
Distance learning platforms as a form of digital empowerment in higher education institutions.

Ahmed Selkhine¹, Abdelaziz Barkat², Nabila Abid³, Mohammed Mimoune⁴, Karim Agueb⁵

¹Doctor, University of Tissemsilt (Algeria).

²PhD student, National higher school of Management (Algeria).

³Doctor, National higher school of Management (Algeria).

⁴Doctor, University of Tissemsilt (Algeria).

⁵PhD student, National higher school of Management (Algeria).

The Author's E-mail: selkhineahmed17@gmail.com¹, a.barkat@ensmanagement.edu.dz², abidnabila@hotmail.fr³, mimounemed3@gmail.com⁴, k.agueb@ensmanagement.edu.dz⁵

Received: 13/05/2023

Published: 19/04/2024

Abstract:

This study aims to shed light on distance learning platforms as a form of digital empowerment for university professors, which have been adopted by our universities in recent years, particularly due to the impact of the COVID-19 pandemic. The study seeks to highlight the advantages and the significant role that these platforms can play as an alternative model to traditional education, which was shown to be fragile and vulnerable in the face of the pandemic. Additionally, the study explores the potential of distance learning platforms to contribute to Algerian universities in achieving the quality assurance system, which has become a primary goal for educational institutions today, aligning with the modern era's demands for competition, interaction, merit, and efficiency. The study also addresses the main challenges and obstacles that hinder the success of this educational model in our universities and educational institutions in general. Ultimately, this study aims to explore how to benefit from distance learning platforms and their positive effects both in the present and in the future.

Keywords: Distance learning platforms, empowerment, digital empowerment, Algerian university, education quality.

Introduction

The COVID-19 pandemic has highlighted the need to focus on distance learning and developing ways to advance scientific research. This includes supporting the empowerment of higher education professors to showcase their expertise and knowledge and direct them to students through distance learning platforms, in order to encourage ways to advance the future of scientific research. Because digital technology plays a pivotal role in enhancing the performance of university professors and developing modern teaching methods, by digitally empowering university

professors, they can harness the most modern digital educational technologies and resources to stimulate and enhance the learning experience for students.

This type of education has spread among institutions and individuals and has become a part of cognitive and capacity development, due to the benefits it achieves and the solutions it provides for many of the problems of the educational process. Many institutions have built an advanced and integrated system for managing e-learning, which includes all the functions and services, enabling higher education professors to achieve their educational goals in a better and more effective manner.

As it is known that the university, as an educational institution, occupies a distinguished position in society due to the responsibility entrusted to it in forming generations to be the pillar of scientific, cultural, legislative and economic life, it has become incumbent upon it to consider how to benefit from what modern information and communication technology has brought, and thus keep pace with the modern developments taking place in developed countries, by exploiting all the potential provided by modern and advanced information and communication technologies in the process of modernizing the higher education and scientific research sector and achieving its quality, especially since quality in education means the ability of the educational institution to provide a service with a high level of distinguished quality. (boukhalifa & abich, 2021)

The pandemic crisis that the world has been experiencing since 2019, due to the spread of the Corona pandemic, has doubled the urgent need for this form of education based on physical distancing, as recommended by all medical and health organizations. This has led to the voluntary closure of various universities and educational institutions, and the cessation of students and pupils from physical attendance. This has been replaced by what has become known as distance learning, of which e-learning is a fundamental aspect. This has led countries to seriously consider localizing this emergency form and making it a stable and permanent model so that traditional face-to-face education remains available. This is done by relying on a digital empowerment strategy that plays an important role in developing and improving the performance of university professors and facilitating the availability of educational resources. Digital empowerment aims to achieve quality in education, especially since the world falling under the shock of Corona or other crises and epidemics in the future is not completely unlikely. From here, the following question can be formulated:

- **What is the role of digital empowerment for university professors through distance learning platforms in improving the quality of higher education?**

Research Objectives:

Through this research paper, we aim to clarify and demonstrate the importance of e-learning management systems, as they are the cornerstone of e-learning success,

especially during times of crisis. Furthermore, we aim to examine the Moodle system as one of the aspects of digital empowerment for higher education professors. Through this research paper, we aim to achieve the following objectives:

- Understand the concept of digital empowerment;
- Understand the reality of using distance learning platforms;
- Understand the role of digital empowerment through distance learning platforms.

Study Methodology

In this study, we relied on a descriptive and analytical approach to identify the role of digital empowerment through distance learning platforms. The study also used an inductive approach by extrapolating and analyzing studies that addressed the research topic.

Section 1: Digital Empowerment

1-Digital Empowerment definition

Digital empowerment: “The individual’s ability to use digital technologies effectively and proficiently to develop life skills and enhance their digital capabilities within the knowledge and information society. It is also the ability to maximize the benefit of digital competence to meet cognitive needs, keep pace with technological, social, cultural, and economic changes, and achieve digital integration into more enlightened societies. It is also the process of gaining control, power, and awareness, and making strong strategic decisions to enable the individual to maximize the benefit of digital technology and achieve technical competence and the ability to control their own learning activities.” Digital empowerment is also a means to achieve comprehensive growth for individuals, institutions, and societies, technologically and informationally, in order to adapt and control life skills. Whether digital empowerment is for individuals or institutions, it is an important means to enhance self-confidence technologically and digitally, as well as enhance their competitiveness.(Othmane Sabih, 2020, pp. 444-445).

Al-Haiki defined digital empowerment as a form of empowerment that aims to provide continuous training to teachers and students to enable them to employ information and communication technology in the educational process and related and supporting operations in a safe and responsible manner with efficiency, skill, effectiveness, interest, trust, honesty, control, and dominance in order to build national competencies capable of producing digital educational content and graduating generations capable of innovation and creativity to produce competitive digital technological knowledge.(Houcine Al-Haiki, 2017, p. 12).

2-Digital empowerment objectives

Digital empowerment is a modern concept that plays a significant role in developing and improving the performance of university professors and facilitating access to educational resources. Digital empowerment aims to achieve quality education and improve interaction between professors and students, while providing immediate feedback and comprehensive assessment of student performance, enhancing the teaching and learning process.

Digital empowerment seeks to create a digital institution that contains human capital equipped with technology, in addition to enabling students, teachers, and workers in educational institutions to obtain continuous education on the use of information and communication technology for development, whether in education or in other areas of life, in order to build national capacities capable of creating digital educational content. Digital empowerment also aims to do the following:(Akkoyunlu, 2011, p. 33):

1- Supporting the competitiveness of educational institutions through digital empowerment to keep pace with the development of information and communications technology (ICT) and the 'digital revolution'.

2-Providing students with digital skills and digital literacy information, training, and qualifications that are consistent with the requirements of society and modern technology, and equipping them with the characteristics and features of the information age, making students more aware and encouraged to embrace digital empowerment.

3-Responding to the expectations of the information society through the optimal use of digital technology. In addition to the above, higher education institutions are among the primary sources for building a skilled workforce and confronting the digital age society. This imposes a need for digital empowerment on universities and ensuring access to all ICTs.

4-Supporting the ICT infrastructure of higher education institutions.

3-Towards Digital Transformation through Digital Empowerment in Algerian Universities

Digital tools, with their various characteristics, represent a fundamental pillar of the digital transformation project in Algeria and around the world. These new digital tools also emerge as true pillars for digitally empowering higher education professors to achieve quality higher education and realize the goals of the digital transformation project as a current endeavor. According to studies explaining the concept of digital empowerment of university professors, it is anything that helps universities unlock knowledge, experience, and values. It is about discovering and unleashing the power of professors in a controlled and focused manner. This brings us to the need to understand the importance of providing opportunities for digital knowledge and

expertise in digital subjects, and to strive to discover their digital skills for the purpose of investing in job positions that support digital transformation paths.(Reda, 2022, p. 66).

Section 2: Distance learning Platforms

1-The role of information technology in education

The last decade of the twentieth century and the beginning of the twenty-first century witnessed tremendous progress in the field of information technology. This development was reflected in many fields, but the field that benefited most from it was education, which relies on these technologies and is called e-learning. As a result of this revolution in teaching methods and technologies, which provided the means to help present scientific material to students in an easy, quick, and clear manner, various forms of e-learning emerged, suited to the needs of learners and the nature of the available communication tools. Educational curricula were subjected to a review to keep pace with the modern requirements of the information society, and attention was paid to equipping individuals with the skills that qualify them to use information technology.(Houdaifa Mazen & Al-Ani, 2015, p. 16).

2-The development of distance education

Distance education was previously limited to correspondence education, i.e. by mail, as it was the medium for transferring printed or handwritten educational materials between teacher and learner. However, over time it expanded to include many computer applications and communication media. The beginnings of this type of teaching and learning were in the 19th century, specifically at the University of London in 1858, and it was called (the external student system). This was also witnessed in the United States of America at the University of Chicago in 1891, the University of Wisconsin in 1906, and Queen's University in Canada in 1889, followed by the University of Queensland in Australia in 1911. In 1969, Britain established the first university concerned with this type of education, and it continued until the early nineties. Currently, there are (39) regular universities in the United States of America that rely on this type of education, including the University of Michigan, Stanford, Delaware, and the University of Maryland, which specialize in distance education and open education, or what is called televised education. Spain established this system in 1972, followed by Iran in 1973, Pakistan in 1978, Japan in 1981, and Nigeria in 1983. As for the Arab world, it started with Palestine in 1985, followed by Egypt with the University of Alexandria in 1990, Sudan in 1991, and finally the Arab Open University in Kuwait in 2000. Currently, due to the knowledge explosion that the world is witnessing, from technological development, especially technical development, which has helped in changing the forms of education and learning, which depends in particular on means of communication and technology such as e-

mail, radio broadcasting, educational broadcasting means of sound and image via satellite, and the spread of the personal computer.(khafadji, 2015, p. 17).

3-The concept of distance education

It includes the process of transferring knowledge to the learner at his place of residence or work instead of the learner moving to the educational institution. It is based on delivering knowledge, skills and educational materials to the learner through various technological media and methods so that the learner is far away or separate from the teacher or the person in charge of the educational process. Technology is used to fill the gap between both parties in a way that simulates the communication that occurs face-to-face. (dahi&sitre el rahman, 2023, p. 36).

According to the Commission of the European Communities (2001), distance education is “the use of new multimedia technologies and the Internet, to improve the quality of learning by facilitating access to resources and services as well as exchange and cooperation by shortening distance (Oulmaati, 2020, p. 07).

Educational institutions have adopted e-learning using various distance learning tools. These tools vary depending on the goals they seek to achieve. The following figure illustrates the various distance learning tools:

Figure 01: Distance learning tools



Source: _____ n some learning management systems,

at the link:[file:///C:/Users/2022/Downloads/63557439%20\(1\).pdf](file:///C:/Users/2022/Downloads/63557439%20(1).pdf) Date of access: 13-01-2025.

4. Moodle distance learning platform

E-learning platforms provide an integrated learning environment where learners can access diverse educational content available anytime, anywhere, interact with teachers and peers, and receive the guidance and support necessary to achieve their educational goals. These platforms also help improve the quality of education and provide a personalized, diverse, flexible, and effective learning experience for learners. It is important to recognize that information and communications technology (ICT) and e-learning platforms are an important and effective addition to improving education and enabling learners to achieve their educational goals in a better and more effective manner.

E-learning platforms provide an integrated learning environment where learners can access diverse educational content available anytime, anywhere, interact with teachers and peers, and receive the guidance and support necessary to achieve their educational goals. These platforms also help improve the quality of education and provide a personalized, diverse, flexible, and effective learning experience for learners. It is important to recognize that information and communications technology (ICT) and e-learning platforms are an important and effective addition to improving education and enabling learners to achieve their educational goals in a better and more effective manner.

4.1-Definition of the MOODLE platform

Moodle is a leading platform, considered one of the best digital learning environments, and has gained widespread popularity around the world. It was designed on educational, not engineering or technical, foundations to help teachers provide an electronic learning environment. It was conceived and developed by Australian engineer and educator Dougiamas Martin and is used by many educational and academic institutions around the world, including Algeria.(Kouihal & Sanatour, p. 15).

Moodle is an open-source e-learning platform designed to help instructors provide an e-learning environment. It develops and publishes an e-learning environment, aiming to develop an e-learning environment and provide excellent educational tools for teachers and learners alike. Moodle can be used at the individual or institutional

level. It is GNU-compliant and can be downloaded, installed, modified, and distributed for free. It is easy to use and develop.(Basiouni, 2008, p. 283).

4.2-Educational Features of the MOODLE Platform

The most important educational features of the MOODLE platform are as follows:(Ferzouli & Seghiri, 2021, p. 960):

- It combines individual and collective learning, creating a collaborative and integrated learning environment.
- It transforms the educational process from teaching to learning.
- It is considered one of the most important self-learning approaches, relying on construction, dialogue, production, and cooperation.
- It monitors new announcements and manages projects related to the educational process.
- It encourages creativity, as a group of students can create one or more teaching tools.
- It exchanges information, discusses, and comments, which helps activate students' skills through learning through activities.
- It treats information as a public right.
- It is based on participation and interaction, and learners contribute to the construction of knowledge.
- It involves the learner in developing educational content.

4.3-Educational activities on the Moodle platform

The Moodle platform offers a wide range of educational activities that allow students to assess learning outcomes, while also allowing them to consult online with each other and their teachers about topics, as well as download educational content. Moodle includes 14 activities that can be used to facilitate distance learning. These activities are interactive activities in an online learning environment. The following are the eight most prominent activities:(Harhad, 2023, pp. 13-15):

- Lesson/Lecture: Professors use this activity to deliver lessons electronically, in a flexible manner, as stipulated in the curriculum. The lecturer can add, modify, or delete whatever he or she deems appropriate for his or her lessons at any time.(Marcant, 2016, pp. 22-26).

Exercises/Assignments: Students receive exercises and assignments assigned to them by their professors, who set response requirements, deadlines, and submission procedures. The assignments may be in the form of an essay, research paper, or question. The assignments are submitted, uploaded to the website, and sent to the professor.

Conversation/Chat: This activity relies on the availability of the Internet and uses chat rooms to conduct synchronous conversations. It can be between two or more people, and it can also be written and transmitted to all speakers: professors with their students, students with each other, and professors with each other.

Forum: A space for exchanging electronic messages. Unlike conversation, it occurs asynchronously between two individuals or a group of speakers. Here, students gain new ideas and concepts that help them write, exchange different perspectives, and learn with other students and their professors. (Larose & Lafrance, 1999).

Exam/Quiz: This activity is used to conduct online quizzes or exams within a set deadline. Moodle helps the instructor design the exam format, including true/false, matching, short answer, fill-in-the-blank, open-ended questions, essay questions, etc. The system also assists in auto-correcting questions. Students also use it to record messages, notes, and feedback.

Memo: The activity is used by the teacher to record their own notes and suggestions and send them to the teacher for comment.

Wiki: Teachers can enhance lessons by adding wiki pages that allow students to collaborate with each other, using HTML in Moodle.

Workshop: A powerful tool for fostering collaboration among learners and for assessment. In the first stage, the teacher creates and prepares a workshop, uploads the assessment file and form, and sets appointments with students. In the second stage, students present their work for mutual assessment and then send it back to the teacher. In the third and final stage, teachers calculate the final results of the process.

Section 3: Digital empowerment through distance learning platforms

1- Mechanisms for achieving digital empowerment in universities

There is a group of actors involved in achieving digital empowerment in universities, including the state, the university, students, and the external community, as shown below: (Gafurov, Safiullin, & Akhmetshin, p. 77)

The State: This includes the government, the Ministry, and the Federal Authority for Education and Science Supervision. State agencies must provide an environment conducive to the development and support of universities digitally at a competitive local and global level, by providing financial support for discoveries and inventions and developing university infrastructure

The university: This includes its administrative staff, faculty members, researchers, scientists, and employees. A creative environment must be provided that allows them to apply modern technology, creativity, and innovation to ensure close integration between the university and the external digital economy.

Student: E-learning must be made accessible to students, and its importance to their professional and future lives and careers must be explained, with care taken to provide students with training to master these technologies.

Institutions, companies, and the external business environment: There must be a realistic partnership between companies, business owners, and stakeholders, and between universities through joint projects and the exchange of training programs between them to ensure graduates with a high level of competence, experience, and digitization.

2-Digital Empowerment for University Professors

Algerian universities have adopted distance learning as an alternative to traditional education amid the coronavirus pandemic. Distance learning is an educational system based primarily on modern technology, utilizing various modern technical tools. One of the most important of these tools is the e-learning platform MOODLE, which relies on the internet to provide its educational services, along with the use of various electronic media in the learning process. This modern approach to education aims to provide high-quality and efficient education for learners by creating an interactive learning environment using new and diverse electronic technologies in terms of information sources, as well as developing university education systems.

Conclusion

The university professor is considered the face of the university and its primary driver. He is a crucial element in the academic process and a leader in renewal, innovation, and modernization processes. He plays a significant role and holds a prominent position within this institution, given the role he plays in advancing the university's level of excellence, achieving quality higher education and keeping pace with technological change. This is achieved by activating creativity and innovation within the university, which in turn is the foundation for research and innovation. In this study, we concluded the importance of digital empowerment for the university professor and its role in enhancing efficiency and effectiveness, particularly in activating organizational creativity in university institutions. Controlling technologies and empowering professors with all means, techniques, and technological media, as well as opening the way for them to freely innovate and create, have become indispensable to keep pace with the progress of universities, centers, and research laboratories in most countries around the world. Innovation has become a prominent feature of the academic community, due to its fertile and suitable environment for

creativity and development. This study also concluded that a set of conditions must be met to achieve digital empowerment for the university professor to advance the university's level and achieve quality higher education.

Through our research on this topic, we were able to reach a number of conclusions, the most important of which are as follows:

- The suitability of this type of teaching—distance learning—in some critical circumstances, such as the pandemic we previously experienced (the coronavirus), through the empowerment of university professors.

- The possibility of integrating distance learning with traditional education at the same time, where e-learning tools support traditional education.

- The digital empowerment of university professors through distance learning via electronic media contributes to enriching modern learning methods for learners.

- Distance learning via the Moodle platform provides students with the opportunity to communicate with professors outside of official working hours.

Bibliography:

- Akkoyunlu, B. (2011). Their Information Literacy SelfEfficacy. *Eurasian Journal of Educational Research, Vol: 44*.
- Basiouni, A. (2008). *e-learning and mobile learning*. Dar Al-Kitab Al-Ilmiyah for Publishing and Distribution, Cairo.
- Boukhalfa, R., & Abish, S. (2021). The role of e-learning as one aspect of distance education in achieving quality university education. *Journal of Studies in Development and Society, 06 (03)*.
- Ferzouli, M., & Seghiri, A.-m. (2021). The reality of using the Moodle e-learning platform at Algerian universities. *Journal of Social Sciences and Humanities, 11 (02)*.
- Gafurov, I. R., Safiullin, M. R., & Akhmetshin, E. Change of the Higher Education Paradigm in the Context of Digital Transformation: From Resource Management to Access Control. *International Journal of Higher Education, Vol: 09 (N: 03)*.
- Harhad, K. (2023). Distance learning using the MOODLE platform: a field study at the Higher School of Applied Sciences in Algeria. *Ideas and Horizons Magazine, 11 (02)*.

- Houcine Al-Haiki, A. (2017). The Level of Digital Empowerment in Education among Middle School Teachers in Bahraini Schools (Master's Thesis). Jordan: Yarmouk University.
- Houdaifa Mazen, A., & Al-Ani, M. (2015). *Interactive e-learning*. Oman, Jordan: Academic Book Center.
- khafadji, s. (2015). *Open education and distance learning are the foundation for e-learning*. (F. Edition, Ed.) Academics House for Publishing and Distribution.
- Kouihal, D., & Sanatour, A. The Role of Digital Platforms in Supporting Distance Learning in Light of the COVID-19 Pandemic. *The Role of Digital Platforms in Supporting DistJournal of the Research Unit in Human Resources Development*, 12 (01).
- Larose, D., & Lafrance, C. (1999). *Les technologies de l'information et de la communication en pédagogie universitaire et en formation à la profession enseignante*. Education et Francophonie, XXVII.
- Marcant, A. (2016, Janvier-Fevrier). *Moodle, une plate-forme d'apprentissage*. Retrieved Janvier 28, 2025, from In : Technologie: [http://eduscol.education . fr › sti › files › ressources › techniques](http://eduscol.education.fr/sti/files/ressources/techniques)
- Othmane Sabih, M. (2020). A proposed vision for digital empowerment mechanisms at Zagazig University and their relationship to the COVID-19 pandemic, in light of the Indian experience. *Journal of the College of Education*, 04 (44).
- Reda, N. (2022). Digital empowerment of Algerian adolescents through the use of media applications. *Introduction Journal of Humanities and Social Studies*, 07 (01), 61-78.