digitalization as the creation of digital materials from physical and human assets by scanning cameras and specialized devices, as digital content includes the creation and exchange of content and the process of accessing it, including online courses, libraries, digital texts, games, and applications (Tung, 2018).
- Smart digitization is the process of transforming sources of information in all its forms (books, periodicals, photos, Voice recordings (into a machine-readable form by using computers via the binary digital system, Bits, which is the basic information unit for an automated information system based on the use of computers, converting information into a group of binary numbers, using a range of specialized technologies and devices) (Al-Khathami, 2010).
- Digital learning is an integrated system that relies on the use of computers, tablets, advanced technologies, and the web to perform electronic academic activities that include presenting lessons inside or outside the classroom through several systems for viewing lectures, presentations, books, recording lectures, submitting assignments, performing educational activities, achievement tests and following upgrades And conducting direct dialogue with faculty members or colleagues at any time or place.

Study Curriculum

The study relied on the descriptive and analytical method. by studying the relationships between the variables (Main and sub), By collecting and

analyzing data relevant to the degree of digital e-learning practice among researchers and students in institutions of higher education and scientific research.

Study Community

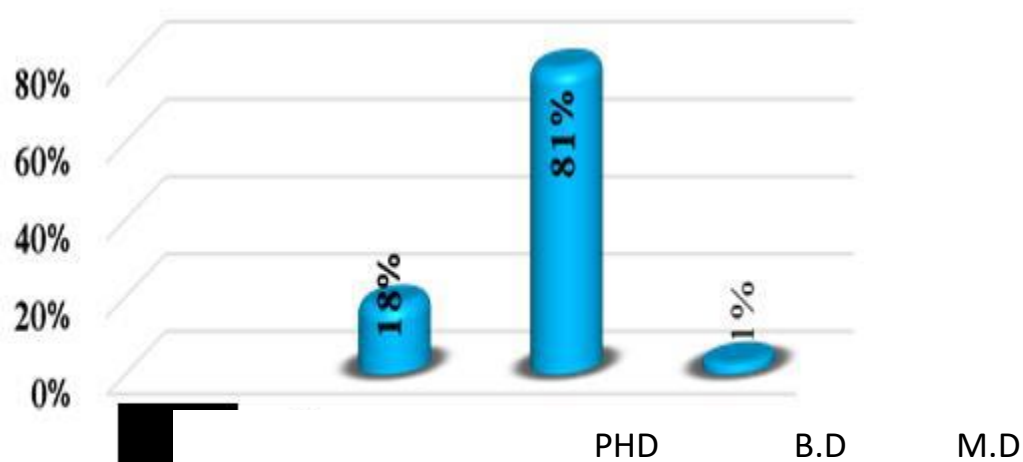
The study population consists of students in institutions of higher education and scientific research.

Study Sample Individuals

A random sample was chosen, consisting of (306) males and females individuals from the study population.

Table No. (1): The Frequency Distribution and the Relative Weight of the Study Individuals According to the Qualification Scientific.

The scientific qualification	Repetition	Relative weight
PHD degree	54	18
Master degree	249	81
Bachelors degree	306	100
Total		



مل العلمي No. (1): the frequency distribution of the study individuals according to the qualification Scientific.

Study Tool

For the current study, the researcher developed a measure to the extent of applying digital learning in institutions.

The Study Tool Validate

the content Validated: This scale is based on specific procedural steps, based on an analysis of previous studies and theoretical framework, The researcher considered these procedures as evidence of the validity of the content. Also, The construction validity is calculated, the correlation coefficients between each field and the overall score. it ranged between (0.52 - ** 0.84, **). It should note that all the correlation coefficients between each field and the pale degree in this study are of high values and a statistical function.

Table No. (2) Pearson correlation coefficient between the study axes with each other and The total mean of the axis

Axis number	Axis two	Axis three	All axis
Axis one	0.79	0.52	0.67
Axis two		0.59	0.84
Axis three			0.62

The Study Tool Stability

To make sure of the study tool, Cronbach's Alpha laboratories were used. The Cronbach alpha values ranged between (0.96 - 0.93) It is an acceptable study method Conducted by the researcher, Table No. (3), above.

Table No. (3) The Values of the Cronbach Alpha Coefficient for The Study Tool Axes.

The study Axis	stability
Axis one: The degree of application of digital learning in higher education institutions	0.91
Axis two: The role of digital learning in developing university student learning	0.89
Axis three: The obstacles that prevent the application of digital learning.	0.88
Axis four: Stability of the form.	0.89

Study Procedures: The Researcher Took the Following Procedures:

1. select the community and individuals of the study.
2. Developing the study tool.
3. Adopting judgment standard Based on the results of the study along with the validity and reliability of the study tool.
4. Collecting and checking the questionnaires, then statistically processing.

Findings and Discussion

Results of the first study question: What is the reality of applying digital learning management to achieve competitiveness in higher education institutions from the viewpoint of its employees?

The question answers by describing personal characteristics. The researcher distributes (306) questionnaires to postgraduate students. (306) questionnaires retrieved with (100). After reviewing the questionnaires, it

founds that all were valid for analysis. Thus, the sample of the study consisted of (306) researchers and students.

To answer the question, the researcher calculated the arithmetic means, standard deviations, ranks, and level for each domain in general. For the degree of application, digital education in higher education institutions is (31.0%) of individuals out of the samples, they agree that it is available at an average degree, which is the highest percentage. And that (9.2%) of them agree that it is available to a large degree, and, it is the lowest percentage.

As for the responses of the rest sample members about the availability of the learning method Digital in universities, it lies between these two values. the researcher calculates The arithmetic means and standard deviations of the first axis expressions: These results demonstrate that digital learning applies in Institutions Higher education ranges between (4.36 - 1.88). That is, the digital learning application is available in a medium degree with an arithmetic mean of (2.84), the weight of the relative value is (56.8%), and a standard deviation is (0.82) depending on the responses of the sample members. The difference between universities to which the study sample belongs, and the degree of applying digital learning depends on the degree of availability.

The diversity of universities and regions may allow some of them to optimize the use of educational technology and effective learning management, and others may not. As a result, the researcher gained varying degrees of practice by the lecturers. Also, some of the lecturers may focus on the course material on the senses of using support technology and any other activities that cost them more work and effort. Which might be stressful for some of them.

Results of The Second Study Question: What Is the Role of Digital Learning in Developing University Students' Learning? Regarding The Use of Digital Learning in Developing Student Learning?

(46.6%) of respondents use a large degree (often) It is the highest percentage. (22.6%) of them are used to a low degree, it is the lowest percentage, as, for the rest of the responses of individuals, the sample on this axis falls between these two values. The results also show that the role of digital learning in developing university students' learning ranged between (1.94 - 4.29). And that the general arithmetic mean is of medium degree (sometimes) arithmetic mean and its value was (2.95) with (59.0%) a standard deviation of (0.77) according to the responses of the sample members.

The use of digital education is considered a helpful factor in teaching, and the use of digital learning saves time, effort, and money, makes education enjoyable for the students, increases the student's ability to understand scientific concepts of the subject, improves the use of digital education in the quality of learning and increases the student's motivation towards learning, and is considered an effective method in Transferring and communicating information.

The Third Question: What Are the Obstacles That Prevent Applying Digital Learning from The Viewpoint of the Study Sample?

- Some students do not have computers or the Internet at home.
- Internet connection service is not available (sufficient and appropriate)
- Appropriate libraries and e-books are not available
- Curricula are not converted to electronic curricula
- Financial support to obtain technological innovations is insufficient

- The lack of training programs for students and how to deal with technological innovations
- Teachers low confidence in themselves, their abilities to use it, their negative perceptions of technology, and their reluctance to change
- The lack of a comprehensive and continuous calendar

The Results of the Fourth Question: Are There Statistically Significant Differences at The Level of Significance ($0.05 \geq A$) Between The Mean Scores of the Sample Members 'Assessment of The Role of Digital Education in Developing University Students' Learning Due To The Variables (Academic Qualification)?

The arithmetic mean of the responses of the study sample members from the Bachelor's campaign was (2.88) with a degree of (average). Its relative weight is (57.5%) the standard shelf deviation is (0.86), which is higher than the arithmetic mean of the responses. Individuals of the study sample who hold a master's degree, who are (2.86) with a (medium) degree, and have a relative weight of (57.1%). And a standard deviation of (0.67), while the lowest arithmetic means for doctoral holders was (2.66) degree. (Medium) has its relative weight (53.1%) and a standard deviation of (0.63). It is evident from the above that there are apparent differences There are statistical differences in the arithmetic averages of the study member's sample responses depending on the academic qualification. The result of the variance test a severe (ANOVA) (1.57) a probability value (0.209) which is greater than the significance level ($\alpha = 0.05$);) Therefore, there are no statistically significant differences at the level of significance (0.05) between the arithmetic means according to the responses of the study sample members according to an academic qualification.

Table No. (4): The Arithmetic Averages and The Standard Deviations of the Study Sample

Qualification	Number	Arithmetic mean	Relative weight%	Standard deviation
PHD degree	54	2.66	53.1	0.63
Master degree	249	2.88	57.5	0.86
Bachelor's degree	3	2.86	57.1	0.67

	Sum of squares	Freedom score	Average of squares	Value (q)	statistical significance Level (α)	
between	2.12	3	1.06	(1.57)	0.209	Indifferent
inside	203.84	303	0.67			
Total	205.96	305				

The researcher attributes this result because Jordan has come a long way in meaningful investment in higher education, in which its focus was on quantity and horizontal expansion, which is the expansion of so many necessities for a country that have the highest proportion of youth in the world. Among its social traditions is that the people in it rise in society, the state, and wealth through the channels of education and higher educational attainment and in a country whose workforce trained in digital learning and other skills and educated people constituted the most important drivers in the country's internal revival, as well as the most important economic tributaries through the export of labor and Experience to other Arab countries.

Recommendations:

- Setting a proposed vision to develop the reality of using digital learning in public education schools and universities in light of global experiences and expertise.
- Establishing clear and specific development plans and enacting regulations and regulations that guarantee learners through digital learning degrees and scientific certificates granted and recognition and make the labor market recognize the certificates given by these institutions
- The necessity of producing Arabized and advanced educational programs for digital learning. This should be done by attracting qualified, skills, and talented technicians.
- Provides an organizational structure that helps in coordination and interaction between all institutions of higher technological education.

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