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An introductory introduction to electronic educational platforms - Moodle platform as a model.

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Dr. Abdelkader Chaachoue¹, Dr. Abdelkrim Touil²

¹University of Ibn Khaldoun Tiaret (Algeria)

²University of Mohamed El Bachir El Ibrahimi Bordj Bou Arréridj (Algeria)

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Abstract:

The study aims to identify electronic educational platforms due to their importance in providing an educational environment that ensures the positive role of the learner and creates the appropriate climate in which he learns. The development in the educational field has led to the emergence of many systems that helped in acquiring knowledge and exchanging information, including electronic educational platforms, which are the focus of all use of technology and its modern applications in the educational process, and have become one of the most important educational resources influential in creating an interactive environment characterized by flexibility and ease of use. On this basis, the intervention tried to present a conceptual and theoretical framework on the nature of electronic educational platforms, their advantages, components, users, disadvantages and positives. As a model, the definition of the Moodle platform, its philosophy, origin, features and capabilities were discussed.

Keywords: education - e-learning - electronic educational platforms - Moodle platform.

Author Email: ¹abdelkaderchaachoue@univ-tiaret.com, ²abdelkrim.touil@univ-bba.dz

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introduction:

Education institutions have benefited from the modern technological development, and the aim was to improve the outputs of the educational process, and information technology has become used in methods of teaching scientific subjects to ensure the success of the learner in the era of the knowledge revolution, which resulted in the urgent need to shift from traditional classes to electronic classes. The knowledge and information technology revolution has led to the emergence of the e-learning system, which makes the learner not receive passively, but receives, sends and shares, and among the applications of this system, we find its use of many tools and software, including electronic educational platforms that are a means of communication and

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remote communication Many e-learning management programs are used, as the Moodle system is one of the most important.

And the Algerian University adopted this system, especially with the spread of the Corona virus (Covid 19), as a new experience that deserves study and research. Therefore, this intervention came to introduce these electronic educational platforms, which researchers see as an urgent educational necessity to use e-learning tools, raise the efficiency of the educational process, and achieve the overall quality of education, with the definition of the "Moodle" platform, which is one of the most important educational content management systems sites globally. Types of technological innovations.

1- The nature of electronic educational platforms:

1-1- Learning platforms Electronic educational platforms concept

The technological revolution in our contemporary world has led to the emergence of the e-learning system as a new type of education process. The use of e-learning tools has become an educational necessity to achieve the quality of learning and education, including electronic educational platforms that offer multiple benefits and advantages to the learner, and reduce the burdens of the teacher, thus creating an educational climate and raising the efficiency of the educational process.

Al-Enezi defined the electronic platform as: "an interactive environment and employing web technology, and combines the advantages of electronic content management systems and social networks, and enables learners to publish lessons and goals, set assignments, implement educational activities, and communicate with teachers through multiple technologies, as well as It enables teachers to conduct electronic tests, distribute roles, divide students into working groups, helps exchange ideas and opinions between teachers and students, and shares scientific content, and allows parents to communicate with teachers and see the results of their children, which helps achieve high-quality educational outcomes. ." (Al-Enezi, 2018: 200).

As for Dalia, he defines it as: "an integrated set of interactive online services that provide learners, teachers, parents and others concerned with education with information, tools and resources that work to support, enhance, provide and manage educational services, and it is a comprehensive system that allows for safe training and learning." Through the Internet and e-learning using a simple user interface." (Dalia, 2019: 12,13).

Al-Sayed defined it as: "an interactive educational environment with electronic content management systems, including the Moodle system, which enables teachers to publish lessons and objectives, set assignments, distribute roles, and divide students into groups." (Al-Sayed, 2015: 45).

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It is clear from these definitions that the e-learning platform is an e-learning system based on the principle of merging between learning in a class between the teacher and the learner via the Internet, and is used to facilitate the education process through the education technologies available in the platform.

1-2- Advantages of electronic educational platforms:

Electronic educational platforms have the following advantages:

- * Publishing and presenting study materials.
- * Follow up students and manage their records.
- * The possibility of communication between students and professors, and between students and each other through private forums provided by educational platforms.
- * The ability to use the platform anywhere and anytime.
- * It supports and complements the traditional method of education. (Al-Enezi, 2018: 192).

1-3- Components of electronic educational platforms:

When operating the educational platform, we find that it consists of the following tools:

- Main touch screen.
- Computer
- Electronic pen.
- Versatile shelf.
- The writing pad of the electronic pen.
- On and off switch.
- Main console

Amplifier, headphones and a microphone. (Al-Mallah, 2017: 123, 124).

1-4 Users of electronic educational platforms:

Electronic educational platforms are used for all sciences, and three types of users can be mentioned:

A- teacher: Concepture

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Where the teacher carries out the teaching process on his own, designs the contents of the training and puts it at the disposal of educators, and also facilitates the learning process. Within the educational platform, the teacher's tasks lie in:

- Determine the objectives of the lessons and courses.
- Preparation of assessment methods.
- Follow-up students' attendance and academic progress.
- Organizing the learning environment and making it comfortable and collaborative.
- Encourage students to learn and engage in classroom activities.
- Assigning students to do exercises and projects.
- Asking questions that develop thinking and accepting answers, no matter how wrong they are.
- Provides assistance and guidance to students and solves their academic problems.
- Guides students with additional learning resources on the network. (Bawi et al., 2019: 144).

B- Learned: Apprenant

He registers in the virtual classes, builds his knowledge, and finds all the courses and programs he needs for free. He also performs the following tasks within the platform:

- View the objectives of the lessons and courses that he seeks to achieve.
- Serious follow-up lessons.
- Commitment to the proposed rules of conduct during the stage.
- Carry out assignments, activities and projects.
- Ask questions and participate in discussion and dialogue.
- View additional learning resources on the network. (Bawi et al., 2019: 144)

C- Administrator

He takes care of the management of the platform and collects the administrative work. (Chabonieh and others, 2012).

1- 5 Types of e-learning platforms:

There are many e-learning platforms, where we find closed-source electronic platforms and open-source electronic platforms:

A_ closed-source electronic platforms:

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They are called commercial or owned electronic platforms where they are owned by a for-profit company that is not used Unless licensed, for example:

***- Webct platform for e-learning management:**

It is a commercial learning management system Web ct compus Edition 6.0 and it is called:

It is used by educational institutions that are interested in e-learning, and its tools are characterized by fertility from the very beginning

Preparing the course for installation on the system, as well as during the learning period, and it is characterized by its ease of use by the trainer and the trainee and is used in more than seventy countries. (Al-Najjar et al., 2008: 06).

It is distinguished by the presence of a forum for discussing topics by the trainer and the trainee who downloads the files and exchanges them with his colleagues or with his trainer. Internet mail can be used and attached files are placed in the mail.

The trainees also put their notes about the material, and thus they form guides about the material. The group members can from the direct live conversation, and the trainer has the ability to manage this conversation, and at the same time the system prepares an archive of all that was written in these conversations so that it is easy to refer to by the trainer. Radwan, 2016: 111).

It is available in 14 languages, including English and Arabic. Web ct The name of the producing company is: (Al-Mallah, 2017: 91-93).

• **To manage e-learning: Blackboard - Blackboard platform :**

It is a commercial learning platform from Blackboard Academy Suite, known as:

It offers various educational opportunities, as it breaks all barriers and obstacles facing educational institutions. Through the Internet, the scientific material and the curriculum are presented to the student with multiple communication tools, whereby the student can communicate with a faculty member, as well as with fellow students. In addition to tools for evaluating students and determining their levels and progress in academic achievement.

The platform enables the distribution of assignments, tests, and public opinion polls, and the receipt of answers and comments on them, while providing feedback and immediate and non-immediate reinforcement for students, and provides safety through a safe environment for conducting risky experiments and simulations. (Ben Rayhan, 2019: 2).

B- open source electronic platforms:

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It is used free of charge and it is forbidden to sell it. Specialists modify and develop it. It is open source and available on the code or code in which it was written and keeps all the technical secrets of its structure and the way its parts work. (Haroun, 2019: 237).

Examples of these platforms are:

- It is an open source learning management system that can be quickly installed by system administrators and is characterized by the ease of Atutor platform

It is used by the trainer and the trainee, and it is characterized by the ability to update and quickly change the confrontations by the trainers. It is also used in small educational institutions and large universities that provide e-learning via the Internet. This system was designed using the PHP language, Mysql databases, and a server program such as:

Apacheor Microsoft.

The system supports 30 languages and is fully localized. University of Toronte. ATRC and the name of the producing company is: (Al-Najjar et al., 2008: 06).

* Dokeos platform: Dokeos

It is called Dokeos 1.2.3 - Clarolinel 1.4, and it is an open learning system used by more than 1,200 organizations in 65 countries that manages learning and activates cooperation between groups with different goals and allows the trainer to create high-quality educational content and interactive exercises and to communicate and follow up on the performance of the trainees It is also compatible with SCROM at the beginning and using the name Claroline, then it turned into Dokeos, knowing that some developers tried to set features for each system. The system was designed in PHP and Mysqlt was used in the databases.

The name of the producing company is: Dokeos Global, and the system supports 34 languages, and 2.60 /° of the system has been localized.

(Dahlan, 2012: 30-31).

1-6- The use of e-learning platforms by Algerian universities:

In light of the knowledge development and the emergence of the technological revolution, which necessitated keeping pace with electronic technologies and services, education used an electronic version called e-learning. And it was necessary for the Algerian university to keep pace with technological progress and continue to perform the tasks entrusted to it. In the year 2007, Algeria adopted the use of e-learning platforms to achieve the e-learning process as a solution that contributes to eliminating the problems of the traditional learning environment. (Mesbah, 2008: 90).

Where the following education platforms were used:

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A- Charlemagne platform:

This platform is considered as an educational content management system, and it manages the elements of the educational process across the network. It was acquired by the Ministry of Higher Education in 2007 and equipped

All universities have the technological tools to implement this platform, which was designed by Charlemagne, a company specialized in university management, and is characterized by the fact that it supports the Arabic language, as well as the flexibility of its interfaces.

B- Moodle platform:

It is an open source programming package that manages courses and provides an electronic environment newly designed by engineer "Martin Dujemann", which includes 400,000 trainees and is used by 138 countries.

C- Avad platform:

It is a system that manages educational content and includes both open and distance education, and allows learners to be evaluated and information, and runs a set of elements of the educational process. It is one of the most important platforms applied in the Algerian University. Especially at the University of Continuing Education.

D- Ganesha platform:

It is a free software licensed by Al-Takween and is considered a remote electronic training platform that allows the trainees to use the study program materials, evaluation tests, and collaborative methods. Registration is open to students of the sixth and seventh year of medical sciences, and the second year of specialization in medical sciences and dental surgery.

1-7 Electronic educational platforms used globally:

The technological age is known for its fast and easy transfer of information at a low cost, and learning has become a reality

Humanly for everyone, and there are more than fifty companies working to provide electronic lessons with standards

International anytime and anywhere. Five prominent educational platforms around the world can be mentioned, the most important of which are:

- **Coursera platform:**

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It is considered one of the most famous global platforms and offers lessons in different sciences. It has more than 121 educational courses on the programmed machine and business analytics in a smooth and academic manner based on prestigious universities. The number of participants is more than 1.2 million people. It provides all learners with a study certificate.

• **Udemy platform:**

It is one of the most popular university platforms concerned with training and educating more than 80 visitors per day, and includes more than 19,000 participants, including trainers and professors.

• **EDX platform:**

Established in cooperation with Harvard University and the Massachusetts Institute of Technology, it offers interactive lessons via the Internet from the best international universities, including biology, business, chemistry, computer science, economics, electronics, food and nutrition, history, and science. Humanity, literature, mathematics, medicine... and others.

• **Riwaq platform:**

It is a Saudi platform that provides free academic study materials in the Arabic language in various disciplines such as social media, art, psychology, medicine, engineering, religion and others. It has become a regional center for e-learning in the Middle East and includes undreds of thousands of users who are keen to provide Break out of 14 items. (Zraibi et al., 2017: 99).

8-1 Pros and cons of electronic educational platforms:

A - The advantages of electronic educational platforms:

The advantages of electronic educational platforms are as follows:

- Provide the opportunity for the largest number of segments of society to obtain education and training.
- Overcoming the barriers of space and time.
- Reducing the cost of education in the long run.
- Optimal utilization of human and material resources (solving the problem of scarce disciplines).
- Accumulation of experience: The training material prepared by an institution is available to those who wish to reduce the cost of education.

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- Transforming the education philosophy from group-based education to individual-based education.

- It depends on the level and skills of the student, and not on the average group in time, curriculum and exercises.

- Ensure the quality of learning and training applications.

- Helped in social change, increased enrollment in education, and increased demand for knowledge.

- Facilitating the contents of the electronic curriculum in teaching.

It includes the contents of the subjects in their entirety (Arabic language, sciences, Sharia sciences and social sciences...etc) and accompanying activities, books and references that the student needs when wanting to learn more about a particular subject, specialized scientific libraries, names of specialized teachers and their addresses, regulations and related examination systems with these materials. (Dalsgaard, 2006: 12).

B- Disadvantages of electronic educational platforms:

Despite the advantages of electronic educational platforms, they face many negatives that limit their successes. Among the negatives, we mention the following:

- Loss of the social aspect of the learner.

- The lack of internet in some areas and some vulnerable social groups.

- Poor direct interaction with the teacher and the absence of his real role.

- Certificates obtained in copies that do not bear the recognized recognition.

(<http://www.almarsal.com>.2021)

2- Moodle e-learning platform:

Many electronic educational systems have spread rapidly among universities and educational institutions, due to the distinguished services they provide, and websites specialized in the field of e-learning have appeared, and this has resulted in a multiplicity of electronic platforms such as: Alinson, Edmodo, and the site for educational content management systems Moodle. One of the most famous sites in the world.

2-1- The concept of the Moodle e-learning platform:

It is: "An open source learning management system based on educational foundations that helps Moodle define the Moodle system

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Teachers provide an electronic learning environment, and it can be used personally at the level of the individual, and it can serve a university that includes 40,000 trainees, and the system website includes 75,000 registered users, and they speak 70 different languages, from 138 countries and technically the system was designed

(Shaqour et al., 2015: 08) using MYSQL and PHP databases.

And the customer defined it as: "It is a SOFTWARE program designed to help manage, follow-up, and provide educational activities and continuing education, so it is a strategic solution for planning and education And managing all aspects of learning in the educational institution, including direct communication, virtual halls, or courses directed by faculty members, and this will make the educational activities that were separate and isolated from each other work according to a coherent system that contributes to raising the level of education. (Mamoun, 2016: 95).

It is a learning management system and the development of the electronic educational environment. It is an open source system designed to help the teacher provide an electronic learning environment and can be used at the level of the site WWW.MOODLE.org

(Bassiouny, 2008: 283-286).

2- 2- The philosophy of the Moodle platform and its inception:

The Moodle system platform for distance education is an abbreviation for the word Modular Object Oriented Dynamic Learning Environment

It means a directed learning environment that helps creativity. And the first to create the Moodle system (the Moodle software) is the computer scientist and educator Martin Dougiamas of Perth University.

In Australia, where he started thinking about this system when he found that all content management systems have exorbitant costs and are done by engineers who do not have educational experience, so he found it necessary to employ his educational and technical expertise in designing an open source content management system that anyone can use Free.

it's done It was built on educational foundations, not engineering or technology, as it was designed in 1999 AD and appeared in its first version in the year 2002 AD and was launched by Moodle.com in 2003 AD as this company works to develop the program, support it commercially, provide hosting services and investments and works on Growing and increasing customers, and it is a constantly evolving project, designed on educational foundations, and now has hundreds of developers from all over the world, as it is haracterized by continuous and rapid challenges. (Vizacro, 2003: 177).

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Martin adopted the social constructivist theory as a basic theory behind the model, and this step constituted a revolution in itself. This is because most content management systems were based on a set of non-educational courses. The social constructivist theory is based on the idea that individuals learn best when they are engaged in social processes of constructing knowledge or when they interact with each other around learning materials. The difference between the philosophy of the regular class and the philosophy of social constructivism is like the difference between discussion and lecture. And the term social process indicates that learning is something we do in groups, so Moodle focused on discussion tools and manual participation in the sense that the main focus was not on communicating information, but on the idea of participation and preoccupation in building knowledge, and Moodle does not require the teacher. The use of social constructivist theory in building his course, rather he supports it with ready-made methods and enables him to add types of static and dynamic course materials. Interactive. This enables the learners to cooperate and share among themselves, and between them and their teachers, and this is evidence of the dominance of the social constructivist theory over the philosophy of modeling. (Al-Jarrah et al., 2016: 416).

2- 3 Features of the Moodle platform: Moodle

The Moodle platform has the following advantages:

- * The existence of a forum in which the teacher discusses topics related to the educational process in general.
- * Teacher delivery of assignments instead of sending them by e-mail
- * The presence of live chat rooms, as well as enabling the teacher to view and communicate with the learners.
- * Search previously raised topics related to the content.
- * The teacher creates groups according to tasks and educational level, or the system creates them randomly.
- * Create self-tests for learners, either with a time limit or without a time limit
- * Enabling the learner to create personal web pages.
- * The presence of a large number of tools for the supervisor, including access to the system
- * Follow-up of the learner everywhere from the beginning of his entry on the system until his exit from it every time he enters and during the time he stays in it, with the possibility of taking his notes, especially about each trainee, in a private place.
- * An open source course management system that is loaded on a server.

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* The teacher gives an account, then creates an electronic course and begins to specify the course settings, such as: course format, title, and when did it start? (Ahmed Sadiq, 2008: 26-31).

2- 4- The capabilities of the Moodle platform:

* The Moodle platform provides many capabilities, including:

* Educational design capabilities provided by the system.

* Student records management capabilities.

* The capabilities of the system in the continuous evaluation of students.

* Possibilities of communication between professor and students.

* The capabilities of controlling and managing the system. (Salman Al-Khalifa and others, 2008: 64-65).

Atta Al-Fadil mentions the following capabilities:

* A special environment for the educational system.

* Educational materials written, read and arranged for all trainees. Dialogue forums and chat rooms.

* The possibility of designing exams, assignments, surveys, and voting for trainees.

Monitoring the trainees' grades electronically in the Moodle grade book.

* Displaying educational content electronically and designing it according to many electronic publishing standards.

Appointment of teachers and assistant teachers for the course.

* The development of multi-system courses.

* Develop scientific references for each course. (Ata Al-Fadhil, 2016: 51).

3- Conclusion:

The use of electronic educational platforms has expanded in various universities of the world as new patterns of education imposed by the scientific and technological changes that the world is currently witnessing. Traditional educational methods are no longer able to keep up with them, so the need has become urgent to adopt electronic platforms.

Being of great importance in the university environment, due to its importance in transferring information and exchanging opinions between the students themselves and the professors, and its help in creating interaction between the teacher and the learner in the appropriate place and

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time, relying on multimedia (texts, sound, pictures, movement). What contributes to raising the cognitive and scientific level of learners and activates the education process with the acquisition of performance and cognitive skill in technological sciences, which makes shedding light on electronic platforms as a modern technology in the educational process important.

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