

Integrating Course Management Systems like Moodle in the Algerian Universities: Between the Algerian Ministry's Perspectives and Realities

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Abstract:

In recent years, the use of technology is speeding up facilitating all academic and professional activities. The process of education also was promoted by the integration of technology for the enhancement of the teaching and learning procedures. Therefore, instructors started using Course Management systems (CMSs) for revolutionizing this sector adding accessibility and accountability to their lectures. The Algerian Ministry of Higher Education also supported these technological advancements and urged its lecturers to use technology in their classrooms. Therefore, the use of Moodle in the Algerian universities was activated with the outbreak of Covid 19 initiating the official Algerian university's shift from face-to-face learning to e-learning. This added more personalization, advancement, and flexibility to the learning and teaching processes in the Algerian university. However, the problem that arose after that was the practical implementation of Moodle in the Algerian classroom and the Algerian instructors' acquaintance of it. This paper investigates the degree of awareness of the Algerian lecturers about Moodle and their familiarity in using it theoretically and practically. Therefore, an exploratory study of the Moodle accounts of some Algerian university lecturers and different interviews were conducted. Consequently, the study ended up giving certain recommendations

to the Algerian Ministry of Higher Education for better implementation of technology and specifically Moodle in its classrooms

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I. Introduction:

With The acceleration of the use of technology along with the necessity of updating the teaching and learning processes, instructors initially started using PowerPoint presentations, and audiovisual materials to animate their courses and make them technologically advanced (Bojiah 2022, 320). However, the use of technology in education gradually became an obligation, especially with the spread of Covid 19 and the official start of the era of e-learning all around the globe. Practically, instructors found themselves obliged to move from face-to-face learning to e learning and unconsciously use Course Management systems.

Course Management Systems or what is called Learning Management Systems. (LMS) are a collection of software tools that can be accessed through a browser. They are considered tools for the creation of online environments for course interaction. Additionally, CMSs allow instructors to design online courses so that enrolled students can easily access them (Cole, Foster 2008,1). Historically, CMSs started in 1951 in Australia as a solution to the problem of the inability of students to attend all of their classes (Turnbull, 2019).

The utility of CMSs is unlimited since it greatly assists both learners and instructors in attaining their educational and academic goals. For educators, CMSs help in designing courses that will be easily accessed by the learners. Practically, instructors use them to vary their teaching materials and animate their courses making them interesting, attractive, and

technologically updated. Moreover, CMSs work as a connectivity tool between instructors and even students. Indeed, instructors can use CMSs to establish discussion groups between students through chat groups, workshops, and online, academic study spaces. Last but not least, CMSs serve as a testing tool that can examine students' comprehension and understanding (Cole, Foster, 2008)

Moodle is an acronym for Modular Object Oriented Developmental Learning Environment that is a Course Management System. it is a free application that is used for the amelioration of the teaching and learning processes. It supports the integration of wide range of resources including chat groups, multimedia, videos, audios, games, dictionaries (Kotzer, and Elran, 2012). Noticeably, Moodle is considered as a learning tool that is greatly supported by the learners as it offers immense accessibility, diversity and accountability (Gudkova, et al. 2021). As a teaching tool, Moodle is a source that greatly assisted them in revolutionizing their courses and easily enriching them (Lopes, 2011).

II. Theoretical Background:

i. Advantages of the use of Moodle in the Learning and Teaching Processes

Moodle has greatly benefited the teaching and learning process by updating it adding more flexibility, connectivity, and efficiency to make the educational environment more professional and supportive for better results. The advantages of CMSs can be summarized into different criteria:

- 1- **Centralization:** it means that CMSs created a learner-centered approach where all the learners have access to the same course materials anytime and anywhere (Solomon, 2016). In addition, the centralization of the teaching process relies on the ability of online software to analyze all learning data for better improvements and better delivery.
- 2- **Assessment and Tracking Progress:** On the one hand, CMSs help instructors grade students' work and assess their daily improvement. This is done through integrating day-to-day feedback and providing guidance (Turnbull, 2019). On the other hand, CMSs assist the student in improving especially when their instructors evaluate their academic achievement on a daily basis.
- 3- **Gamification and adaptive learning:** CMSs are composed of different educational mechanisms that can suit all learning methods and styles aiming at better performance of students and better results. This also helps instructors in improving the quality of their teaching materials and adapt them accordingly. In addition, the gamification system of Moodle increases students' participation and general engagement in class (Poondej 2016).
- 4- **Didactic Pattern:** Moodle is composed of various resources used by instructors to vary the teaching assets and provide an attractive learning environment. From a didactic point of view, Moodle creates a friendlier learning process for students.
- 5- **Constructivist Approach:** Moodle helps instructors in planning, organizing, and directing their courses. This would enhance the process of learning of students by improving their critical thinking, problem-solving strategies, active reflection, and communication skills (Chan, 2010).

6- Pedagogical Strategy: As a CMS tool, Moodle is a student-centered approach that makes instructors employ creative assets for an engaged learner. Therefore, students build a pedagogical relationship with the content presented in the online course.

ii. The Algerian University Shift from Face-to-Face Learning to E-Learning: Historical Context

In 2007, the Algerian Ministry of Higher Education decided on the adoption of different online platforms for the improvement of the quality of learning and teaching processes. These platforms include Charlemagne, Ganesha, and Moodle (Sala, Bibi, and Nechad 2020, 87). However, the majority of these platforms were not used at that time because of the lack of experience in exploiting them.

After that, The Algerian universities started using Moodle at the beginning of March 2020 because of the outbreak of Covid 19. This situation obliged teachers to move from face-to-face learning to online learning. Instructors started posting their lectures using YouTube, Facebook Groups, WhatsApp, and Zoom. Consequently, universities were obliged to introduce formal online platforms for academic online learning. Moodle and Google Meets were introduced in Algeria as the formal solution for an Algerian university shift from Face-to-face learning to online learning.

This shift was challenging to both students and instructors who lacked experience and knowledge in using these platforms. Therefore, Algerian instructors started searching for training that would facilitate their new e-teaching task. They started reading about Moodle as the new teaching, and academic platform and even watching YouTube videos on how

uploading documents on Moodle works. This initially helped them just upload lectures on Moodle without using other resources available on Moodle. However, this did not aid them because they needed more academic, extensive training on the professional, academic use of Moodle.

iii. Technology in Algerian Universities: Strategies and challenges

In the middle of diverse technologically educational systems, the Algerian government supported the integration of technology in its teaching processes to modernize this sector and make it technologically attractive. The current minister of Higher education Dr. Kamel Bedari has initiated a great revolutionary program for updating the university setting in Algeria. This system is a collection of strategies and methods that aim at the fast and smooth implementation of technology in the university teaching procedures. These strategies range between:

- 1- **Teacher's trainings:** the Algerian ministry recently is organizing qualified trainings for the development of the digital literacy skills of teachers. These programs aim at encouraging Algerian academics and researchers to integrate technology in their courses and insert technological competence in their CVs. Therefore, the Algerian ministry of HE imposed that kind of training on all its newly recruited instructors providing different national and international workshops for the better attainment of their teaching targets.
- 2- **Student Engagement in the process:** the Algerian ministry of Higher Education is encouraging teachers to engage their students in their newly created technological atmospheres. This engagement can be established through online interactions,

gamification, group chats and online classes. This step will introduce even students to the technological atmosphere of studies; the fact that would animate their courses and make them technologically updated.

- 3- **Resource improvement:** the Algerian government is now working on improving their utensils and kits that would facilitate the process. These improvements will turn around ensuring the availability of these kits and processors at all universities.
- 4- **Imposing Online systems of grading and lecturing:** Recently, Algerian university instructors found themselves obliged to use certain online platforms and programs for grading, lecturing and diversifying their learning input.
- 5- **Creating digital administration groups that would assist university lecturers and learners in using technology in their learning and teaching processes.** More, these teams solve all technology problems to provide a smooth movement of the Algerian university from real time teaching and learning to a modernized system that uses technology and internet for better results of the processes.

However, there are many challenges that can obstruct the process of the modernization Algerian university.

- a. **Hardware knowledge and Software knowledge:** the Algerian ministry of HE is studying the different problems that can obstruct its modernization process. One main problem is the availability of the hardware and software materials in all the Algerian universities to ensure the success of their program. More, the ministry should provide its instructors with some professional trainings that would at least introduce them to all these technological utensils for a better implementation.

- b. **Internet connectivity:** the second factor that can hinder the process of the modernization of the Algerian higher educational system is the short internet connectivity in the Algerian universities. In addition, the Algerian learners have problems in connecting virtually with their teachers and participating in the different chat groups, online tasks, games and solving their online exercises smoothly.
- c. **Infrastructure development** the Algerian Ministry of HE is also required to develop its institutional infrastructure all around the Algerian universities. The majority these institutions need modernization and a smart installation of technological input for the attainment of the ministry's goals. Smart laboratories that are fully equipped should be implemented all around the Algerian universities so that students and teachers can use when ever needed.
- d. **Resistance to Change:** the other detrimental obstacle that can obstruct the process of the modernization of the Algerian HE is the unawareness of the Algerian university staff about the usefulness of this step and its practicality. This step should be taken into consideration because it can play a key role in that procedure.

III. Practical Side:

i. Research Design:

To achieve the main objectives of this study, the exploratory approach was used. Accordingly, this research used qualitative methods with the support of different primary and secondary sources on the integration of course management systems in teaching. For the

process of data collection, two research instruments were applied: an analysis of the Moodle accounts of teachers and semi- structured interviews.

First, the exploratory approach was used in explaining the utility of using technology in general and Moodle in specific in the Algerian universities and how it can modernize the Algerian universities and animate their classes. A step that would facilitate the mission of the modern university instructors and motivate the modern learners to actively attend their energetic, fresh classes.

Second, the qualitative approach is used in doing in depth studies on how Moodle as a Learning Management System is used being perceived and integrated in the Algerian classes. This was done in this research paper through exploring some Algerian instructors' point of view about this topic via conducting semi- structured interviews with them.

Finally, the analytical approach also was used in analyzing the different responses of the participants via a thematic analysis and triangulation. Firstly, the thematic analysis is used to identify the patterns and basic themes across the data collected from the interviews and observations of the Moodle accounts of all participants. Triangulation is method of comparing all the retrieved data to cross – validate all the findings.

ii. Moodle Accounts

To investigate the real relationship between Moodle and the teachers in Algerian universities, 20 Moodle accounts of different teachers at Laarbi Ben Mhidi University/ Oum El Bouaghi (East of Algeria), Mentouri University/ Constantine (East of Algeria), Maascar University (West of Algeria) were examined. Some of these teachers were newly recruited

university lecturers and they received national and international training on the use of Moodle that was directed by the Algerian Ministry of Higher Education.

These observations were done at the level of their online courses that were recently uploaded on Moodle for the new academic year. Animated videos, games, chat areas were searched for the attainment of the goals of the study. More, the way of the integration of these technological tools was examined whether they are properly inserted or no.

iii. Lecturers' Interviews

To establish a relationship between the Moodle accounts of instructors and their mastery of this platform, different interviews were conducted with them. The interviews were semi-structured discussing their sights about online teaching, the use of computers in teaching, and the different course management systems like Moodle that can be integrated into the learning and teaching processes to improve the quality of these procedures. Other particular questions included their mastery of Moodle as a teaching platform, its effectiveness in providing students with diverse resources, and their conviction about its efficacy and practicality.

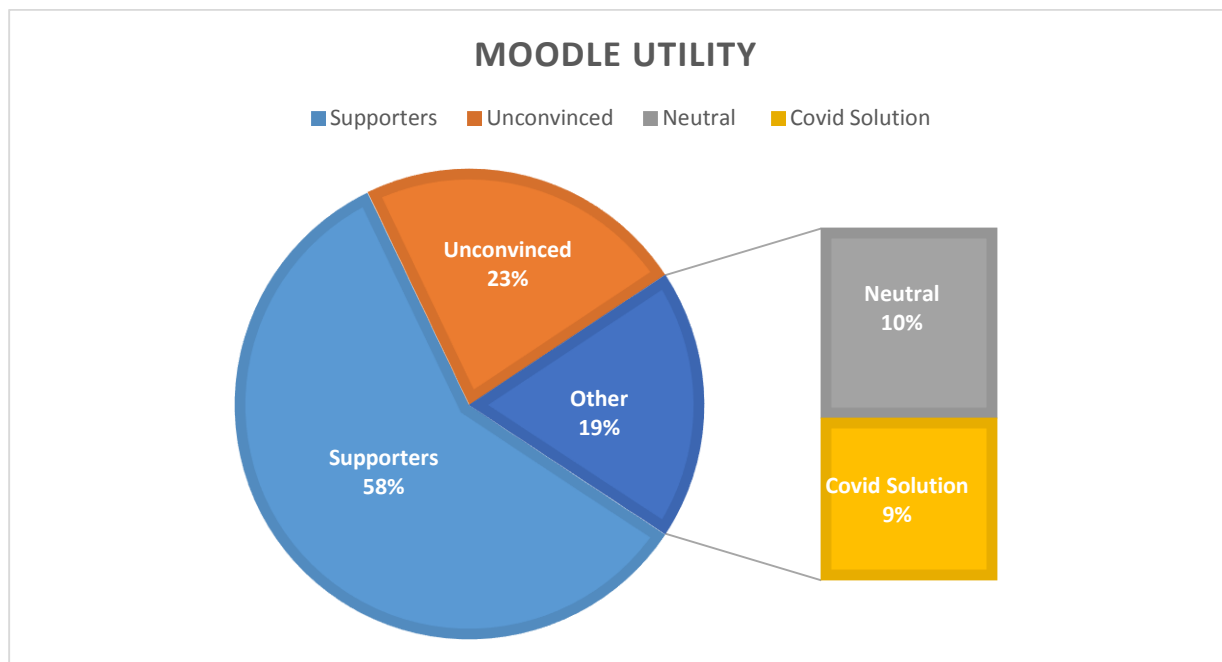
IV. Discussion of the main results of the study

After collecting all the data needed for the research, many outcomes of the study emerged. First, the analysis of the Moodle accounts of the teachers revealed that about 58% of the Moodle accounts of the teachers are perfectly used. They uploaded videos, links, pictures, and even dictionaries that were accessible to their students. Indeed, they supported their lectures with these utensils to be more understandable and attractive to their students, and technologically reinforced.

These teachers assumed that they received a recent training on the use of Moodle in uploading lectures and it was very beneficial. Amira argued, "When we started teaching I watched different YouTube videos on the use of Moodle in teaching but I learned just how to upload lectures when I received the training I was using Moodle perfectly exploiting all its resources including the chat groups and even games and my students are enjoying this". This reveals that receiving training on the use of Moodle in teaching is more effective than just using YouTube or Facebook to learn about that platform. This was the point of view of the majority of lecturers who suggested organizing different study days, seminars, and workshops for teachers about integrating technology as a whole in the learning and teaching processes.

Concerning the other 23% Moodle accounts, they were not well developed. Only PDFs of the lectures were uploaded without any descriptions, resources, or academic tools that would benefit their students and enrich their lectures. The question that was asked here is whether these teachers are unaware of the utility of the use of resources or they do not know how to use this platform properly. Consequently, in the interviews conducted the lecturers argued that there are many reasons behind the poverty of their Moodle accounts including the lack of time, the absence of knowledge, the absence of background expertise about Moodle and its basic concepts and usage, the non-conviction in the utility of other source materials to students. Therefore, they found themselves just uploading the PDFs of the lectures without any other source materials. Fatima argued that "I can learn easily how to upload videos and pictures in my Moodle account but I cannot see the utility of these as my students just look for the lecture and no other things so we are saving time and energy in just uploading the pdf of the lecture".

Other teachers who participated in the study were neutral about the role of Moodle in improving the process of learning and teaching at an Algerian university setting. Noticeably, they were hesitant about the utility and non-utility of this platform in the learning and teaching processes. The motives behind this uncertainty may be linked to the lack of familiarity and expertise about the efficacy of Moodle and its benefits.



V. Conclusion

The collected data reflect that the majority of Algerian university instructors are great supporters of the use of Moodle in the Algerian classroom as a learning and teaching tool. They were with the Algerian university shift from total face-to-face learning to a balance between e-learning and face-to-face learning. However, they suggested an acceleration of training and workshops for teachers discussing the usefulness of Moodle in higher education and assisting them in better knowing and using that platform. Consequently, this research sheds light on that fact trying to voice these estimations to be heard by the Algerian ministry and initiate some training programs for university instructors.

This study also revealed that there is another percentage of Algerian teachers who are still unconvinced or unaware of the usefulness of Moodle. Till today these instructors cannot find the utility of CMS in the learning and teaching processes opening the doors for other long years for the total integration of these tools in the Algerian higher educational system. This fact can be a threat to the recent Algerian Higher Education Ministry's objectives of full integration of technology in the Algerian classroom.

To conclude, the results of this study initiate a call to the Algerian Ministry of Higher Education to invite their teachers to different national and international workshops, webinars, study days, and conferences about CMSs, Moodle, and their utility. Moreover, different rewards should be given to teachers who attend and get certificates proving their success in

these trainings. This way the integration of technology and CMS in the Algerian universities will not take a long time and be very fast.

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