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## Digital Educational Platforms in the Educational Process: Between Technological Transformation and Pedagogical Stakes

المنصات التعليمية الرقمية في العملية التعليمية  
بين التحول التكنولوجي والرهان البيداغوجي

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## Abstract:

Educational systems are undergoing profound transformations driven by rapid technological advancement, making digital tools an essential component of the educational process. Within this context, digital educational platforms have emerged as one of the most prominent manifestations of modern educational technology. They represent contemporary learning environments that contribute to developing the educational process, transcending the limitations of traditional education. This article aims to analyze the role of these platforms in developing the educational process based on a theoretical-analytical approach. It addresses their conceptual foundations, pedagogical functions, and contributions to improving learning quality and enhancing learner interaction. Furthermore, it clarifies e-learning modes, their key characteristics, and advantages, while highlighting their role in supporting continuous self-directed learning and reshaping the roles of both teacher and learner.

**Keywords:** Digital Educational Platforms, Educational Technology, E-Learning, E-Learning Modes, Quality of Education.

## المخلص:

تشهد الأنظمة التعليمية تحولات عميقة بفعل التطور التكنولوجي المتسارع، مما جعل الأدوات الرقمية مكوناً أساسياً في العملية التعليمية، وفي هذا السياق، برزت المنصات التعليمية الرقمية بوصفها أحد أبرز تجليات تكنولوجيا التعليم الحديثة، حيث أصبحت تمثل بيئات تعليمية حديثة تسهم في تطوير العملية التعليمية، متجاوزة محدودية التعليم التقليدي، ويهدف هذا المقال إلى تحليل دور هذه المنصات في تطوير العملية التعليمية اعتماداً على مقارنة نظرية تحليلية، ويتناول المقال أسسها المفاهيمية، ووظائفها البيداغوجية، وإسهاماتها في تحسين جودة التعلم وتعزيز تفاعل المتعلمين، إضافة إلى توضيح أنماط التعليم الإلكتروني وأهم خصائصها ومميزاتها، كما يبرز دورها في دعم التعلم الذاتي المستمر وإعادة تشكيل أدوار المعلم والمتعلم.

**الكلمات المفتاحية:** المنصات التعليمية الرقمية، تكنولوجيا التعليم، التعليم الإلكتروني، أنماط التعليم الإلكتروني، جودة التعليم.

## 1. INTRODUCTION

Rapid technological transformations have created a new educational reality that forces educational systems to reconsider their traditional foundations and the methods used to organize the teaching and learning process. Education has shifted from a model based on rote memorization and knowledge transmission to a model focused on knowledge construction through interaction and self-learning, leveraging the potential offered by the digital revolution. At the heart of this transformation, digital educational platforms have emerged as one of the most important tools reshaping the learning environment and expanding the horizons of the educational process.

Digital educational platforms represent an advanced manifestation of educational technology, integrating digital content, interactive tools, and assessment methods.

This integration enables the delivery of flexible, multimedia learning that transcends temporal and spatial constraints. However, despite its importance, this shift raises fundamental questions about the effectiveness and efficiency of these platforms in developing the educational process, the extent of their actual contribution to improving the quality of learning, and the nature of the accompanying pedagogical stakes.

Based on this, this article seeks to address the following problematic question:

**To what extent do digital educational platforms contribute to developing the educational process, and what are the limits of the pedagogical stakes associated with their deployment in contemporary educational contexts?**

The article adopts a theoretical-analytical approach based on a range of

educational studies and research addressing digital educational platforms, with a focus on their conceptual dimensions, educational functions, and their impact on both the teacher and the learner.

### **First: The Concept of Digital Educational Platforms**

Digital educational platforms are relatively recent concepts in the field of educational technology. Their emergence is linked to the rapid digital transformation witnessed by contemporary educational systems due to the development of the internet, communication, and information technologies. This shift occurs within the context of transitioning from traditional educational models based on instruction and physical attendance to more flexible models based on interaction, self-learning, and the utilization of digital media in knowledge construction. This transition has redefined the concept of the learning environment and its temporal and spatial boundaries, revolutionizing the field.

An electronic platform is defined as:

"The place where groups of stakeholders gather under clearly defined rules of engagement to exchange ideas, goods, services, and anything else. They are software programs used to host an application or service operating under an operating system and software formatting that uses a set of instructions for a specific processor. They are platforms for training, work, communication, interaction, and remote services based on web technology. They consist of a coherent technical and commercial offering to access a world of interactive or non-interactive services that can be broadcast or provided online, either paid or free, with limited or unlimited access. This offering relies on developing a community of users, establishing a direct and official link with the platform operator"[1].

It was also stated in the *Harvard Business Review* that a digital platform is a technology-based business model that is easy to use, facilitates the exchange of information, goods, and services among

different parties, and allows electronic communication between many people[2].

Thus, electronic platforms are interactive digital virtual spaces that transcend traditional, recognized physical spaces. They are based on interaction and sharing among actors within a virtual space that allows them to communicate, thereby overcoming time and space.

Under this digital transformation encompassing all fields, education has become one of the sectors that benefits the most and utilizes this shift along with the privileges and facilities provided by modern technology. E-learning has become an educational method for delivering information to learners. It uses all types of modern communication technologies to deliver information to the learner in the shortest time, with the least effort, maximum benefit, and greater flexibility and interactivity. It provides spaces for communication and interaction between learners and teachers[3], making it an essential tool for developing educational methods and diversifying the ways knowledge is disseminated.

Digital educational platforms are defined as remote training platforms based on web technology, through which everything related to e-learning is presented. This includes e-courses and their contents/activities. Through these platforms, the learning process is achieved using a set of communication and interaction tools, enabling the learner to obtain the required courses and curricula[4]. Educational platforms are interactive software educational systems employed to deliver courses, educational activities, and electronic learning resources. This allows for organizing the teaching and learning process, tracking learners' progress, and evaluating their performance. This conceptualization highlights the comprehensive nature of educational platforms as integrated learning environments that are not limited to displaying content but extend to interaction, communication, and managing the learning

process with all its components, making them a structural framework for the digital educational process rather than just a technical medium.

In this context, we find several definitions of electronic educational platforms as a form of education and information delivery to the learner. Through it, modern communication mechanisms are used, including computers, networks, and multimedia (audio, image, video), search mechanisms, electronic libraries, and internet portals—whether remotely or in person during the classroom session. Thus, it is a teaching method that relies on using all types of technology to deliver information to the learner in the shortest time, with the least effort, and maximum benefit[5].

Education via electronic platforms is an integrated, multi-source, interactive educational software system on the Internet. It aims to offer courses, educational programs, and instructional activities using interactive educational and communication technology tools, thereby enhancing the educational process. This highlights the integrative dimension of educational platforms, combining interactive digital content with educational material such as lessons, distinguishing them from other digital media that lack functional integration. Educational platforms are not limited to the technical dimension alone but encompass the pedagogical dimension. The success of these platforms in the learning process is not achieved merely by deploying digital media, but rather through the proper integration of educational content (curricula, materials, lessons) with these digital media.

#### **Second: Between E-Learning and Traditional Learning**

In light of digital technological transformations, the learning process is no longer confined to traditional education based on direct physical attendance and real-time interaction with the instructor within a single temporal and spatial framework. Rather, this development has led to the emergence of new patterns of education, such as e-learning, which has revolutionized

the learning process by providing vast opportunities for learning outside the boundaries of time and space. Consequently, digital educational platforms emerged to combine the characteristics and requirements of traditional education with technological developments and aspirations. To understand the nature of these educational platforms, it is necessary to identify the differences between traditional education and e-learning across several key aspects[6]:

| <b>E-Learning</b>                                                                                                                                                                                          | <b>Traditional Learning</b>                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| E-learning introduces a new type of culture, namely digital culture, which focuses on knowledge processing and helps the student become the center of the learning process rather than the teacher.        | Traditional learning relies on the production of knowledge, where the teacher is the center of the learning process. |
| E-learning requires high costs, especially at the beginning of its implementation, to set up the infrastructure (computers, software) and train teachers and students on how to deal with this technology. | Traditional learning does not require high costs for computers, software, training, etc.                             |
| E-learning is not bound to delivering education in a specific time and place.                                                                                                                              | The learning process takes place in a specific place and time (the classroom).                                       |

| E-Learning                                                                                                                                                     | Traditional Learning                                                                                                                    | E-Learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Traditional Learning     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| It relies on the student's activity and collaborative engagement because it is based on self-learning.                                                         | It relies on receiving information from the professor without research or investigation, depending on the lecture and dictation method. | communicate with various professors and students of different nationalities if registered on foreign platforms.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | which the student lives. |
| E-learning provides educational opportunities to a wide segment of society without requiring physical attendance.                                              | Traditional learning requires physical attendance in the classroom and regular attendance throughout the week.                          | <b>Third: Modes of E-Learning</b><br>E-learning takes several modes; it is not limited to a single pattern but assumes multiple forms depending on the nature of interaction between the teacher and the learner, the degree of reliance on digital media, or the time and schedule of learning. Abdullah bin Abdulaziz Al-Mousa explains this by saying: "When we talk about electronic studying, we are not necessarily talking about instantaneous synchronous education; rather, e-learning may be asynchronous. Virtual learning means learning useful things from remote sites unbounded by place or time via the Internet and technologies"[7]. These modes consist of: <ul style="list-style-type: none"> <li>• <b>A. Synchronous E-Learning:</b> This is an electronic learning format where communication is direct between the student and the teacher simultaneously through audio, video, or even text. This occurs via chat rooms or by receiving lessons through what are known as virtual classrooms, along with other tools. One of its most significant advantages is that the learner can obtain immediate feedback on the lesson, reducing their effort and required cost since they are not obliged to travel to the class location. The only challenge in this mode is that it requires modern electronic devices and a strong internet connection[8].</li> <li>• <b>B. Asynchronous E-Learning:</b> This is indirect learning that does not require the simultaneous presence of the teacher and the student. The teacher places the scientific material on the platform or any electronic medium in a way that allows</li> </ul> |                          |
| Learning is more motivating and exciting for students due to the inclusion of multiple media in the learning process, such as images, videos, and other media. | Content is presented in the form of a printed book containing textual prose and some images.                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |
| Freedom to communicate with the teacher at any time and ask questions through various media.                                                                   | Communication with the teacher is limited to the duration of the class period.                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |
| The teacher's role is guidance, direction, assistance, and providing [1] consultation.                                                                         | The teacher is the transmitter and lecturer of information.                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |
| The necessity of learning foreign languages to                                                                                                                 | It is mostly limited to the language of the country in                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |

the student to access the educational content at a convenient time and place, following the teacher's instructions and guidance without synchronicity between them. One of the advantages of this type is that the learner accesses lessons according to their preferred times. Types of asynchronous learning include CDs, electronic documents, educational websites and forums, e-mail, and other media[9].

- **C. Blended Learning:** Blended learning is an educational pattern that combines traditional face-to-face learning with e-learning. Digital media and technologies are utilized alongside direct interaction within the classroom to achieve integration between the two methods. This pattern allows for exploiting the advantages of traditional education—such as direct, immediate communication with the teacher—and the advantages of e-learning, such as flexibility and availability of educational content at different times[10].

#### **Fourth: Characteristics and Advantages of Digital Educational Platforms**

Digital educational platforms are distinguished from other educational media by characteristics that make them suitable for the requirements of contemporary education, rendering them an integrated learning environment. These technologies and digital media within these platforms have added many capabilities that contributed to developing the learning process and solving many problems. It has become essential to integrate the learning process with these technologies and media to keep pace with modernization and development. Chiron and Potter argue that the acceleration of remote education program implementation pursued by universities is due to three main reasons:

- The convergent evolution between communication technologies and computers.
- The need for workers in the information age to acquire new skills without disrupting their professional lives for

long periods.

- The need to reduce the cost of education[11].

Among the most important characteristics and features of these platforms are[12]:

- **Ease of dealing with the platform:** Simple to use and implement; today's advanced technology simplifies many processes, reducing effort and time.
- **Providing an interactive environment:** Diversified tasks directed at both the teacher and the learner. Platforms rely on an interactive mechanism that allows individuals to act and react, breaking away from previously dominant patterns.
- **Inclusion of supporting activity units:** Features like forums and multimedia educational resources that aid learners in research.
- **Universal access to knowledge:** Utilizing a variety of digital formats and multimedia.
- **Continuous and periodic updates:** Regular updates of information and curricula to keep pace with scientific and technological developments.
- **Saving time and money:** Eliminating access costs since materials are pre-prepared and ready for immediate use.
- **Enhancing interactivity between teacher and learner:** Shifting the learning process from old, stereotypical forms to interactive and collaborative participation among learning actors.
- **Allowing parents to monitor results:** Parents can view their children's grades and follow up remotely and instantaneously, enabling guidance and correction to achieve educational goals.

#### **Fifth: The Role of Digital Educational Platforms in Developing the Educational Process**

The quality of learning is one of the fundamental criteria by which the success of the educational process is measured. Digital educational platforms have contributed to redirecting this concept from focusing on content transmission to focusing on knowledge construction and deep understanding. Digital platforms do not

merely display content in digital form; they provide interactive learning environments that allow learners to actively participate in constructing knowledge. This makes learning quality the product of a continuous interactive process rather than a static accumulation of information. Thus, it has become an integrated educational space that reshapes the roles of actors in the learning process and supports the transition toward more flexible and effective learning.

Electronic educational platforms have enabled many positive outcomes that have contributed to elevating the teaching-learning process, including[13]:

- The ability to browse the Internet and use email to log into the educational platform, accessing information quickly and easily.
- Effective communication between students and teachers.
- The ability to record and store lessons, allowing students to refer back to them at any time for review.
- Assisting teachers in delivering presentations in a simple electronic format, which helps simplify concepts and present them clearly.
- Supporting continuous self-directed and individual learning.
- Diversity in assessment methods and feedback.
- Enabling the use of several programs that ensure good communication between teachers and students, such as audio systems, lecture management systems, video recording of lectures, and displaying educational materials as presentation slides[14].

The quality of education is closely linked to how content is organized and delivered, which digital educational platforms enhance through design, organization, and interaction tools. Electronic educational platforms contribute to improving learning quality by diversifying knowledge sources, activating the interaction process, and providing multimedia educational experiences. This accounts for individual differences and limits the dominance of a single learning

style. Furthermore, they offer real opportunities for self-learning, enabling learners to build knowledge according to their own pace, which raises the level of comprehension and achievement and promotes cognitive independence as an indicator of deep learning.

### Conclusion

The article concludes that digital educational platforms represent one of the pillars in the path of developing the teaching-learning process, as they embody one of the most prominent manifestations of the transformation witnessed in the contemporary educational arena. These platforms have contributed to providing more flexible and interactive learning environments through the multiple capabilities they offer to improve education quality, enhance interaction, and expand educational opportunities for a larger segment of society.

Digital educational platforms serve as the practical framework through which these characteristics are manifested—most notably temporal and spatial flexibility, multimedia educational diversity, and support for interaction. Interaction is a pivotal element in the educational process due to its direct impact on learner motivation and learning effectiveness. It is no longer limited to direct verbal communication within the classroom but has become a multi-level process that includes interaction with content, the teacher, and other learners. This expands the concept of interaction from its communicative dimension to its cognitive dimension. These media also allow for the continuous updating of content.

Furthermore, digital educational platforms have contributed to reshaping the role of the teacher within the educational process. The teacher's role is no longer confined to transmitting knowledge; instead, they design educational activities, organize content, and manage interaction. This shift represents a transition from an instructional/rote-learning role to an interactive pedagogical role. It contributes to developing the teacher's

professional performance by providing tools that assist in planning, evaluation, and communication, thereby strengthening the teaching profession rather than weakening the teacher's status within the educational process. Digital educational platforms have also expanded educational opportunities by overcoming temporal and spatial constraints, making learning accessible to groups that faced difficulties joining traditional education. This dimension is one of the most prominent social justifications for adopting digital educational platforms. Virtual learning environments represent an effective solution to the problems of traditional education, supporting continuous learning and equal educational opportunities, provided they are integrated into comprehensive educational policies.

#### **Bibliography List:**

- [1] See: Khairi Ahmed Rahouma Masoud, Iman bint Mustafa Abdullah Qamsani, *The Impact of Electronic Platforms on Training Effectiveness in Public Organizations (A Field Study on Saudi Airlines)*, Journal of Deep Economic Studies, Abdelhamid Ibn Badis University, Mostaganem, Algeria, Vol. 05, No. 03, 2020, p. 66.
- [2] Harfoush Madani, Kerbish Nabil, *Electronic Platforms in Algeria: Reality and Challenges - The Public Procurement Electronic Portal as a Model*, Annals Journal, University of Algiers 1, Vol. 37, No. 03, 2023, Algeria, p. 117.
- [3] See: Radwan Abdel Naeem, *Educational Platforms: Educational Courses Available via the Internet*, Dar Al-Uloum for Publishing and Distribution, Egypt, p. 03.
- [4] See: Safi Latifa, Bouziane Abdelghani, *E-learning as Platforms for Education and Scientific Communication in Higher Education Institutions During the Novel Coronavirus Pandemic: A Field Study on a Sample of Students from Larbi Tébessi University - Tébessa*, Herodotus Journal for Humanities and Social Sciences, Vol. 07, No. 04, 2023, p. 95.
- [5] Abbasi Abdelkader, Mustafa Kamal Foudi, *The Foundations of E-Learning in Algeria*, Journal of Distance Education and Open Learning, Beni Suf University, Association of Arab Universities, Vol. 08, No. 14, May 2020, p. 79.
- [6] See: Abdelkader Ali Zarouki, Hamid Ghouireq, *Digital Education Platforms and Their Importance in the Learning Process*, Journal of Applied Linguistics, Vol. 09, No. 01, 2025, p. 193.
- [7] Maryam Boujenah, *Smart E-Learning Modes and Models*, Al-Arabiya Journal, École Normale Supérieure, Algeria, Special Issue 01, Vol. 07, p. 90.
- [8] See: Abdelkader Ali Zarouki, Hamid Ghouireq, *Digital Education Platforms and Their Importance in the Learning Process*, op. cit., p. 194; and Maryam Boujenah, *Smart E-Learning Modes and Models*, op. cit., p. 90.
- [9] See: Abdelkader Ali Zarouki, Hamid Ghouireq, *Digital Education Platforms and Their Importance in the Learning Process*, op. cit., p. 195.
- [10] Ibid., p. 195.
- [11] See: Abbasi Abdelkader, Mustafa Kamal Foudi, *The Foundations of E-Learning in Algeria*, op. cit., p. 80.
- [12] See: Bouziani Abdelrazzak, *Electronic Educational Platforms: An Analytical Vision*, Journal of Management and Strategic Organizations, Laboratory of Regional Development and Entrepreneurship Studies, Vol. 03, No. 04, p. 50.
- [13] See: Ibid., p. 53.
- [14] See: Rahma Kezouli, *The Effectiveness of Using Electronic Educational Platforms in Developing University Education*, Contributions Journal for Research and Studies, Vol. 09, No. 02, 2024, p. 89.