Manel Triki
Mohamed Khider University of Biskra (Algeria), manel.triki@univ-biskra.dz

Abstract:

This research aims at investigating the effectiveness of one of the strategies the Ministry of Higher Education has adopted to improve distance learning. This strategy is information and communication technology training which was provided to newly recruited university teachers. The researcher attempts to find out to what extent such strategy contributed in facilitating English distance teaching under Corona pandemic. It is hypothesized if all teachers of English were well trained in using ICT their performance in teaching English would be better. Findings revealed that teachers who were recruited after 2015 had better performance in teaching English than those recruited before 2015.

Key words:

distance learning, teaching English, ICT, Mohamed Khider University.

Corresponding author: Manel Triki, e-mail: manel.triki@univ-biskra.dz

1. INTRODUCTION

The use of Information and Communication Technologies (ICT) in higher education is of a great importance in the world in general and in Algeria in particular. Recently, this importance gets more emphasis due to the current circumstances under the Corona pandemic. Algerian university teachers among other university teachers in the world found themselves obliged to cope with the necessity of distance teaching instead of classroom or face-to-face teaching. It is known that in order to achieve an effective online teaching and learning both teachers and students need to be knowledgeable about the fundamental aspects of information and communication technology since that without this last distance teaching/learning cannot be fulfilled. The role of ICT in higher education is becoming more and more important and this importance will continue to grow and develop in 21st century. Moreover, the use of ICT in education not only improves classroom teaching facilitates the e-learning process. learning process, but also Additionally, the use of ICT will not only enhance learning environments but also prepare next generation for future lives and careers. In this connection the ministry of higher education and scientific research in Algeria has provided university teachers with ICT training.

The present paper aims to investigate to what extent such training has contributed in enhancing distance teaching during the Corona pandemic in addition to highlighting various difficulties university teachers have faced in distance teaching during this crisis. Therefore, it is hypothesized that if all university teachers were well trained in using ICT their distance teaching performance would be better with fewer difficulties (Phelps, Graham, & Kerr, 2004). In an attempt to confirm the above mentioned hypothesis a questionnaire was administrated to forty teachers of English in Mohamed khider university in order to get insights about their experience in distance

teaching under the Corona pandemic and to examine the effectiveness of ICT training that has been provided to newly recruited university teachers. Accordingly, in analyzing the research data a descriptive method will be followed since it serves the main purpose of the study which is to understand participants on how they teach, use technology and artifacts based on their experiences.

The current study consists mainly of two parts. First, a theoretical part in which notions, definitions, and importance of distance teaching/learning and information and communication technology in higher education will be provided. Moreover, Characteristics and challenges in using ICT will be discussed. Second, a practical part which will deal with the study fieldwork and data analysis.

2. Distance Teaching/Learning

Although many people think that distance teaching/learning is a recent new term; in fact, distance learning has been around for well over 100 years especially in higher education (Imel, 1998). Studies have generally claimed that universities are experiencing a paradigm shift, whether as a single and dual mode institutional transition or by moving from face-to-face delivery to distance and blended to online learning (Bates, 2007). In the last two decades, the term distance teaching/learning became more popular by the emergence of videotaped lectures and data-shows in universities and professional courses (Moore & Lockee, 1998). Nowadays, internet and live videos are the most used means of distance teaching/learning and communication in general. Interestingly, Greenberg (1998:36) defines distance teaching/learning as "a planned teaching learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning" (Greenberg, 1998). Following the same line of thought, Keegan (1995:7) claims that "distance education and training result from the technological separation of teacher and learner

which frees the student from the necessity of traveling to a fixed place at a fixed time to meet a fixed person in order to be trained". That is, distance learning is the kind of interaction that happens between the teacher and the learner that does not require them to be in the same place at same time in order to fulfill the learning objective (Keegan, 1995).

3. Information and Communication Technology

It can be said that the engine of distance teaching/learning is information and communication technology (ICT). That is, the main tool used for an effective distance teaching is ICT. This last needs the use of the internet and computers to facilitate distance learning since it is a generic term referring to technologies which are being used for collecting, storing, editing and passing on information in various electronic forms. ICT is considered as a mainstream in higher education. There are several areas in which ICTs are being used such as course materials, delivering and sharing content, learner teacher online/virtual interaction, creation and delivery of presentation and lectures, scientific research, etc. (Mandal & Mete, 2012). It has been proved that the educational effectiveness of ICTs depends on how they are used and for what purposes. And like any other educational tool, ICTs do not work for everyone or everywhere in the same way (Sarkar, 2012). In other words, the use of ICT in higher education has certain advantages that can contribute positively in educational programs, as it may have some disadvantages.

3.1 ICT Advantages and Disadvantages

a. Advantages

- •Enhancing group collaboration since learners and teachers can be connected together via different chatting forms such as voice and video conferences and virtual classes. In this way, learners are active in learning and interactive processes.
- •Flexibility of content delivery
- •Availability of different resources and easy access to it since digital

libraries offer electronic copies of books and documentation so that students will be able to use them everywhere.

- •Time and place access, in other words users can proceed through a training program both at their own pace and at their own place.
- •Offering the combination of education while balancing family and work life. According to Bjork, Ottossonand Thorsteinsdottir (2008) the participants can participate and complete coursework in accordance with their daily commitments. This makes an e-learning education a worthwhile option for those who have other commitments, such as family or work and/or cannot participate easily (Bjork, Ottoson, & Thorsteinsdottir, 2008).

b. Disadvantages

ICT plays an important role in creating a new educational learning environment which is used now as a solution to teaching during the current Corona pandemic (Mime & Tashio, 2001). However, this distance teaching/learning approach cannot eliminate the importance of classroom or face-to-face teaching/learning approach; yet they can be both combined together to result in a one learning system (Crispin & Andrew, 2007). The following are some disadvantages of ICT in higher education

- •Compared with traditional methods, face-to-face and lively communication does not exist in e-learning which may cause negative effects on academic progression and characteristic development of students.
- •The limitations that can be faced when it comes to students' assessment and feedback. The Internet provides a wonderful opportunity to get all kinds of information back and forth, but it also makes it harder to assess some types of students' feedback and knowledge (James, 2002). For instance, it was the case in Mohamed Khider university and other Algerian universities; a distance learning system was followed to deliver courses and lessons yet when it comes to students evaluations and exams teachers found themselves in

troubles due to difficulties to assess students electronically or virtually.

Thus, Titus (1998) notes that ICT and distance learning cannot be put to replace face-to-face learning, yet it can be considered as an additional tool which is more advanced, and time and effort saver, moreover it strengthens and fosters self-learning among students (Titus, 1998).

3.2 ICT Teachers' Training Characteristics

In order for teachers to be competent in using ICT when teaching there is a set of components and standards to be followed. That is, the establishment of the competencies that teachers should acquire to make productive use of ICT in their classrooms needs to follow some rules; for instance, the Teacher Training Agency (2001) is one of the proposals that has been made and which sets out as objectives in ICT teacher training the following skills:

- When to use ICT in teaching and when not to use them
- How to use ICT in teaching the whole class
- How to use ICT in lesson planning
- How to organize ICT resources adequately
- How to evaluate student work when using ICT
- How to use ICT to keep up to date and share practices. (Cited in Muñoz-Repiso, A. & Tejedor Tejedor, F. 2009: 685).

Following the same line of thought, the Society for Information Technology and Teacher Education (SITE, 2002) established the following large modules as ICT training standards:

- Technological operations and concepts
- Planning and design of learning environments and experiences
- Teaching, learning and study plan (how to maximize learning)
- Learning assessment
- Productivity and professional practice
- Social, ethical, legal and human aspects. (Munoz-repiso & Tejedor, 2009).

Concerning the training contexts that should be covered Kook (1997) highlights the following:

- Networks (access to online services with navigators, use of e-mail, videoconferencing, creation of web pages, use of cooperative working tools, etc.)
- Use of materials (online training courses, design of electronic presentations, educational software, product evaluation, etc.)
- Use of peripheral units (DVD, scanner, cameras, video, etc.)
- Office software (text processors, databases, graphics, etc.)
- Strategies for communication and cooperation in technological environments (group work in telematic environments, interdisciplinary work, development of teaching networks and learning networks, etc.) (Kook, 1997)

From their part, MacDougall and Squires (1997) claim that there are various competencies that must be developed throughout the educational system for ICT integration to be successful. These competences are mainly related to teachers; they note that teacher professional development should have five focuses:

- Skills with particular applications
- Integration into existing curricula
- Curricular changes related to the use of IT (including changes in instructional design)
- Changes in teacher role; and
- Underpinning educational theories (MacDougall & Squires, 1997)

3.3 Challenges of Using ICT in Higher Education

Challenges that may face both teachers and students while using ICT in learning differ from country to another. In Algerian universities a number of different challenges can be mentioned briefly in four main aspects.

a. Insufficient Infrastructure: which means that there is no proper ICT infrastructure in universities that may facilitate distance learning.

It can be mainly due to non-availability of required hardware and

2016-2019	Before 2015
-----------	-------------

software or due to the old and poor used hardware; however, this cannot be said about all universities since many universities are equipped with new ICT tools and hardware.

- **b. Poor Internet Connection:** ICT requires strong high speed secure internet connectivity in order to have proper functioning. Algerian universities in general lack proper net connectivity while some have poor or unstable net connectivity. Thus, in most universities information and communication technology tools cannot be used appropriately because to do so it mainly requires a high internet speed.
- **c. Lack of Teacher's Training:** teachers need proper training and awareness to implement ICT in their day to day lectures. In order to master any kind of competence one should be first theoretically and practically trained in the subject matter. Many teachers in Algerian universities are incompetent to handle ICT equipment due to several reasons which will be discussed in details in the field work of this research paper, one of these reasons is lack of ICT training.
- **d. Lack of Government Policy:** The Ministry of Higher Education and Scientific Research in Algeria has taken many initiatives and policies for implementing ICT in the class room at University level since 2016. But still many universities lack ICT infrastructure, network connectivity, and well trained teachers. It can be said that despite the fact that many Algerian teachers lack ICT training, Algerian universities can be considered to be on the right path towards better digital learning/teaching since the field of information and communication technology in higher education is getting improved day by day.

4. RESULTS AND DISCUSSION

Q1: Since when have you been recruited?

a. 2016-2019

b. Before 2015

30%	70%

Table 1. Recruiting Time

Results in table 01 show that the majority (70%) of teachers of English in Mohamed Khider university were recruited before 2015; while 30% of them are newly recruited (2016-2019). This question aims at shedding light on the number of teachers who were newly recruited (since 2016) because they are the ones who benefited from a one year ICT training when they were first recruited as table 02 below shows.

Q2: If you are newly recruited (since 2016), did you benefit from a one year ICT training?

- a. Yes
- b. No

Yes	No
90%	10%

Table 2. One Year ICT Training

It is clear on table 02 that almost all newly recruited teachers (90%) benefited from a one year ICT training. This is supposed to have a positive impact on their distance/online performance during the Corona pandemic.

Q3: If you were recruited before 2016, did you benefit from any training session on ICT and the use of Moodle Platform?

- a. Yes
- b. No

If yes, how many sessions?

Yes	No
90%	10%

Table 3. ICT Training Sessions

1 Session	2 Sessions	6	Months
		Train	ning
80%	10%	10%)

Table 4. Number of ICT Sessions

Table 03 above displays that most teachers who were recruited before 2016 benefited from ICT training sessions such as training on the use of Moodle platform. However, when teachers were being asked about the number of sessions they had got about ICT (as shown on table 04) responses reveal that a large number of teachers (80%) benefited from only one session, while 10% of them benefited from two sessions, and the remaining 10% benefited from a six months training on ICT. Teachers need specific professional development opportunities in order to increase their ability to use ICT for formative learning assessments, individualized instruction, accessing online resources, and for fostering student interaction and collaboration. Thus, results reported on table 04 concerning the number of ICT sessions teachers have been provided with can be described as insufficient because one or two training sessions would never be enough to cover the ICT aspects and use in teaching and education. As far as the six months training is concerned, it is supposed to be effective in case teachers were having both theoretical and practical ICT training.

Q4: In case you have benefited from one or two ICT training sessions, were the training sessions more of a theoretical nature or a practical nature?

- a. Theoretical
- b. Practical

Theoretical	Practical
85%	15%

Table 5. The ICT Training Nature (before 2015)

As it was expected by the researcher, one or two training

sessions would never be sufficient to combine between a theoretical and a practical ICT training. That is what is shown in results of table 05 where 85% of teachers who had one or two ICT training sessions claimed that these sessions were more of a theoretical nature; while only 15% of those teachers said that there was practice during these training sessions.

Q5: If you are newly recruited (2016-2019), was the one year ITC training of a more theoretical nature or practical nature?

- a. Theoretical
- b Practical

Theoretical	Practical
00%	100%

Table 6. The ICT Training Nature (2015-2019)

Unlike teachers who benefited from one or two training sessions that were mostly of a theoretical nature, table 06 indicates that the training that was provided to newly recruited teachers on ICT was of a purely practical nature. Consequently, newly or recently recruited teachers are supposed to have less difficulties in distance teaching during the Corona pandemic since they had enough practice in ICT.

Q6: Did you use Moodle platform in teaching before the Corona pandemic?

- a. Yes
- b No

If NO why so?

Yes	No
00%	100%

Table 7. Moodle Platform Usage

As table 07 displays, all teachers answered that they did not use ICT (more precisely Moodle platform) in teaching before the Corona pandemic. This can be due to several reasons. When teachers were asked in the sub-question about the reason why they did not use

Moodle platform, some of their answers were as follows:

- I do not use Moodle platform because students do not have access to it yet
- I did not get enough training to use ICT in distance teaching
- Students are not familiar to such platform so it is useless to use it with them
- most students do not even know what Moodle Platform is
- I have a good theoretical information about Moodle platform and ICT in teaching, however when it comes to practice I face many difficulties.
- Because I do not have full knowledge. But I think that the teaching process would improve
- I don't use them because I have a heavy work load
- Lack of internet at university (poor connectivity)

According to teachers' answers, reasons why teachers do not use Moodle platform in teaching can be divided into three main categories, those related to teachers, others related to students, and the third category which is related to the university. As far as teacher related reasons they include mainly lack of time, lack of knowledge and lack of experience or training. Concerning students related reasons, they can be summarized in the fact that almost all students do not have access to Moodle platform and most of them do not even know what Moodle platform is. Concerning the reasons that are linked to the universities they are related to the internet availability and speed which English teachers find it an obstacle towards the application of distance learning using Moodle platform. Thus, it can be said that universities did not provide neither enough ICT training sessions to most university teachers nor proper internet connectivity for teachers to be able to use ICT in distance learning. Additionally, universities were mostly interested in training teachers without considering the fact that students do not even have access to e-learning platforms such

as Moodle.

Q7: While using Moodle platform nowadays during the Corona pandemic, do you face any difficulties? If you face any would you mention some?

- a. Many
- b Few
- c Some

If you have faced any would you please state some of those difficulties.

Many	Few	Some
35%	15%	50%

Table 8. Frequency of Moodle Usage Difficulties

Statistically speaking, table 08 shows that a great number of teachers (50%) claimed that they faced some difficulties while using Moodle platform as a distance teaching tool during the Corona pandemic; while 35% of them reviewed that they faced many difficulties, and only 15% of teachers answered that they face few difficulties in using Moodle platform. More interestingly, when teachers were being asked to mention some of those difficulties they faced in distance teaching they reported the following:

- I am not familiar with such method of teaching so it took time for me in order to get used of it
- Unfortunately it is not easy to apply the theoretical ICT knowledge I have in a practical way especially without an instructor
- The large number of students
- Students are unfamiliar with Moodle platform and e-learning
- Some technical problems such as connectivity
- difficulties due to lack of practice

Such difficulties can be due to different reasons. One of these reasons could be the fact that most teachers did not benefit from a long term ICT training before the Corona pandemic since those who benefited from such training in Mohamed Khider University were only newly

recruited teachers (2016-2019) while the majority of teachers (as shown in table 01) were being recruited before 2015 which means that they did not get ICT training. Another reason for these results might be that all teachers did not use Moodle platform in real teaching before the Corona pandemic (see table 07); in other words, the first time teachers of English in Mohamed Khider University started really using Moodle platform to teach was once universities were closed and distance teaching/learning was imposed, this explains teachers answers about not being familiar with e-learning approaches.

5. EXPERIMENTAL

This questionnaire was used in order to obtain data about the subject matter under investigation. The questionnaire contains both open ended and closed ended questions. It is composed of two sections. The first section aimed at gathering background information about teachers. The second section includes questions about ICT importance in teaching, and ICT training and use in universities.

The questionnaire was sent via e-mail to forty seven teachers of English in Mohamed Khider University of Biskra in Algeria. The number of the received answered questionnaires was of forty questionnaires which will be analyzed following a quantitative procedure where the researcher examined the teachers answers and found out to what extent their answers would validate the research hypothesis.

6. CONCLUSION

Our universities must fulfill the expectations of a new society, which is characterized by being more open, flexible, and they must promote the use of ICT. Universities must respond to students' needs, design new programs, restructure their conceptions on the characteristics of learning environments, and develop internal policies to encourage e-learning.

based on what was displayed in the questionnaire findings, it

seems that most teachers faced several difficulties in distance teaching

under the Corona pandemic, this can be mainly due to the fact that most teachers have not received initial training in ICT area and the few sessions offered to them seems to be insufficient especially since results showed that these information and communication training sessions were mostly of a theoretical nature. It was noticed that only newly recruited teachers (after 2015) who present 30% of teachers of English in Mohamed Khider University benefited from an extensive one year ICT training; however, other teachers (70%) who present the majority of English teachers did not benefit from any ICT training except for a very few sessions.

Interestingly, ICT training should be understood as a continuous process, not as a one/two-time activity as it was the case for English teachers in Mohamed Khider University. As it is said 'practice makes perfect' which indicates that in order to master any topic there should be more practice in it. In addition to the theoretical notions of ICT practice in this field is of a great importance; therefore, it is highly recommended for English teachers in Mohamed Khider University to be provided with more practice in the field. Furthermore, ICT training should be in accordance with the technological means and the needs that arise among the teachers. It should be a training that permits the creation of learning communities.

In a nutshell, in order for a better distance English teaching performance, first, it is important for Mohamed Khider University teachers to become familiar with new programs to help them with their subjects, which means ICT trainings should not be limited only to the use of Moodle but to be extended to the use of other ICT tools such as knowing how to create web sites, and knowing how to use virtual environments like conferences and meeting. Second, it is recommended to train teachers who were recruited before 2015 in an intensive way, i.e., they should not be trained only at the theoretical level but much more at the practical level by providing them with more sessions where there will be instructors and support from ICT

specialists at the university. Additionally, there should be an emphasis on the importance of being able to link the use of ICT to educational practice; in other words, ICT training should be for a specific purpose which is here 'teaching', thus teachers must be trained on ways and tools of information and communication technology that they are meant to facilitate the teaching process for English teachers in higher education.

7. Bibliography List:

- Bates, A. W. (2007). Strategic Planning for e-learning in a Polytechnic: Making the Transition to e-learning. New York: NYC Press.
- Bjork, E., Ottoson, S., & Thorsteinsdottir, S. (2008). E-learning for all. Dans A. R. Parsons, *E-learning: 21st Century Issues and Challenges* (p. 22). Nova Science Publishers.
- Crispin, D., & Andrew, L. (2007). A Wolf in Sheep's Clothing: an Analysis of Students Engagement with Virtual Learning Environments. *Journal of Hostility LeisureSport and Tourism Education, University of Wolver Hampton*, Vol 6 No 2.
- Greenberg, G. (1998). Distance Education Technologies: Best Practices for K-12 Settings. *IEEE Technology and Society Magazine*, 36-40.
- Imel, S. (1998). *Myths and Realities of Distance Learning*. Ohio State: Ohio State University.
- James, G. (2002). Advantages and Disadvantages of Online Learning. Consulté le May 2020, sur http://www.comminit.com/ict-4-development/node/210058
- Keegan, D. (1995). Distance Education Technology for the New Millenium: Compressed Video Teaching. *Institute for Research into Distance Education ERIC Document Reproduction Service No ED 414 446*.

- Kook, J. K. (1997). Computers and Communication Networks in Educational Settingsin the Twenty First Century. CUP.
- MacDougall, A., & Squires, D. (1997). A Framework for Reviewing Professional Development Programs in Information Technology. *Journal of Information Technology*, 115-126.
- Mandal, A., & Mete, J. (2012). *ICT in Higher Education: Opportunities and Challenges*. Consulté le april 2020, sur http://bcjms.bhattercollege.ac.in/ict-in-higher-education-opportunities-and-challenges/
- Mime, K., & Tashio, O. (2001). The Knowledge Management for Collaborative Learning Support in the Internet Learning Space. *University of Electro-communications Graduate School IEEE*, 62-77.
- Moore, D. R., & Lockee, B. (1998). A Taxonomy of Bandwidth: Consediration and Principles to Guide Practice in the Design and Delivery of Distance Education. Portland State: Portland State University.
- Munoz-repiso, A., & Tejedor, T. (2009). Information and Communication Technologies in University Teaching: Implications in European Higher Education Space. *International Journal of Human Sciences*, v6 n2 683-696.
- Phelps, R., Graham, A., & Kerr, B. (2004). Teachers and ICT: Exploring a Metacognitive Approach to Professional Development. *Austrilian Journal of Educational Technology*, v20 n1 49-68.
- Sarkar, S. (2012). The Role of Information and Communication Technology (ICT) in Higher Education for the 21st Century. *The Science Probe*, 1 (1) 30-41.
- Titus, A. (1998). *Internet in the Physics Classroom*. North Carolina, USA: Davinson Colledge Press.

8. Appendices QUESTIONNAIRE

Thank you for accepting to answer to the present questionnaire. We			
would very much appreciate your candid response to questions therein			
included which may help to carry this study about Teaching English in			
the Light of Information and Communication Technology Use in			
Mohamed Khider University, Algeria: ICT Training Effectiveness.			
1. Since when have you been recruited?			
a. 2016-2019			
b. Before 2015 □			
2. If you are newly recruited (since 2016), did you benefit from a one			
year ICT training?			
a. Yes			
b. No			
3. If you were recruited before 2016, did you benefit from any training			
session on ICT and the use of Moodle Platform?			
a. Yes			
b. No			
If yes, how many sessions?			
4. In case you have benefited from one or two ICT training sessions,			
were the training sessions more of a theoretical nature or a practical			
nature?			

6. Did you use Moodle platform in teaching before the Corona

training of a more theoretical nature or practical nature?

5. If you are newly recruited (2016-2019), was the one year ITC

pandemic?
a. Yes
b. No

a. Theoretical

a. Theoreticalb. Practical

b. Practical

Dear colleagues,

TRIKI Manel				
If NO why so?				
7. While using pandemic, do you mention some?	-			
a. Many				
b. Few				
c. Some				
If you have face difficulties	d any would	you please	e state some	of those
Any further comme	ents and sugges	stions		

Thank You for your cooperation!