The experience of virtual education at the Algerian University

- Blida University 2 as a model-

تجربة التعليم الافتراضي في الجامعة الجزائرية

-جامعة البليدة2 نموذجا -

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Abstract:

The current study that we have before us shows the difficulties that a university professor encounters through their use of virtual education according to professors of humanities and social sciences from the University of Blida 2. We also used the descriptive analytical approach and the opinion of a group of professors about virtual education and its role in the quality of university education. And in the end, we reached a number of results addressed within this research.

Keywords: Obstacles; Quality of education; University professor; Virtual education.

الملخص:

الدراسة الحالية التي بين يدينا تبين الصعوبات التي يتلقاها الأستاذ الجامعي من خلال استخدامه لتعليم الافتراضي من خلال رأي أساتذة العلوم الإنسانية والاجتماعية من جامعة البليدة   2-، كما استخدمنا المنهج الوصفي التحليلي ورأي مجموعة من الأساتذة حول التعليم الافتراضي ودوره في جودة التعليم الجامعي وفي الأخير توصلنا إلى جملة من النتائج.

الكلمات المفتاحية: التعليم الافتراضي، المعوقات، الأستاذ الجامعي، جودة التعليم.

I. INTRODUCTION

1.Study's problematic

The continuous and rapid development of information and communication technology has prompted university institutions to use modern and diverse learning methods. For example, we find the so-called electronic library, university websites, as well as virtual learning. The latter is considered one of the modern trends adopted in the higher education system, as it provides educational content With a more effective and comfortable curriculum based on modern electronic technologies that are in line with modern technology, and provides assessment of learners' performance in the fastest time and with the least effort.

And it is clear that virtual education is one of the important steps taken by the Algerian state, especially in the higher education sector, in order to keep pace with the requirements of modern life, which is characterized by rapidity and social change, because, on the other hand, traditional education systems are no longer able to provide a comfortable educational environment in addition to the epidemiological situation. Because of the Covid-19 that Algeria is experiencing, like the rest of the world, it prompted the Algerian Ministry of Higher Education to adopt a new educational pattern in line with the current health protocol, and is also characterized by academic flexibility capable of providing information to students in well-known and modern pedagogical methods.

The problem included the following question:
-What is the university professor's opinion of virtual education?
-What are the most important obstacles to the use of virtual education in the Algerian university from the point of view of professors?
- What are the most important solutions and alternatives proposed from the teachers' point of view?

2.Study hypotheses

-Virtual education is a way to develop university education.
- The success of virtual education is associated with the provision of material and human capabilities.

3.Aim of the study

The current study aims to achieve the following:
-Transferring the Algerian experience through the opinion of the university professor?
-An inventory of the most important obstacles to the use of virtual education in the Algerian university.
-Familiarity with the most important suggestions and alternatives to face these obstacles.

4.The importance of the study

The importance of the current study is reflected in the importance of field research that dealt with the obstacles of virtual education at the Algerian University, based on the professors' attitudes towards this experience, as the professor is the basis of the educational process. This study is also consistent with the general philosophy of the Algerian University in adopting the principle of self-learning, by adopting Virtual learning as one of the ways to access knowledge, especially in light of various crises.

5.Basic Concepts

5.1.The Obstacle

It is: "a set of technical, material, administrative, and supervisory problems that prevent academics and learners from using virtual learning in different educational situations.

5.1.Solutions

Are the suggestions made by the research sample in order to create an effective and efficient virtual learning environment.

5.2.Virtual Learning

It is "a flexible learning method using technological innovations and information network equipment over the Internet, based on multi-directional communications, and providing an educational material concerned with interactions between learners and faculty, experiences and software at any time and place" and includes faculty members, students, educational programs and curricula, and classrooms. (Gatar Musa 2016, p 46)

5.3.Blended Education

Dual education may include a variety of teaching methods in higher education, including synchronous or asynchronous online education, a model driven by a series of technical and technological innovations. (Mustafa 2012)

5.4.Mixed Learning

This type combines the two previous types, i.e. traditional education and virtual education, and it is defined as: "An educational system that takes advantage of all available capabilities and technology media, by combining more than one method and tool for education, whether electronic or traditional, To provide a good quality of learning commensurate with the characteristics and needs of learners on the one hand, and the nature of the course and the educational goals we seek to achieve on the other hand.

6.The Limits of The Study

6.1.Spatial Limits:

This study was carried out at the University of Blida 2, Faculty of Humanities and Social Sciences.

6.1.Time Limits:

The current study extended from the beginning of February 2021 to May 2021.

7.Challenges of Incorporating Virtual Learning in Higher Education Institutions

Zhao (2003) stated that E-learning is still not in a place to replace traditional learning due to several issues, although E-learning is an effective method in certain situations. As learning is more of a social cognitive task, E-learning cannot cover such an element between students themselves and even with the instructor. The lack of face to face interaction would be easily revealed within such teaching. (Zhao.Y 2003, p 27)

Getting bored can be also observed with students: staying in front of a computer for a long time will add to that. Other aspects which need some consideration are issues related to the responsibilities of instructors, students, and other interested parties.

Other issues related to the absence of face to face tasks need to be considered and training is required for both the instructor and the students. Issues related to trust, accountability, academic integrity and other related aspects should be observed and tasks are needed to cover those at different levels. This would ensure a high level of E-learning approach. Internet security is also a demanding task for the processinvolved and IT departments with any institution need to be strong enough to make it run smoothly (Al-Jardani ; K.S 2020, p 64)

8.The Experience of Virtual Education at The Algerian University

This type of education is called by several terms, including: e-learning, digital education, distance education, and this type depends on the use of electronic media in communication between teachers and learners and between learners and the educational institution

Virtual education has also been developed according to the following stages:

8.1. First generation:

It appeared in the early eighties, so that the educational content was on CDs, and the educational interaction through which was individual between the student and the teacher, with more emphasis on the role of the student.

8.2.Second Generation

The method of delivering content in this generation has evolved into a networked method using the Internet, and the content has evolved with it to a certain extent. The process of interaction and educational communication has also moved from being an individual to a collective method in which a number of learners participate with a specific teacher(Phillip 1997, p 93)

8.3.ThirdGeneration

This generation began with the emergence of the concept of e-commerce and electronic security in the late nineties, and this coincided with a rapid development in multimedia technologies, virtual reality technology and satellite communication technology, which allowed the development of the third generation in the use of electronic media in the delivery and reception of information and the acquisition of skills and interaction between the student and the teacher Between the student and the school.

In fact, this education has increased due to the acceleration of modern technology and the emergence of various crises, including the health crisis represented by the Corona epidemic, and its impact on the quality of higher education.

9.The Experience of Virtual Education Blida University2During the Covid 19 Pandemic

The spread of the Corona pandemic has caused a challenge to Algerian society, and among the sectors affected by the educational systems at the level of university institutions, the Algerian government imposed in March 2020 the suspension of studies for all educational levels with the imposition of a strict health protocol. Higher and Scientific Research Transition from the traditional education mode to the distance education mode.

Like all university institutions in the country, Ali Lounisi University - Blida 2 - for the academic year 2020/2021 adopted the virtual education system using the (Moodle) platform, which is an acronym for: Modular Oriented Object Dynamic Learning Environment, and it was

directed to students (Bachelor's and Master's). All employees, including administrators and professors, were recruited to make this process successful by opening professional electronic accounts for them to access the electronic platform, in order to facilitate the process of communication between professors and students. As for the students, they could visit the platform and access its contents as visitors, in order to view the scientific material and be able to download it without having to have their own account on the platform.

On this basis, the professors prepared their lessons and downloaded them to the platform in the form of Word Document, Power Point, PDF, or as lessons in video clips. In view of the students' financial conditions, the concerned ministry concluded an agreement with all mobile phone dealers in Algeria in order to enable students to visit the Moodle platform and download content for free.

It is also worth noting, and similar to various university institutions in the world, scientific lectures and seminars were presented through (Google Meet) technology, or via (Zoom) technology, which are two modern technologies commonly used in international conferences and training workshops in the time of the Covid 19 virus pandemic.

10.Accredited Distance Learning and Education Resources

Many countries have turned to distance learning as a way to reduce lost time in schools (all online in China, Italy, France, Germany, and Saudi Arabia; mobile phones or telecasts in Vietnam and Mongolia) and Algeria. In addition to infrastructure and connectivity, teachers and administrators' knowledge of the necessary tools and processes are also key factors in providing distance learning, as happened recently in Algeria. Other countries send lessons to children at home as homework. Creating accounts for teachers, students and their parents, mobilizing publishing houses to make textbooks and educational materials available in digital content for classes at different levels, and broadcasting educational programs on national television by two channels. As more countries closed schools, more creativity was needed. For example, adapting currently available platforms for use on smartphones or agreeing with carriers to eliminate the cost of accessing educational materials on a Ministry of Education website, or both, could be part of a crisis mitigation effort.(Kaliobi, 2020, p. 30)

II. Methods and Materials:

1.Study Approach

Our study falls within the framework of descriptive and analytical studies, and this is a result of the nature of the topic through which we describe and analyze the phenomenon represented in virtual education, according to the opinion of the university professor.

2.Study Sample

The study sample included 100 professors at the University of Blida 2- they were deliberately selected from the Department of Social Sciences and Humanities.

Table (1) shows the distribution of sample members by field of study

Faculty of Humanities and Social Sciences	Repetitions	Percentage
Department of Humanities	40	40%
Department of Social Sciences	60	60%
Total	100	100%

Through Table (1) we note the research sample of 100 university professors, distributed

in varying percentages. The Department of Humanities represented 40 professors, i.e. 40%, and the Department of Social Sciences was estimated at 60 professors, i.e. 60%.

3.Study tool

The form that was passed to the estimated (100) respondents was used to find out the obstacles to virtual education from the viewpoint of university professors.

4.Statistical methods

In our current study, we relied on percentages and frequencies in order to achieve the objectives represented in: Identifying the most important obstacles to virtual education in Algeria from the point of view of university professors.

III.   Results and discussion :

1.The first hypothesis: Virtual education is a means of developing university education

Table (2) The degree of aptitude of a university professor for virtual education

Do you prefer to use virtual education?		Repetitions	Percentage
Department of Humanities	Yes	15	15%
	No	25	25%
Department of Social Sciences	Yes	10	10%
	No	50	50%
Total		**100**	**100%**

It is clear from Table No. (2) that (35) professors from the Department of Humanities answered "No," that is, they did not agree to the use of virtual education at a rate of (35%), while (15) professors from the same department answered: Yes, that is, they prefer Using virtual education with an estimated percentage (15%) of the total sample members.

On the other hand, the number of professors of the Department of Social Sciences who answered that they did not agree to virtual education was (10) professors, i.e. (10%), while the number of professors who answered yes from the same department was estimated at (50), i.e. (50%).

Table (3) The respondents' opinion about virtual education

The respondents' opinion about virtual education	Repetitions	Percentage
A way to improve university education	25	25%
A way out of crises	60	60%

Supplement to the contents of regular education	15	15%
Total	**100**	**100%**

Through Table (3) we notice that (60%) of the professors consider virtual education as a solution to various crises, while (25%) consider virtual education as a means to improve university education, and in the end (15%) refer it to the fact that it is a complement to the contents of regular education.

2. The second hypothesis: The success of virtual education is associated with the provision of material and human capabilities

Table (4): Represents the obstacles facing the university professor

The Obstacles	Repetitions	Percentage
Uninformative lectures meetings for teachers and students	10	10%
The difficulty of applying virtual education in subjects that need practice and realistic viewing	32	32%
Lack of training in the use of modern media technology	40	40%
Teachers' lack of interest in using modern means of communication in teaching	18	18%
Total	**100**	**100%**

It is clear from Table (4) that (10%) of the obstacles are related to the problem of weak lectures and formative meetings for teachers and students, followed by the lack of interest of professors to use modern technology at a rate of (18%), while the problem of the difficulty of applying virtual education in the subjects that need to be viewed by percentage (32%). Finally, the problem of lack of training in the use of modern media technology was estimated at (40%).

Table (5) Obstacles related to the student

Obstacles Related to The Student	Repetitions	Percentage
Lack of financial means for students	50	50%
Poor direct communication with the student	35	35%
The inability of virtual education for the student	15	15%
Total	**100**	**100%**

Through Table (5), we note that (50%) of teachers refer the obstacles to virtual education to the problem of lack of financial capabilities for students, and (35%) refer them to the problem of poor direct communication with students, and in the last (15%) they refer them to The problem of students' inability to virtual education.

Table No. (6): represents the solutions proposed by the professor to overcome the obstacles related to virtual education

What are the most important solutions that you propose to overcome the difficulties of virtual education?	Repetitions	Percentage
Providing a strong physical infrastructure for the success of virtual education	27	27%
Holding virtual education training courses for students and teachers	40	40%
Providing means of protection for the information that the academic staff deals with	20	20%
Smooth transition from traditional education to virtual education	13	13%
Total	100	100%

According to the solutions proposed by students to overcome the difficulties of e-learning, we find that the idea of providing strong physical infrastructure for the success of virtual education came by (27%), followed by the proposal to hold training and guidance courses for virtual education for students and professors by (40%), and then the idea of providing means Protection of the information that the academic staff deals with by (20%), and the latest suggestions are the smooth transition from traditional education to virtual education with an estimated percentage of (13%).

3. Results

The aim of the current study was to try to identify the most important difficulties of using virtual education in the Algerian university from the point of view of the professors, and we reached the following results:

3.1. Hypothesis: Virtual education is a means of developing university education

-The university professor does not prefer to use virtual education, i.e. 85%, as most of the respondents prefer in-person education, and this is the result of the obstacles and difficulties he encounters.

- The university professor considers virtual education a way out of crises by 60%.

3.2. The second hypothesis: The success of virtual education is associated with the provision of material and human capabilities

Weak lectures and formative meetings for teachers: Since the virtual teaching style is a new method in the university education system, it was necessary to hold instructive lectures and practical training meetings for the benefit of teachers in order to enlighten them with the modern techniques that will be used during the teaching process.

The difficulty of applying virtual education in subjects that require practice and realistic viewing: We sought the majority of these answers from the professors of the College of Technology, due to the large number of applied work in these disciplines, which require real observation during teaching accompanied by direct communication and active interaction.

Teachers refused to use virtual education instead of traditional education and their lack of interest in modern means of communication. To their feeling of unwillingness to adapt to modern methods and lack of interest in them in advance.

Teachers' lack of interest in using modern means of communication in teaching: especially among older professors who prefer traditional teaching despite its difficulties, so that it is difficult for them to use modern means.

Lack of financial capabilities for students: the sample members indicate that the most important thing is that not all students own computers and technology equipment, because the availability of these equipment requires financial capabilities that are difficult for all students to provide. Also, these means are considered a link in the virtual education process, and their lack of availability leads to some educational behavioral problems for students, the most important of which are low academic achievement motivation and frustration.

Weak direct communication with professors: The traditional direct communication in departments with the professor is a good way to receive information and experiences, and this is a major shortcoming in the virtual education process, although it is sufficient for the learner to receive the educational content through the sense of sight and hearing only.

The inability of virtual education for students: This is considered normal, given the epidemiological situation imposed by the Corona pandemic, which made those in charge of the Algerian university education system move directly to the use of the virtual system, and as a new system to the educational process, it is considered an alien element to the traditional system. Which led to a sense of lack of acceptance.

IV.   Conclusion:

The use of modern technology is one of the priorities of the Ministry of Higher Education and Scientific Research, and this approach has been touched through the use of distance education in recent times, which is one of the forms of virtual education. Through this research, we touched on the most important obstacles to the use of virtual education from the point of view of teachers, and they were classified according to their order, and the proposal of practical solutions that would remove these difficulties was also addressed. Finally, we concluded that the Algerian university must move to blended education, which includes both virtual education and traditional education, so that we can benefit from the advantages of each educational style and remove their disadvantages.

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