For studies and scientific research in social and human science:

Online Instruction in Managing Higher Education Teaching and Learning During Covid-19 Pandemic

Amina KERKEB*

Faculty of Letters, Languages and Social Sciences, Department of Letters and English Language, BELHADJ BOUCHAIB University of Ain Témouchent (Algerie), e-mail: amina.kerkeb@gmail.com

Submitted	Accepted	Published
09/05/2022	22/05/2022	01/06/2022

Abstract:

Concerns are often raised about integrating new technologies such as online learning and successfully implementing them in classrooms. These are often related to internal and external environmental barriers and are mostly related to personal mindsets such as attitudes and lack of appropriate materials. A short survey of mixed method is conducted with teachers from Ain Témouchent University (Algeria) to question about their experience. Results have shown balanced attitudes about the debate around the role of online teaching in higher education, its advantages and weaknesses.

Key words: online instruction; higher education; pandemic; teachers' experience.

I. Introduction

After the World Health Organization declared COVID-19 a pandemic on March 11, 2020, the Algerian government imposed a lockdown on nearly all institutions on March 15. Soon, Algerian universities were hanged face to face. Facial teaching and education is quickly being replaced by online digital formats. Principles of online learning as an alternative or supplement to classroom teaching/learning may be useful during emergencies such as pandemics. However, the willingness and attitudes of all Algerian University members to use this innovative technology do not seem to be the same.

While many countries -predominantly in the west- welcome the wide use of online learning as an alternative to classroom learning, other countries like Algeria still suffer from unreliable internet access and/or technology fight to participate in an online learning activity. In July 2021, UNESCO conducted a global survey of foundations (the global survey involved 193 UNESCO Member States and 11 Associate Members. 65 countries submitted responses, 57 of which

^{*} Corresponding author

were used to inform the report Analysis) "The various impacts of the pandemic on higher education systems in terms of access, equity and quality of teaching and learning, university operations, national challenges, emerging issues and policy responses" (UNESCO, 2021) summary. The findings for the various assessment dimensions show that 'the major impact of COVID-19 on teaching and learning is the increase in online education. The hybrid mode of teaching has become the most popular form'. Nevertheless, the survey underlines that access to online learning still varies by regions and countries depending on 'income levels, infrastructure and availability of digital devices for online or distance learning as well as support for teachers'. In view of those challenges, the paradigm of online learning is approached with varying degree of enthusiasm by teachers and students all over the world. And despite the numerous advantages of the online learning, raising claims -whether in western rich countries or in developing countries- are starting to question the effectiveness and the impact of that method on the future of education. So for example, Cellini (2021) a professor of public policy and economics at George Washington University discusses in her paper the efficacy of online instruction in higher education by asking questions like: what can we expect from the move to virtual learning? How does virtual learning impact student outcomes? And how does it compare to in-person instruction at the postsecondary level?

As far as Algeria is concerned, the interrogations raised by Cellini (2021) above are not specific to the US case, and these can be the concern of any Algerian teacher or student. Moreover, many of them tend to totally reject online learning principle and prefer classroom instruction.

The lockdown imposed by the government after the pandemic led to a sudden interruption of educational activities in classrooms and a shift to online instruction. This unplanned shift has created much trouble and feelings of stress, anxiety and worry among the university community. On the one hand, many of the teachers who were not accustomed with this mode of teaching found difficulties in preparing and delivering their courses, mainly those whom subject matters nature was inappropriate with the virtual environment. On the other hand, the students habitually familiarized with classroom face-to-face interaction with the teacher especially for slow and less autonomous learners.

Before the pandemic, the recourse to an online instruction in our universities was a personal choice made by instructors in search of creativity and innovation. The effectiveness of online learning was tested in a time in which there were permanent courses in the study rooms. Hence, teachers could choose which learning activity could be taught online and which would rather fit with classroom

Online Instruction in Managing Higher Education Teaching and Learning During Covid-19 Pandemic

settings. And yet, the students had the possibility to choose to participate to an online activity or not.

The present paper studies a sample example of the Algerian University community to bring balanced and most importantly rational answers to the debate around online teaching integration in higher education, its advantages and weaknesses. To this end, a short survey has been conducted with a number of teachers at the University of Ain Témouchent in the west of Algeria to identify their perception and attitudes about the new paradigm of online instruction.

II. Theories of Distant Learning

The paradigm of distance learning generally turns around, correspondence education, e-learning, remote studies, flexible learning, and massive open online courses (MOOCs). All these types of distance learning share the common features of spatial and/ or temporal separation, and the use of media and technology to enable communication and exchange during the learning process. Several researchers have proposed different theories to identify the fundamental characteristics of distant education. Keegan (1995) classifies theories of distant education into three groups: theories of independence and autonomy, theories of industrialization of teaching, and theories of interaction and communication.

Moore's Theory (1991) comprises two dimensions one of which distance education is seen as transactional and is described as follows:

The transaction that we call distance education occurs between individuals who are teachers and learners, in an environment that has the special characteristic of separation of one from another, and a consequent set of special teaching and learning behaviours. It is the physical separation that leads to a psychological and communications gap, a space of potential misunderstanding between inputs of instructor and those of the learner, and this is the transactional distance' (Moore, 1991 in Amundsen, 1993: 56)

Accessibility is the most important element of distance learning and is itself based on three important elements: Agent, hardware and software, Internet, broadband connection, teachers and students, computers, headphones, microphones, courses. These factors can have a significant impact on the presentation of the course (White, 2003: 103). Accessibility has been proven by Temperton to be essential to student success. He claims that students who successfully complete their studies are students with access rights. That is, they had a network to support their research. The network is from family and friends, colleagues at work, other students, or their tutors (Simpson, 2003:22).

III.Advantages of Distant Learning

Many specialists have claimed the benefits of distant learning to be adopted in the educational systems. One can summarize those benefits as follows: because interactivity is the core element of educational technology, it increases communication and interaction between teachers and learners anytime and anywhere, that is, dialogue between the teacher and the learner and even among learners is the core of learning environment (Cullingford C. and Haq.N, 2009). It facilitates the task for the teacher to transfer knowledge immediately to the learners and helps in 'collaborative' and 'self directed learning' (Kats.Y, 2010: 83). It also gives the chance to shy learners to express their point of views and participate without anxiety and embarrassment (Johnson. L, 2003: 2). Because of anonymity and distance, Anxiety disappears and large opportunities for collaboration are offered to the learners (Lamy.N.M and Hampel.R, 2007: 77). Moreover, in distant learning, the number of all participants can be controlled and known in advance by the instructor, as a result their level is tested rapidly (Ortega.M and Bravo.J, 2002: 94).

IV.Methodology and Research Instruments

In order to know to what extent the previously mentioned online advantages were palpable in real teaching situations and also to verify whether the recommended online instruction via different platforms is really helping teachers and their students accomplish the targeted learning task, a short survey was conducted with teachers of different specialties at the University of Ain Témouchent. The purpose was to study the effectiveness of online learning in higher education in general without limiting it to a specific field of study which is more interesting and more helpful if we want to share experiences, identify hindrance and come up with efficient solutions.

A Google form questionnaire was sent to 156 teachers however only 66 questionnaires were completed and returned. The questionnaire included four multiple choice questions and one open-ended question and was prepared in French language so that all the teachers could understand and give authentic responses.

V.Findings and Discussion

Right after the lockdown, the ministry of higher education has urged the teachers all over the country to switch to online settings as an alternative to classrooms. To this end, the teachers were invited to use their Moodle accounts to deliver their courses and communicate with their students from them.

1. Question One

The results of the first question in the chart below show that the great majority (90%) of the respondents have indeed switched to online learning against 10% only who said had not delivered any course online.

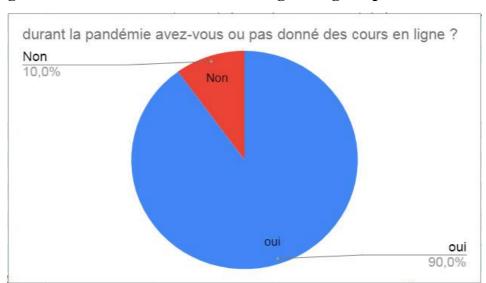


Figure n° 01: The use of online learning during the pandemic

2. Question two:

Online learning does not mean automatically communicating in real time. The exchange could be indeed either in a synchronous or in an asynchronous mode. The purpose of the second question was to know which mode was dominant in the teachers' use of online instruction. The results in the chart below demonstrate that most courses were only deposited in the dedicated space in a Word or PDF format, and in some cases a video was added to consolidate comprehension. The asynchronous mode was then the dominant one with a rate of 53% against 11% for synchronous and 36% for both modes.

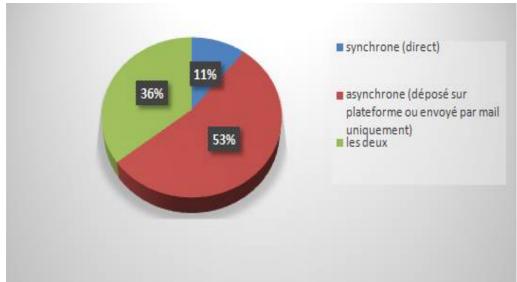


Figure n ° 02: Synchronous verses asynchronous courses

3. Question three

The efficiency of online learning method relies mainly on how much its environment can be similar to classroom settings, and the synchronous mode specificity can in fact approach to a large extent in person learning. Hence, the third question aimed at identifying the number of students who could benefit from a synchronous online course with their teachers. The results in the table below show the different rates of students' participation in that mode:

Synchronous mode	0 student	Less than 10 Students	Between 10 & 20 Students	More than 20 Students
	5 6 %	27.8.0/	27 8 %	38 0 %

Table $n^{\circ}01$: Participants' rate in the synchronous mode course

4. Question four:

In this question the purpose was to spot the online means mostly used by the teachers for online instructions. The suggestions in the multiple choice cases were selected from what was commonly used worldwide during the pandemic. The teachers had the possibility to select more than one choice. The results show a dominant use of Moodle with a rate of 39,7% which could be explained by the fact that this open source platform was the official online space proposed by the ministry of higher education where all teachers were asked to post their courses, and through which they could contact their students. Moodle was followed by Zoom with 20,7%. Despite the wide-reaching use of the platform during the pandemic, its paying access after 45 mn of use made it helpless for teachers and

Online Instruction in Managing Higher Education Teaching and Learning During Covid-19 Pandemic

students. Nevertheless, teachers answers have revealed that other platforms were used with different rates as it is shown in the chart below.

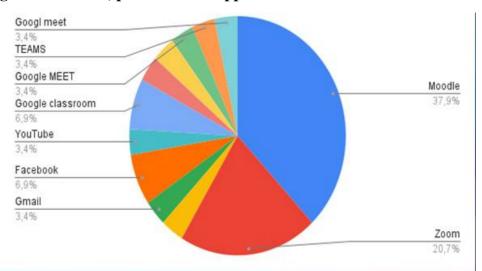


Figure n°03: Sites, platforms and applications used for the online courses

5. Question five:

This question meant to open widely the debate with the teachers about the online instruction and situate their position vis-à-vis the adoption and the integration of this new paradigm with the standard methods. The table below summarises the overall responses results which reveal a clear reticence toward online instruction:

Negative	Positive	Neutral		
63,33 %	10 %	26, 66 %		

Table n° 02: Teachers' opinions toward online instruction

The teachers' negative opinion appeared to be narrowly related to three major drawbacks of online instruction: the lack of computer literacy, internet low flaw, and course design difficulty. The following constraints have also been commonly shared by the teachers:

- Computer/platforms manipulation difficulties
- Course content/design
- Assessment
- Individual feedback difficulties
- Technical issues
- Fear of cheating
- Time commitment

- Communication issues

Furthermore, two teachers' comments were particularly pessimistic about the integration of online instruction as an alternative to classroom teaching, and literally blamed policy makers and institutions of having hidden reasons for imposing such a method:

- **Example 1:** the obvious answer: «no» means that this mode of teaching constitutes a danger for the quality of the training. Indeed, through distance education (including assessments) the university community is declaring that we are knowingly and consciously reducing the quality of training. Unless it can be said: we are sure that distance training is at least of the same quality as face-to-face training. And since this is not credible, why does the university teacher (echoing the declarations of the administration) say that... «... there is... still... something...» There is nothing, though!
- **Example 2:** Online education can be effective when the necessary means are available, starting with the training of stakeholders in the handling of software and platforms, the availability of a good Internet speed and the organisation of the courses in the form of schedules drawn up by the administration as well as the control of the participating students.
- **Example 3**: Online education is part of the sustainable development agenda, which aims to limit vehicle traffic, fuel consumption, and everything related to normal public life. With online teaching we are moving towards irreversible mediocrity. We will never be able to know the true level of students. For generation Z, the internet is social networks and not anything else. In classrooms, our visual field captures one set of students at a time and we can instantly see if they are interested or not. This online teaching is a great step towards transhumanism.

6. Conclusion

After two years of Covid-19 pandemic all around the globe, the struggle still continues for conveying an adequate education in higher education, and university teachers at Ain Témouchent are in a perpetual search for optimal options that gather both in person and online instruction. Yet, the constraints that both teachers and students meet in both methods makes it more than urgent to think about the adaptation of each subject matter with new environments, by including new methods of teaching, assessing and evaluating. Future research can be oriented alongside this question and each researcher in his field can come up with interesting ideas to help teachers know how to blend their courses.

Online Instruction in Managing Higher Education Teaching and Learning During Covid-19 Pandemic

References:

- Amundsen, C. (1993). The Evolution of theory in distance education. In D. Keegan (Ed.), *Theoretical Principles of Distance Education* (PP.55-71). London & New York: Routledge.
- Boulmerka, S. 2016. Internet Use in EFL Classrooms. An Investigation of Teachers 'Attitudes and Concerns in the Teacher Training School of Constantine.
- Cellini. S. R (2021) How does virtual learning impact student in higher education? Retrieved on 19/09/2021 at https://www.brookings.edu/blog/brown-center-chalkboard/2021/08/13/how-does-virtual-learning-impact-students-in-higher-education/
- Cullingford C. and Haq. N (2009) Computers, Schools and Students. *The Effects of Technology*. Printed and bound by in Great Britain. TJ. International. Ltd. Padstow, Cornwall
- Johnson. L. J. (2003) Distance Education. The Complete Guide to Design, Delivery, and Improvement. Published by Teachers College Press, 1234 Amsterdam Avenue, New York, NY 10027.
- Kats.Y. (2010) Learning Management System Technologies and Software Solutions for Online Teaching: *Tools and Applications .Ellis* University, USA &Rivier College, USA Published in the United States of America by Information Science Reference.
- Keegan, D. (1995). Distance education technology for the new millennium: compressed video teaching. ZIFF Papiere. Hagen, Germany: Institute for Research into Distance Education. (Eric Document Reproduction Service No. ED 389 931).
- Lamy.N. M, and Hampel.R. (2007). Online communication in language Learning and Teaching. Published by Palgrave Macmillan.
- Nedjah, H. 2010. EFL Teachers' Attitudes and Beliefs toward the Implementation of E-Learning. Canstantine University
- Ortega.M and Bravo.J. (2002) Computers and Education in the 21st Century. Edited by Kluwer Academic Publishers
- Simpson.O. (2003) Student Retention in Online, Open and Distance Learning. First published in Great Britain and the United States in by Kogan Page Limited
- White, C. (2003). Language Learning in Distance Education. Cambridge: Cambridge
- UNESCO, 2021. New Global Survey Reveals Impact of COVID-19 ON Higher Education. Retrieved on 19/09/2021 at https://en.unesco.org/news/new-unesco-global-survey-reveals-impact-covid-19-higher-education.