The E-Learning In Times Of Covid 19 In The Algerian University (Challenges And Prospects)

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Summary:

Our intervention is part of the presentation of a vision of a new mode of teaching-learning that is currently being experienced Algerian university, which is E-learning. It's about a simplified presentation on the nature of E-learning in order to define all the areas related to this new teaching method as a first time and to clarify the characteristics and transformations carried out by this tool in the process of Algerian higher education, as a second step we focused on the role of the E-learning during the covid-19 pandemic as well as its effectiveness and we aim at the end to propose resolutions which would contribute to its improvement and this obviously needs an answer to these two questions: what are the challenges facing universities in order to involve the teacher and the learner in the online teaching process? What are the terms suitable for successful online teaching during the covid-19 pandemic?

Keywords: Online teaching (E-learning) - Challenges- Algerian University – Covid-19.

Introduction:

The health crisis that the world is currently experiencing has caused a fast changing to all the habits and the system of higher education, where the Algerian university found itself facing two major challenges: fight against the spread of the covid-19 virus and ensure the continuity of educational courses.

Indeed the Algerian government has applied the containment policy from March 23, 2020 with the total closure of the majority of administrative institutions, schools and universities as well as certain economic and socio-cultural activities.

On April 02, 2020 and following a ministerial directive from the MESRS (Ministry of Higher Education and Scientific Research) addressed to the heads of universities and colleges of higher education calling to provide the courses online and suddenly it was necessary to find in an effective solution to save the current academic year.

This brutal and massive shift to online education has imposed the: e-learning, it is a system that combines educational tools and other technologies (Charlier, Deschryer & Peraya, 2006).

In addition, E-learning makes it possible to acquire knowledge and develop skills in the form of sharing courses on the MOODLE platform or on social networks without having to attend an educational institution and without the presence of the teacher or of the learner but with the provision of a PC or at the limit of a Smartphone and a high-performance internet connection while these conditions are not necessarily available to all students nor the teachers.

In this regard we try to understand this new experience of online teaching in the Algerian university in order to identify the

necessary technical and professional conditions that lead to the success of the latter.

The objective of this study is based on the response of these two questioning: what are the challenges facing Algerian universities in order to involve the teacher and the learner in the online teaching process? What are the suitable terms of a successful online teaching during the covid-19 pandemic?

1-online education (E-learning) some definitions:

The term E-learning is an English word (origin).

According to the European Commission in 2001, e-learning is defined as being: "the use of new multimedia technologies of the Internet to improve the quality of learning by facilitating on the one hand access to resources and services, and on the other hand exchanges and remote collaboration", it is also defined as the solution of online education organized remotely on the web where all learners can access to educational courses in the form of PDF or video, and thus learn at their own pace when their schedule allows it, these courses are associated with tests to evaluate and measure progress over time .

And to clarify the word E-learning we have chosen these two English definitions: "E-learning, is typically defined as, learning using a computer and the internet. Synonyms and/or related terms include E-learning , that is : online, virtual , web-based, technology assisted, distributed learning, computer-assisted learning, distance education, blended learning, computer managed learning, learning management systems, and others" (Chenwo,2012,p.10).

"E-learning is the use of information and computer technologies, to create learning experiences" (Horton, 2006, p.09).

E-learning is part of information and communication technologies for education it allows to carry out activities not face-to-face. It is most often the use of computers or mobile devices (Smartphones, tablets, etc.) connected to the internet.

This online training program can be used to develop different skill types like:

- **Cognitive skills**: which involve increasing the knowledge and understanding (of scientific concepts),following instructions (skills in procedures), and apply methods in new situations to solve problems (skills intellectual or reflective).
- **Interpersonal skills**: like those needed in active listening, presentation or negotiation.
- Psychomotor skills: which involves the acquisition of physical and movement perceptions (practicing a sport or drive a car) (Ghirardini,p,11).
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After the representation of the definitions we conclude that the E-learning is an English term that means "learning by electronic means", it refers to the use of the web and new distributed learning technology applications to improve the process of acquiring and updating new knowledge.

2- Previous research:

2-1 Study by G.M. Ramirez, and al. (2018): this article "everything learning: state-of-the-art models and methodologies education with ICT » presents a systematic review of models and methodologies that integrate ICT in mobile education allowing the development of learning processes like e-learning, mobile learning (M-learning), game learning (G-learning), thus offering ubiquitous learning (U-learning) or all learning. (Casey,2005). they demonstrate that over time the internet has revolutionized the field of education. the

authors erect an inventory of learning modes and methods developed using ICT with emphasis on ubiquitous learning (U-learning) as a concept that brings together all ICTs with most important and relevant features for the development of educational processes at any time, place, and in same time. The authors start from the stipulating principle that an education without ICT (so-called classic) is not conceivable because of the impact and permeability of technology in all environments and all areas of society.

2-2 Study by Slimani and Bentahar (2019): in their descriptive research, the authors draw up an inventory of the accession of some Algerian universities have distance education following the will of the MESRS, the study draws up an exhaustive inventory of educational technology platforms advocated in Algerian universities since 2013 like the AVUNET project, the project Mech-e learn, MOOC and other initiatives that have enabled the Algerian university to lay the groundwork for ICT training. In the same vein, they highlight the avant-garde efforts of Mentouri Brothers University in adopting the platform MOODLE as a distance pedagogical base for the training of newly recruited university teachers (since 2012) which positions the university as a leader in technological education in Algeria. It is not insignificant to predict that E-learning is a springboard to the quality of university education. At the end of this article, the authors reveal that the Algerian university is facing a real challenge that of the urgency of moving from a traditional university not connected to distance training and E-learning to catch up the delay comparable to their counterparts in order to enhance the quality of higher education.

2-3 Study by D.Marjan (2019): the author interviews the traditional modes and digital modes of teaching languages in Morocco; it shows that in time of vertiginous technological advancement, digital education is now a requirement. Indeed, he draws up a profile of the digital relationship between the student and the teacher; the child who is born in a connected environment is said to be "native digital" will have at his disposal the possibility of consulting the varied content in formats and will be able to join groups outside the family home and will never be limited or constrained by time, nor to that of geography through travel. However, teachers born before 1990 are said to be "digital immigrants" having embraced technology in their youth are facing a great digital challenge to adapt to the needs of a population marked by the explosion of ICT. He concludes his article with a quotation borrowed from (Bax, s. 2011), through which he draws up a technology life cycle curve. First, reserved for a limited public made up of specialists, then popularized to the general public and end up being integrated into the practices of society as the blackboard, the chalk,…the computer suggests that distance education is no longer restricted to a circle of specialist, but it is now a heavy necessity. After having made this inventory of works having the technologies shared education, we can confirm that the distance learning using ICT becomes an increased necessity especially with the covid-19 disaster. In this sense (Cornu 2003) admits that: information and communication technologies (ICT) impact deeply society and education. They not only offer tools that can improve teaching and learning, but they greatly transform society, education and the knowledge. (Cornu, 2003).

3- Approaches to E-learning:

There are two general approaches to digital learning:

- Self-learning.

- training led/facilitated by a trainer.

3-1-E-learning course in self-study: learners receive a digital learning tutorial, which can be complemented by additional resources and assessments. Tutorials are usually hosted on a web server, and learners can access it from a learning platform by online or on CD.

Learners are free to learn at their own pace and to define personal learning paths based on their interests and individual needs. Those who provide the digital courses do not have need to plan or manage or monitor learners through a specific process.

E-learning content is developed according to a set of learning objectives and delivered using various multimedia components (text, video, illustration, audio). The course must provide as much as possible solutions that will facilitate learning through explanation, examples, or comments to make learners independent.

When the self-study E-learning course is offered through an internet connection, it is possible to monitor the actions of learners in a centralized database. (Gherardini, p.12)

3-2- Trainer Facilitated/Led E-learning Course: in this

model, a linear program is developed which integrates several activities and elements in a chronological course or syllabus. The lesson is planned and led by a trainer and/or a facilitator through an online learning platform.

The E-learning course can be supplemented by presentations given by the trainers, individual work and collaborative activities between the learners.

Learners, facilitators, trainers can use communication tools such as e-mail, discussion forums, chats, polls, interactive whiteboards, features of application sharing and audio and video conferencing to communicate and collaborate. The course usually ends with an exercise or a test to assess learning outcomes. (Gherardini, p, 13).

4- The typology of E-learning:

The issuance of E-learning courses is carried out according to three fundamental principles:

- ➢ Synchronous online learning.
- ➢ Asynchronous online learning.
- ➢ Blended Learning.

4-1-Synchronous online learning: in this type of learning, the learning experiences are direct, and in real time, the roots of synchronous online learning arise from three main influences: the classroom, the media and the conference. (Shahabadi & Uplane,2015,p.131).

4-2-asynchronous online learning: this type of learning is an autonomous approach, specially designed for self-learning, with which the learner and the instructor work separately. The asynchronous environments provide learners with materials in the form of articles, audio/video lectures, presentations and documents. (Xie, Liu, Jahanvi, & Euysup, 2018, p.271).

4-3- Blended learning: it is added as a third proposed method. Blended learning is online training aimed to enriching face-to-face training but this is done using the personalized training modules E-learning. This method meets the needs specific to each learner, which ensures that each learner has an personalized additional online training according to the trained person, his prior knowledge, his shortcomings, his availability or not.

"These are courses designed to combine online and face to face teaching in any combination." (Huertasr, et al, 2018,p. 04).

5- E-learning objectives:

E-learning is designed to meet four main objectives that we present as follows:

- It is part of a new information and communication technology.
- Expand opportunities and help learners to acquire skills they need.
- Exploring effective uses of broadband tools such as the video conferencing.
- Learning foreign languages as a means of promotion of mutual understanding between people.
- Offer him the possibility of varying his learning by the use of new multimedia technologies of the Internet to facilitate learning and improve performance by

exchanging necessary information between the actors.

- The integration and participation of our society in the process of globalization highlights the need to train executives mastering foreign languages as well as the computer skills.

6- The development of E-learning:

The first computer-assisted teaching systems appeared in the 1970s, the goal was primarily learning as a transfer of knowledge, facing the rapid evolution of it more than basic education, continuing education requires new adaptable and less formal learning process. The number of different terms and expressions that are used around the distance education or virtual education concepts.

6-1-The route of E-learning in Algeria: The revolution in information and communication technologies, and the development of the international dimension, have pushed Algeria to identify problems faced by higher education, and that by improving quality, based on a restructuring of university by integrating new techniques such as E-learning.

6-2 The integration of E-learning in the Algerian university: In 1962 Algeria had only one university, after more than 130 years of colonization. Since then, she has not stopped increasing her skills. In terms of institutional power, the current university network has 106 higher education establishments spread across the 48 wilayas (between 2017/2018): 50universities, 13 university centers, 20 national higher schools, 10 normal higher schools and 02 annexes. Universities are organized into three regions: 17 in the Center, 22 in the West and 11 in the East, with respectively 2,375 students in 1962 and 1,730,000 students in 2018. (MESRS.DZ, 2021).

The Algerian higher education sector has a telecommunications infrastructure that connects all of the academic and research institutions to network through: "the national

distance learning network". this project was initiated by the MESRS which has granted, since 2003, a budget envelope more than 700 million DA devoted to the acquisition of advanced technology equipment. In addition, this project was supported by the installation of videoconference rooms in 2008, as well as the implementation placement of learning platforms in appropriate rooms. (CERIST News, 2010, Tahi & Bouraba Dahmani, 2014).

In 2003, the MESRS launched a project that links universities and scientific research "the national network of tele-education", then in 2008 the Minister of Post and ICT with the collaboration with the MESRS made the E-learning project a reality, they have brought together several Algerian Universities in the same network (Sétif, Batna, Constantine, Ouargla, Sidi Bel Abbes, Annaba, Biskra, Bechar, the UFC and the University of Poitier), they created the experimental platform called "virtual Algerian university" and the ICT portal in Algeria "EL BAWEB"(Slimani&Bentahar,2019,p.92).

And since online education in Algeria is considered as a face-to-face training support, whereas in other developed countries it is considered an option offered separately to the learner. This approach enables our country to take up the challenge and to adopt this mode of teaching.

The training of teachers in E-learning is one of the priorities of the Algerian universities, it is generally programmed for teachers newly recruited, to prepare them for mastering the use of new techniques of online teaching in the educational activities.

At the present time, each Algerian university has its own platform (MOODLE) which is the most used in Algerian universities, where each student has an account that allows him to access his courses, ask questions to his teachers, share documents with colleagues, and even to make evaluations in line.

Students are relatively familiar with this kind of platform MOODLE, or apps like "ZOOM, Google Classroom…" And even teachers can post their course content in synchronous whose students can access them freely and interact with them, they can even record their lessons in form of WORD or PDF. While other teachers cannot yet do this task for lack of training and necessary materials.

6-3 Obstacles of E-learning at the Algerian University: Although very heavy investments have been made to carry out the E-learning project for higher education in Algeria remains many obstacles that prevent the success of this new technology launched in an exceptional situation where we can name few of them:

➢ The lack of equipment and videoconference rooms and even personnel responsible for handling them.
➢ Poor internet speed and disconnection problems which interrupt online classes.
➢ The lack of computer equipment among a large part of the students, many of them do not have a personal computer or even an internet connection.
➢ The absence of a technical pedagogical culture, and the lack of training of teachers in the management and leadership of project and at the level of the preparation of courses and distance conferences and framing.
➢ The weak mastery of E-learning from the students and lack of direct contact with teachers.
➢ Problems related to lack of motivation and commitment from students and even some teachers.

7-E-learning in Algeria during the pandemic:

During this period of lockdown, the instability and uncertainty are installed, we add to this consequences for the higher education of the pandemic crisis. With the unpredictable arrival of COVID-19, the transition to online teaching was an absolute obligation in order to ensure the continuity of educational activities, this new teaching method opens up the doors for a great use of information technologies and the communication (ICT) in learning processes.

The heads of the majority of Algerian universities have chosen for several reasons the MOODEL platform to ensure the courses of the academic year according to: Dallaire, Gravelle and Beaudoin "to choose the videoconferencing platform or the simplest technological tool to use and which does not require a long registration." This mode of learning is used to host online courses, conferences, teacher course materials and even student notes.

In this crisis situation, Algeria has faced several challenges to ensure better integration of new technologies in higher education, it is about setting up networks, the acquisition of equipment, the resolution of the lack of personnel trained (training in the mastery of ICT for teachers newly recruited), and also the problems of funding. (Grari, 2015, p. 26-27).

Today we must change the old methods teaching/learning given the need to use different types of pedagogical support, in particular audiovisual and multimedia, and think of new strategies diversifying current teaching practices. (Benzouai, 2016, p.88-89).

The integration of E-learning becomes a priority in the Algerian university at this time of the health crisis that the world is going through, this event had a positive impact on the radical passage from a traditional face-to-face education to a distance education, also the use of ICT (information and communication technology) makes it possible to shape the professional qualities of the teacher, which contributes to improve Algerian higher education itself, without forgetting the mastery of the MOODLE platform as a distance teaching support ensures a quality of teaching

and scientific research, saving time, cost of training, travel, the student can carry out projects, access to a sustainable and qualifying database that meets the needs of an increasingly connected society. (Assoul, 2016).

8-Challenges and prospects:

Despite the discussions raised by the experience of online education and according to the different visions on the advantages and disadvantages of the latter, the only problem that comes to mind is: how effective is e-learning as an alternative to traditional methods. From this point we can summarize the challenges that face online education as follows:

- ➢ **Pedagogical content**: the teacher or trainer relies on the development of an instructional design according to the needs of their students and also include assessment tools and feedback.
- ➢ **Educational Tools:** Choosing the right tools helps to increase the flexibility of the use of interactive teaching and the attention of the students which motivates them to give good results.
- ➢ **Meet the needs of learners:** The online learning process requires taking into account the different styles of learning such as auditory learning and visual learning.
- ➢ **Teacher Preparation and Training:** Teachers trainers must be trained to be able to handle all the computer equipment that helps to make this online teaching a success.
- ➢ **Provide the necessary technology:** Online learning cannot succeed without having a good connection speed, and the availability of equipment without internet is useless at all, therefore the teacher must know the conditions of the learners to be able to choose the best teaching method in order to preserve the common interest.

Therefore, to remedy the difficulties suffered by the Algerian university by practicing this new method of online teaching we offer some **perspectives:**

- ➢ Motivate students, and train teachers used this technology and give more importance and seriousness to this genre of teaching.
- ➢ Mobilize all necessary means to avoid power connection cuts.
- ➢ Favor more interactive and attractive approaches
  than expositive so that students do not feel discouraged and isolated.
- ➢ Vary the methods of organization and management of courses so not to focus in a single form of file under PDF or WORD.
- ➢ Make necessary digital resources available for students according to their needs and interests.

From the foregoing, we outline that Algeria and like other developing countries suffer from the experience of E-learning as civilized alternative faced with covid-19 pandemic, this is due to lack of online teaching culture, especially that the decision to apply this system occurred under conditions forced by the new epidemiological situation that the country is experiencing to save the university year 2019/2020, but the success of the latter require application of the following:

- Provide appropriate educational content.
- The distribution of all electronic courses on the network.
- Communication and dialogue with students.
- Awareness of the importance of E-learning from the part of the university staff.
- Training and internship courses for teachers in order to improve their level of use of the platforms.

At the end we conclude in this contribution by   emphasizing   the

need to meet all the conditions so that the universities can jointly combine technical and pedagogical development so that the complexity of the act of learning is taken into consideration. Ultimately the generalization of online teaching successful remains a long process that must be supported over time, by an institutional will and widely adopted by both teaching and student communities who must adhere to it without common measure.

- Conclusion:

A great deal of effort has been made by the Algerian higher education to overcome this crisis health of COVID-19. Several initiatives have been taken in this direction in order to help learners to better benefit from good distance teaching considered as a new mode of learning, in order to provide alternative solutions to continue the educational activity in a safe, holy and protective environment. It's about to adopt the E-learning system which has constituted a very great opportunity for Algerian universities.

The integration of this system allowed us to become aware of the conditions necessary for its realization and this by providing all the means which help its success with the awareness of all the actors regarding the nature of this change and the good training of teachers trainer.

In reality, the practice of E-learning is quite difficult at Algerian university given the lack of certain factors but it must be a challenge to take up by the Algerian university for the success and the development of this system, where e-learning is one of the priorities and one of the basic requirements of the Algerian university in the future.

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