

THE ROLE OF E-LEARNING IN ACHIEVING QUALITY IN HIGHER EDUCATION

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Abstract

The world is experiencing a wave of wide transformations and a revolution of science and technology that affects everything as a result of the tremendous development in science and technology, especially with regard to remote communication systems, from which many fields and sectors have benefited, the most important of which is education, which invested this progress in an effective manner, whether by integrating these developments in The traditional process or through the creation of an integrated advanced education that depends mainly on the availability of high-quality and efficient means and techniques of communication, which was called by many new terms and concepts, including: e-learning, digital education.

Keywords: e-learning, means and technologies of communication, digital education.

INTRODUCTION

The advancements and developments in the field of educational technology have led to the emergence of numerous technological innovations, making their integration into the educational process an urgent necessity to enhance educational efficiency. Among these innovations is e-learning, with its diverse tools and methods that align with the scale of future challenges.

Consequently, in line with this global trend toward change and development in the educational process, it has become imperative for most countries, including Algeria, to achieve quality standards in education by effectively utilizing e-learning tools.

Given the importance of this topic, the research problem is presented as follows: What is meant by e-learning globally, and what are its implications for the quality of higher education?

This research aims to present the concept of e-learning and the quality of higher education, highlight their significance, and identify the role of e-learning in enhancing the quality of higher education while outlining its challenges.

To address the topic, a descriptive and analytical approach was adopted, which suits such topics. The research is structured according to the following plan:

1. **The First Section:** The essence of e-learning.
2. **The Second Section:** The essence of quality in higher education.
3. **The Third Section:** Challenges of e-learning.

THE FIRST SECTION: THE ESSENCE OF E-LEARNING

E-learning is the result of the integration of communication and information technologies into the field of education. It is a modern method of teaching that enables the use of all types of modern technologies to manage the educational process. This type of education will be explored through discussing the concept of e-learning (first), its types (second), and the importance and objectives of e-learning (third).

First: The Concept of E-Learning

E-learning is considered part of the new dynamic that characterizes educational systems at the beginning of the 21st century. The concept of e-learning is subject to continuous change.

Moreover, it is challenging to arrive at a single definition of e-learning that is accepted by the majority of the scientific community. The various concepts of e-learning differ based on methodologies and specific professional interests.¹

A- Definition of E-Learning

The term "e-learning" has been defined in various ways. Below are some of these definitions:

- E-learning is defined as "an educational system in which education is delivered to the student at their place of residence or work, rather than requiring the student to travel to the educational institution itself. This is achieved through one or more diverse multimedia formats, whether visual, auditory, written, or computerized."²
- It is also defined as "the use of communication technology in management, teaching, and learning. E-learning, therefore, encompasses all aspects of information and communication technology that serve the university's strategy."³
- Additionally, e-learning is described as "a modern form of delivering well-designed learning that is student-centered, interactive, and provides a learning environment accessible from any location and at any time. This is achieved through the use of various digital technology resources characterized by flexibility and a distributed learning environment."⁴

B- Characteristics of E-Learning

E-learning is characterized by numerous features that have made it an essential component of modern education. These features include:⁵

1. E-learning provides valuable content through written texts and audio effects, in addition to a significant reliance on various other presentation tools, such as images and video clips, ensuring these multimedia elements achieve the goals of e-learning.
2. It is cost-effective compared to traditional education and can be accessed anytime and anywhere.
3. It allows learners to review lessons repeatedly as needed.
4. It enables learners to acquire knowledge independently, which reinforces the concept of self-learning and reduces reliance on others.

Second: Types of E-Learning

E-learning is divided into three types:⁶

1. **Synchronous Learning:** This type involves real-time interaction between the teacher and students, such as through video conferences, audio conferences, chat rooms, and similar tools.
2. **Asynchronous Learning:** In this type, communication between the teacher and students occurs with a time gap, utilizing tools such as email, discussion forums, and newsgroups.
3. **Blended Learning:** Also known by various names such as hybrid learning, mixed learning, or integrated learning, this type combines the advantages of the two previous types to mitigate their drawbacks. It merges e-learning with classroom-based learning, employing various tools such as educational software and the internet. In many cases, the teacher and student meet face-to-face.

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Third: The Importance and Objectives of E-Learning

A- Importance of E-Learning

E-learning holds significant importance and numerous advantages that have driven many educational institutions to adopt this form of learning:

1. **Increased Communication Opportunities:** E-learning enhances connectivity between students themselves and between students and the university. This is achieved through easy communication channels such as email, chat rooms, and discussion boards.
2. **Facilitating the Exchange of Perspectives:** Real-time platforms such as discussion boards and chat rooms provide opportunities for students to exchange views on various topics, aiding in the development of strong and informed opinions.
3. **Promoting Equality:** E-learning fosters a sense of equality among users, allowing students to express their opinions without embarrassment, discomfort, or hesitation.
4. **Ease of Access to Professors:** Students can communicate with their professors quickly, even outside official working hours, by sending inquiries via email at any time and from any location.

5. **Flexibility and Accessibility:** E-learning eliminates the need for physical attendance, offering flexibility that allows students to learn without being constrained by time or place.
6. **Simplifying and Diversifying Student Evaluation:** E-learning facilitates various evaluation methods and repetition, contributing to a better understanding and retention of information.
7. **Enhancing Interactivity:** E-learning fosters an interactive environment in the learning process. This interactivity transcends one-way content delivery and enables communication among learners, with the content itself, with educational resources, and with instructors.⁸

B- Objectives of E-Learning

Entering the realm of modern technologies must be based on specific objectives to maximize benefits. Accordingly, the primary objectives of e-learning include:⁹

- **Providing a Multi-Source Educational Environment:** E-learning aims to support the educational process in all its aspects by modeling education and presenting it in a standardized form. Lessons are delivered in exemplary formats, and outstanding educational practices can be replicated. Examples include banks of exemplary questions, lesson plans, and optimal use of multimedia technologies such as audio and video.
- **Preparing a Tech-Savvy Generation:** E-learning seeks to prepare a generation of teachers and students capable of dealing with modern technologies and the rapid advancements of the contemporary world. It also contributes to spreading technology within society, transforming it into a digitally literate community that keeps pace with global developments.¹⁰
- **Facilitating Flexible Learning:** E-learning encompasses distance learning and technology-enhanced education through computers and the internet, using web-based tools, collaborative software, email, communication platforms, and computer-based assessments. Its high flexibility is one of its most significant advantages, enabling learning anytime, anywhere, through any method, and for any subject.¹¹

THE SECOND SECTION: THE ESSENCE OF QUALITY IN HIGHER EDUCATION

Quality, in general, represents one of the main requirements for higher education and contemporary universities today. Recently, global and local interest in the quality of higher education has grown, accompanied by increased efforts to establish standards for this quality. This emphasis is crucial for improving and qualifying the outputs of this sector to compete in various labor markets according to international standards.

As a result, all countries have directed their efforts toward improving the quality of their education systems to enhance and grow their economies. Quality in higher education has thus become the challenge of the current era.

First: The Concept of Quality in Higher Education

Defining the concept of quality is ambiguous and undefined in the business world, and it becomes even more obscure and less defined in the field of education, particularly in higher education. Among the definitions provided for the quality of higher education are the following:

- Quality in higher education is defined as "the ability of educational institutions to produce a high-quality educational product represented by their graduates, in addition to contributing to community service and environmental development. Thus, quality in education is the optimal application of educational tools to ensure the highest possible quality in outcomes, which means achieving the defined objectives with the highest possible efficiency for all elements and functions of the educational process to attain high-quality education outputs."¹²
- Quality in higher education is also defined as "the ability of the total characteristics and features of the educational product to meet the requirements of students, the labor market, society, and all internal and external stakeholders."¹³

Second: The Importance of Quality in Higher Education

The importance of implementing quality principles and requirements in the field of higher education stems from the significance of higher education institutions and their substantial impact on various other sectors. The importance of applying quality in higher education is evident through the benefits it achieves, including:¹⁴

- Regulating and improving the administrative system in higher education institutions.

- Enhancing the students' level across all fields.
- Increasing educational efficiency and raising the performance level of employees in higher education institutions.
- Meeting the needs of students, their parents, and society, and achieving their satisfaction in accordance with the overall system of higher education institutions.
- Establishing connection and integration among faculty members and administrative staff within higher education institutions and fostering teamwork.
- Implementing a quality system grants higher education institutions local respect and global recognition.
- Preventing randomness in higher education institutions, whether in teaching, administration, or among students. This ensures that educational functions have well-defined objectives, expected outcomes, and organized methods and strategies following specific rules.
- A comprehensive system that spans various fields, with an emphasis on achieving the multiple levels of the organizational structure.¹⁵

Third: Standards for Ensuring Quality in Higher Education

The quality of higher education is achieved through the following standards and levels:

A- At the Level of the Educational Institution

- Ranking among the top positions in global academic university rankings.
- Research and studies completed, approved, and validated by global specialized bodies and institutions in the field.
- Intellectual and scientific contributions made by the institution.
- The number of professors with high ranks and qualifications.
- Scientific events and activities organized by the institution.
- The number of accredited research teams and laboratories.

B- At the Level of Students

- The ability to fully and effectively comprehend the curriculum of their specialization.
- The ability to apply the acquired university knowledge in the workplace.

C- At the Level of the Teaching Staff

- Contributing to the scientific output of the university institution.
- The ability to effectively deliver knowledge to students.
- The ratio of faculty members to students.
- Mastery of the academic subject matter.
- Developing students' critical thinking and creativity.
- Proficiency in teaching methods and strategies.

Additional aspects include: maintaining regularity in the educational process, accepting feedback, fostering national awareness and ethical values, promoting analytical thinking, ensuring a high level of personal interaction, understanding students' needs, adhering to scientific methodologies, enhancing competitive intellectual skills, understanding the objectives of teaching methods used, encouraging in-depth perspectives, and being aware of the role of scientific competence.¹⁶

The standards established by the Permanent Evaluation Committee for University Education Quality in British Universities and the Higher Council for University Education Quality Assessment in American Universities include the following: Academic level and knowledge background.¹⁷

THE THIRD SECTION: CHALLENGES OF E-LEARNING

The Third Section: Challenges of E-Learning

E-learning can play a significant and effective role in improving the quality of higher education. However, in some higher education institutions, several challenges act as barriers to this type of education fulfilling its intended role.

The main challenges facing the implementation of e-learning and some proposed solutions to overcome them are as follows:

- **Lack of funding and infrastructure** required for e-learning.

- **Shortage of trained personnel:** This includes the absence of technicians, experts, and specialists necessary for implementing e-learning projects. This can be addressed by organizing intensive training sessions for the required personnel and sending them on training missions to advanced countries.
- **Technological illiteracy in society and lack of awareness of e-learning:** Addressing this challenge requires intensive efforts to train and prepare both teachers and learners for this experience.
- **Information security:** Implementing security policies to protect databases and virtual learning platforms from unauthorized uses.
- **Technical issues:** These include difficulties in accessing information and unexpected network disruptions due to weak internet connectivity.¹⁸
- **Insufficient devices for students:** The high cost of computers and the requirement for advanced devices to run modern programs pose challenges.
- **Lack of expertise among those managing educational programs:** Many fail to attend training sessions and conferences in advanced and developed countries.

CONCLUSION

The use of modern technology is one of the main objectives of educational policies in any country, as it has become one of the most important tools for development in our era. The integration of computers as a subject and a curriculum, especially at the university level, has made education more engaging, enjoyable, and efficient, while saving time and effort.

In conclusion, we have reached the following key findings:

1. E-learning through electronic platforms plays a significant role in the educational process, but this type of education requires proper planning for systematic implementation.
2. E-learning still requires certain capabilities and conditions, such as the technological and cultural infrastructure necessary for the success of this educational model, particularly in virtual or online universities.
3. Most higher education institutions suffer from the lack of essential technological tools, such as computers and high-speed internet, which are fundamental for every faculty member at their workplace.
4. Several obstacles hinder the use of e-learning as a modern mechanism to support the continuity of quality in higher education (e.g., financial and technical challenges).

Based on these findings, we recommend the following:

1. Revising educational curricula in line with the current needs and trends of the digital society.
2. Enhancing technology-supported education, including the creation and expansion of e-learning platforms that provide instant access.
3. Supporting the establishment and expansion of online higher education institutions with curricula that integrate science and technology.
4. Promoting the development of active learning communities within online platforms.
5. Supporting libraries and other lifelong learning spaces in digital skills strategies.
6. Ensuring continuous training to employ modern educational and information technologies in education.

ENDNOTES

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