

## Technology for Instructional Purposes: Teaching and Learning EFL in Algerian Higher Education

التكنولوجيا للأغراض التعليمية: تدريس وتعلم اللغة الإنجليزية كلغة أجنبية في التعليم العالي الجزائري

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### Abstract

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*The present study raises an issue that is related to a current debate about technology-based instruction in EFL teaching and learning in Algerian higher education. An investigation of the various features of using technology for educational purposes is carried out. The study aims at exploring the use of technology and its incorporation in EFL teaching and learning in Algerian higher education. It can be of great significance to both teachers and students who would be enlightened about the place of technology in education. Moreover, they are equally expected to exploit technological tools and media following the changing conditions all over the world. Data was collected relying on the questionnaire as a research tool. The findings reveal that the issue under study is merely restricted to some technological means, procedures and E. learning. In addition, the implementation is neither systematic nor based on specific teaching or learning models for guidance and improvement.*

### Introduction

A contemporary issue that is deemed a hot topic in the field of research about the teaching and learning of English as a foreign language (EFL) is related to technology and its incorporation in education. Known as educational or instructional technology, it primarily refers to the use of technological tools for educational purposes. This issue is proliferating, and with the lapse of time, it can result in a very sophisticated pedagogy of teaching and learning. The use of technology should be deeply understood because misusing or even overusing can be disastrous for both teaching and learning; this is the reason why, the whole matter should be handled with great caution and extreme care. To unveil the extent to which technology is incorporated in EFL teaching and learning in Algerian higher education and investigate the general atmosphere underlying this implementation, the present study points out some technological devices and procedures and puts them under investigation.

### 1-Teaching/Learning Process

A review of the literature demonstrates that teaching and

learning are two constituents of the same process. That is to say, teaching and learning are deeply intertwined and any gap between them would result in the failure of the whole process. Kirkwood and Price (2013) claim that teachers hold different conceptions vis-à-vis the teaching/learning process; some have “teaching-focused” conceptions (i.e. teaching as the transmission of information, skills and attitudes to students), others have *learning-focused* conceptions (i.e., promoting the development of the students’ own conceptual understanding)” (p.537). One of the most known and bitter realities about teaching and learning is simply that what is taught is not always learned. Nunan (1995) raises this problematic aspect stating that “there is a mismatch between the pedagogical agenda of the teacher and that of the learner” (p. 135). This means that what the teacher is teaching may not always be the same thing that the learner is focusing on.

As far as higher education is concerned, Black (2002) maintains that it has to be restructured to enable students to match their needs; he openly states that “there is a dangerous mismatch between what today’s student needs

from higher education and what it is receiving. This disparity has lined colleges and universities to evaluate and develop partnerships to ensure their ability to compete in a global economy” (p.267). Concerning the issue of restructuring, Lesgold (2003) claims that “there are two sets of processes to think about: those that change teacher and classroom behaviors and those that change student-learning processes” (p.53). The learners’ needs would be met if the whole process revolves around the learner, and the teacher being merely a guide and facilitator. The use of technology in the classroom is reported to possibly foster learner-centered classrooms. In a nutshell, we can say that in addition to the teacher and the learner, technology can equally take part in the teaching/learning process. Sharma (2009) supports this view and asserts that “the role of the instructor together with the role of the technology can lead to advanced learning results” (as cited in Nomass, 2013).

## 2–Using Technology for Instructional Purposes

Questioning and changing our ways of teaching and learning has become an urgent necessity in the 21<sup>st</sup> century that marked the invasion of technology with its miscellaneous forms and flavors more than any other time before. This technological invasion will persist and radically change the educational scene even more. According to Lemoine, Waller, Garretson and Richardson (2020), “evolving technologies have revolutionized teaching, creating a constantly changing environment for teachers” (p.81). At present, technology is present in almost every aspect of life. This apparent dominance led to the formation of a new generation that is now called the E. generation or digital generation. For example, Prensky (2001; as cited in Lehtonen, Page, Thorsteinsson & Hepburn, 2007) stated that:

The present generation of students – *the games generation of children* – is quite different from older generations; they want to manipulate presented objects and expect a degree of interactivity as opposed to merely passively watching and listening. It can be proposed that the traditional way of thinking and learning has been shifted from deploying established media, such as literature and print, to a considerably more interactive media, such as digital video and audio. (p.141).

It is believed that it is extremely important to find out ways and new ways to make education go hand in hand with technology rather than the opposite. In support of this claim, Johnson, Levine, Smith and Smythe (2009; as cited in Brahmi, 2016) maintain that thanks to technology

that new horizons are open to students for more access to information and wider contact with people. Technology can be used for educational purposes the same way it is utilized for business, medical, social and personal matters.

Innovation in education has as a first target the improvement of learners’ performance and learning outcomes. According to Bick and Kummer (2008), “these current and emerging technologies have valuable potential in supporting the learning needs of an expanding, heterogeneous and mobile society...” (p.90). In this case, if Ed Tech is used for this purpose, then, what matters more is not the quantity and quality of the materials and media used but the role, effects and outcomes of the adopted approach. Put it differently, the use of high technologies and innumerable devices with no remarkable amelioration in relation to teaching and learning would be non-sense.

The use of technology in teaching and learning has become a characteristic of the modern classroom (Khan, 2013). According to Graham and Semich (2008), the purpose of the integration of technology into instruction is to “transform pedagogy to a more constructivist as opposed to behaviorist model of classroom instruction” (p.2). Tertiary teachers should be highly concerned with the various classroom practices and this can be achieved via concerning themselves with leaning-based research (Price & Kirkwood, 2014). Steeples et al. (1996) state that universities are no exception and have to benefit from the development of “an information superhighway” (p.71). According to Mottegram (2013), recent technologies are starting to change our ways of learning languages. Similarly, Chapelle (2005; as cited in Saeed, 2015) maintains that technology has had a big impact on language teaching through “the changes it prompts in the language itself, the opportunities for studying language, and the options available for teaching language” (p.65). In studying English as an FL or an L2, learners need more pedagogical aids for practicing the language in “hearing language, reading language, speaking language, and writing language to develop their experience and skills” (Nomass, 2013). One way for providing more opportunities for language study is technology (Saeed, 2015). In the field of language teaching, “over the last few decades, the use of technology and multimedia for foreign language teaching has expanded rapidly” (Gonzalez-Vera, 2016). In the case of reading, for instance, Adam and Wild (1997) describe the use of CD-ROM interactive storybooks and report that “students can interact with the character and landscape, to hear sounds and speech, and see animation. This type of interaction is not possible with books or print media”

(Anderson, 1992; as cited in Brindley, 2000). However, research undertaken by Littleton *et al.* (1998; as cited in Brindley, 2000) indicates that students can:

spend far longer over composing an e-mail, paying far more attention to details, spelling and conveying meaning than in traditional classroom writing because the audience they are writing for is authentic. There is a real purpose in their writing in that they are attempting to communicate with children in other classrooms or other schools. (p.15)

## **2–1–Definition of Educational/Instructional Technology**

Being the use of technological resources systematically for the sake of improving the quality of teaching and learning, Ed Tech is a current and developing issue in the field of instructional research:

- It can be defined as the application of technology to the processes of teaching and learning (Inoue & Bell, 2006).

- According to Kovalchick and Dawson (2004), educational technology refers to a specific method in which certain technological devices and machines are employed to obtain some learning and teaching outcomes.

- Wenglinsky (2005) maintains that “educational technology needs to be understood not as an isolated event, but as a piece in the puzzle of how teachers teach and students learn”(pp.4-5).

## **2–2–Historical Account on the Use of Technology in Foreign Language Teaching**

The idea of educational technology dates back to the 1920s with some attempts to use some objects and tactics to assist learning. It reached its climax in 1950 with Skinner’s Programmed Learning (Sharma, 2002). The invention of innumerable technological devices later on gave the impetus for a more serious and intensive incorporation of technology in education. As far as teaching and learning foreign languages are concerned, the paucity of information on the use of educational technology for EFL teaching and learning puts us in a rather embarrassing situation. Nonetheless, the advent and use of the language laboratory during the 1960s in the United States was a remarkable and influential step forward, but “unfortunately, the history of the use of technology to teach languages has not been duly noted by historians of educational technology” (Roby, 2004).

## **2–3–Promoting Learner-centered Classrooms through Technology-based Instruction**

The issue of learner-centered teaching came to the scene with the advent of communicative language teaching (CLT) which focused more on the learner being the main

actor in the classroom. Developing or trying to create a learner-centered classroom can be fostered by a plethora of elements and factors that can give different but tasty flavors to the classroom that is subsequently born. A review of the literature clearly shows the agreement of many researchers on the advantages and effectiveness of learner-centered teaching and learning. According to Nunan (1995), “learning-centred classroom carries learners toward the ability to make critical pedagogical decisions by systematically training them in the skills they need to make such decisions” (p.134). In the same vein, Premsky (1998; as cited in Brahmi, 2016) makes an appeal for using learning-centered teaching stating that “[W]e must get our teachers...to stop lecturing, and start allowing students to learn by themselves” (p. 71). The procedures and practices that might facilitate the issue in question are many and varied but not all of them can be successful. Moore et al. (2008; as cited in Doherty, 2010) use the term “new learning” which, according to them, is a combination between learner-centered learning and technology. The latter can be used as a pedagogical tool for engaging students in the learning process (Doherty, 2010; Abukhattal, 2016). Indeed, “one of the most powerful trends in education today is the integration of technology” (Lewandowski, 2004). It is the reason why, the use of technology for pedagogical purposes is starting to gain a high status in the field of language teaching research even though there is a lack of research evidence on the use of technology in foreign language teaching (Roby, 2004).

## **2–4–Most Widely-used Technological Tools**

Some technological tools and devices are employed in the language classroom including:

### **2–4–1–Computers**

Computer technology constitutes a basis for the various applications that can be used for instruction such as “computer-based instruction, interactive multimedia instruction, “intelligent” tutoring systems, networked tutorial simulation, and web-based instruction” (Fletcher, 2003). This is the reason why the computer is considered as the main technological means ever utilized in the field of education. Different names are used to designate the incorporation of the computer into learning in general and language learning in particular, for instance, Computer-Assisted Language Learning (CALL), computer-supported learning (CSL), computer-mediated communication (CMC), etc. According to Benbunan-Fich and Stelzer (2002), “computer-supported learning (CSL) environments promise to enhance traditional teaching

models and permit the exploration of new teaching/learning paradigms that were not possible before”(p.86). In this regard, Saeed (2015) asserts that the computer technology is increasingly contributing to teaching and learning foreign languages. Moreover, Nunan (1999; as cited in Lynch & Campos, 2014) maintains that computers provide teachers and learners with some “interactive visual media” that can have tremendous instructional power for many subjects, including foreign languages. In relation to teachers’ readiness for using computers for instruction, Sabzian, Gilakjani and Sodouri (2013) argue that having positive attitudes towards technology together with computer use efficacy are necessary factors for successful technology implementation. One more thing, teachers should be supported with learning theories in the field of technology is to be useful.

#### 2-4-2-Interactive Whiteboards

An Interactive Whiteboard (IWB) is a tool that looks like an ordinary whiteboard, but it is connected to a computer to grant it the power it has, and which enables the user to interact with it directly just by touching. IBWs have become an essential teaching tool and “are regarded as one of the most revolutionary instructional technologies for various educational levels” (Türel & Johnson, 2012, p.381). Interactive whiteboards can be most useful for student engagement (Çelik, 2014; as cited in Merç, 2015). Moreover, they have “the potential to aid collective thinking and learning, and can become the focus for group collaborative work” (Harlow, Taylor & Forret, 2011).

#### 2-4-3-Language Laboratories

The use of language laboratories started in the 1960s and 1970s. In the beginning, they consisted of “a number of small cabinets, provided with a cassette deck, a microphone and a headphone for each one” (Nomass, 2013). However, with the advent of new and more advanced technologies, language laboratories have been supported by those technologies for reinforcing EFL teaching and learning.

#### 2-4-4-Blogs

According to Blackstone, Spiri and Naganuma (n.d.), blogs “are interactive homepages that are easy to set

up and manage, enable students to engage in online exchanges, thereby expanding their language study and learning community beyond the physical classroom” (p.1). Blogging relies simply on the computer for communication (Pinkman, 2005, p.14). Ward (2004; as cited in Lin, Groom & Lin, 2013) uses the term *blog-assisted language learning* (BALL) which “covers a wide variety of implementations in terms of software and course design” (p.130). It is reported to have many benefits on language learning including developing autonomy, promoting motivation and facilitating communication between the teacher and his/her learners (Lin, Groom & Lin, 2013).

Other technological tools include: “electronic mail (e-mail), electronic lists (LISTSERVs), electronic journals, world wide web, streaming audio and video, search engines, remote access to libraries and databases, chat, audio and video conferencing, messaging, web course management software” (Kasapoğlu-Akyol, 2010), and “PowerPoint presentations” (Merç, 2015).

#### 2-5-Benefits of Technology for Language Teaching and Learning

According to Akcil, Uzunboylu and Kinik (2021), “one of the requirements for teachers in the 21st century is being prepared to integrate instructional technology into teaching practices effectively” (p.1). This is the reason why our teachers need to be prepared for instructional technology. The latter has been reported to have many advantages and benefits for language learning (Abukhattal, 2016). These include:

- Fostering the students’ academic ability through self-confidence enhancement (Abukhattal, 2016);
- Improving the language skills (Kasapoğlu-Akyol, 2010);
- Enabling students to control their learning even more through the use of information and communication technologies (Warschauer, 2000);
- Promoting Autonomy and Supporting Self-directed Learning (Gómez, 2016);
- Saving time for both teachers and learners. Fletcher (2003) reports some studies in relation to saving time as indicated in the following table:

**Table(1): Percent Time Savings for Technology-based Instruction**

Study (Reference)	Number of Findings	Average Time Saved (%)
Orlansky and String (1977)	13	54
Fletcher (1991)	6	31
Kulik (1994) (HigherEducation)	17	24
Kulik (1994) (Adult Education)	15	24

Source: Fletcher (2003)



-Providing more opportunities for language practice: In this vein, Lynch and Campos (2014) state that “teachers should understand that technology is just a “tool” in which students have the opportunity to expand their language practice in different environments and not only in the classroom by itself” (p.429);

-Preparing learners for personal and professional life (Chamorro and Rey, 2013);

-Engaging students in more active roles and encouraging creativity (Lehtonen, Page, Thorsteinsson & Hepburn, 2007).

## **2–6–Limitations of Using Technology for Instructional Purposes**

A sudden and random shift from the traditional classroom to a new teaching and learning pedagogy or paradigm in favor of the use of technology can be a real threat to the whole educational context. In the first place, convincing teachers to stop lecturing and receive some training on the use of the various technological devices and media can be a hard and challenging task. So, the teachers’ readiness for using technology in the classroom, and the availability of the various technological means and tools can be a real obstacle to the whole process. Lynch and Campos (2014) raise this problematic concern stating that “some teachers have limitations when implementing the use of technology in their classes since some of them do not have the required knowledge for using the technological components or because the institutions’ lack of the different resources ...” (p.428). In a nutshell, the adoption of technology for educational purposes requires careful planning and wise implementation. As far as the issue of knowledge is concerned, Mc Crory (2006) explains that teachers should be equipped with two broad categories of knowledge:

First, they need to be able to identify and develop technologies into tools for meaningful learning. This means knowing what technology offers for such learning and what effective use looks like in practice. Second, they need a useful portfolio of technologies that engage students in meaningful learning. This means knowing about specific tools and resources that they can use in their teaching. (pp.141-142)

Wenglinsky (2005) reports that some opponents of technology were afraid that computers would replace teachers in the classroom. Yet and unsurprisingly, this did not happen and “school computers have not replaced

teachers, but instead have given them an opportunity to be more productive” (p.4). Given this situation, researchers should try to make technology a blessing rather than a curse via its positive exploitation and especially in the particular field of education.

## **3–Methodology**

Given the use of the state of the art technology for a wide range of purposes and domains of life, it is high time some answers to particular questions vis-à-vis technology and education are yielded. In the field of educational/ instructional research, some controversial questions were and are still being posed in relation to the integration of technology for teaching and learning (in our case EFL), and the effectiveness of the whole procedure. This single-method descriptive study investigates the extent to which technology is incorporated in EFL teaching and learning in one of Algeria’s higher institutions, the reasons behind this and teachers and learners’ attitudes towards instructional technology. In light of this, the following research questions are framed:

-To what extent is the technology used for educational purposes?

-Is technology randomly or systematically integrated into EFL teaching and learning?

-What is the general atmosphere which underlies this implementation, if any?

### **3–1–Sample**

The participants in this study are EFL teachers and learners in the Department of Foreign Languages in the University Center of Mila. The responses to the students’ questionnaire are obtained from one fifth (1/5) of EFL students in the Department of Foreign languages who were randomly selected. The teachers’ questionnaire was administered to all EFL teachers in the same department.

### **3–2–Students’ Questionnaire**

#### **-How do your instructors communicate with you?**

According to **82.27%** of the participants, classroom communication and interaction is implemented mainly the face-to face. The remnant part of the respondents reports that in addition to face-to-face communication, the latter equally takes place via e-mails. Moreover, other participants, though are few, mentioned other media for the issue in question, including social networks, online chat and the telephone.

### -Do any of your teachers recommend that you incorporate technological devices into EFL learning?

The results demonstrate that only **12.65%** of the participants report that their instructors recommend the use of technological devices for EFL learning in class. This can relatively indicate that teachers rather rely on the traditional ways of learning, at least so far as the use of computers is concerned. A myriad of factors is supposed to lie behind this bitter reality including ignorance of the various benefits of technology for EFL learning, and lack or absence of any training for teachers on the use of instructional technology; a factor that would obstruct any attempt for the use of technology in class.

### -Do you use technology for learning English as a foreign language?

Concerning the use of technology for EFL learning, the overriding majority (**94.93%**) responded 'yes'. This

clearly shows that students of English in this university have a tendency towards the incorporation of technology in their EFL learning; at the same time, they might be more aware of its benefits. Only **5.07%** of the participants answered 'no'. This means that they are either ignorant of the advantages of technology use in EFL learning, or they do not have the technological devices themselves, for this is an essential factor that has to be spotted.

### -If yes, it is to:

Students can use technology for a variety of purposes including supporting their learning in the classroom, preparing homework and revising for exams. These items received approximately the same percentages as is shown in table two:

**Table(2): Reasons for Using Technology in EFL Learning**

Items	Percentages
a-Support your learning in the classroom	20.00%
b-Prepare homework	16.00%
c-Revise for exams	16.00%
a+b	09.33%
b+c	16.00%
a+c	06.66%
a+b+c	16.00%

### -How often do you integrate the following devices and procedures in your learning activities?

EFL students in this department integrate almost all the devices and procedures cited with varying frequencies which can be attributed to a cluster of factors including:

their recognition of the advantages of technology for EFL learning, and the availability and easy access to those devices and procedures as is shown in table three:

**Table(3): Frequency of the Integration of Technology in Learning Activities**

Items	Never	Always	Often	Sometimes
Digital dictionaries	02.53%	68.35%	08.86%	20.25%
E. Books	11.39%	07.59%	08.86%	72.15%
Computers	02.53%	74.68%	11.39%	11.39%
Blogs	91.13%	01.26%	05.06%	02.53%
Wikis	77.21%	02.53%	12.65%	07.59%
Smart Phones	01.26%	91.13%	02.53%	05.06%
Internet	00.00%	83.54%	07.59%	08.86%
E. Mails	20.25%	06.32%	58.22%	15.18%
Social Networking	07.59%	68.35%	12.65%	11.39%
E. Learning	07.59%	07.59%	17.72%	67.08%

### -How does the use of technology assist you to learn?

It is assumed that the use of technology would assist learners in various ways. Table(04) clearly shows that technology helps EFL students, and it is mainly perceived

in terms of facilitating and accelerating access to information. Relying on this finding, we can conclude that EFL learners' knowledge of the wide and innumerable uses of instructional technology is rather limited and narrow.

**Table(4):** Students' Recognition of the Benefits of Technology for EFL Learning

Items	Percentages
a-It saves time	07.59%
b-It makes you more autonomous	01.26%
c-It makes access to information quick and easy	31.64%
d-It makes communication with students and teachers quick and easy	01.26%
a+c	17.72%
a+d	01.26%
b+c	02.53%
b+d	02.53%
c+d	16.45%
a+b+c	01.26%
a+c+d	10.12%
b+c+d	01.26%
a+b+c+d	06.32%

### -What do you think about the use of technology for EFL learning?

Students' attitudes towards the use of technology for EFL learning are miscellaneous. The proposed items received varying percentages, as indicated in table five. This can relatively indicate that EFL learners in this department are rather aware of the infinite opportunities that technology offers for EFL learning. Consequently, we venture to say that having positive attitudes and lucid perceptions so far as instructional technology is concerned, EFL learners demonstrate their readiness for adopting any serious attempts for the incorporation of technology in EFL learning and teaching.

**Table(5):** Students' Attitudes towards the Use of Technology for EFL Learning

Items	Percentages
a-Necessary	37.97%
b-Useful	26.58%
c-Interesting	08.86%
d-Boring	00.00%
a+b	13.92%
a+c	02.53%
b+c	02.53%
a+b+c	07.59%

### 3-3-Teachers' Questionnaire

#### -Is ICT (information and communication technology) included in your subject?

The findings demonstrated that EFL teachers in this

department tend to support ICTs and include it in their various subjects, as 66.66% of the participants reported so.

#### -If yes, is it because:

The majority of the teachers who answered 'yes' in the first question (75%) consider the use of ICT a necessary teaching tool. This result indicated that EFL teachers stand in favor of the adoption of the use of instructional technology. Nonetheless, the obtained results could be just meaningless if the workplace (in our case the university) does not provide the necessary media or support the approach in question.

#### -Is there any ICT training at your university?

All the participants mention the university's valuable attempts to promote E. learning. Moreover, newly recruited teachers are concerned with special training in the program, which contains sections on the use of information and communication technologies.

#### -Does your university (teachers and administrative staff) support the use of technological tools in teaching?

When asked about this issue, 66.66% of the respondents claim that their university supports the use of instructional technology. This would initially suggest that the teaching context is rather suitable for the implementation of such a procedure.

#### -How would you evaluate the use of technology for educational purposes at your university?

The use of technology for educational purposes in this department is said to be low as is shown in table six:

**Table(6): Degree of Technology Integration in EFL Instruction**

Items	Percentages
a-Intensive	00%
b-Moderate	25%
c-Low	66.66%
d-Null	08.33%

**-Do you use technological devices in your teaching activities?**

As far as the incorporation of instructional technology in teaching activities is concerned, the responses reveal that **66.66%** of the informants try to use technology in the classroom.

**-How many years ago did you start integrating technology in your teaching?**

The obtained results show that a big part of the subjects report to have started integrating technology in their teaching more than four years ago.

**-How often do you integrate the following devices and procedures in your teaching activities?**

The use of technology is solely restricted to computers,

E. learning, the internet and electronic references, as is demonstrated in table seven:

**-Which of the following domains of educational technology would be more useful?**

Technology can be exploited in either teaching or learning depending on the degree of its purposes. As a teaching tool, it is reported by our teachers to be more useful (**62.50%**).

**-What are your students' attitudes towards the use of technology in the classroom?**

Students have positive attitudes towards the use of technology in the classroom, as is reported by **75%** of the participants.

**-Do you think that students would depend more on themselves in language learning with the use of technological devices?**

In the same vein, **75%** of the respondents agree with what is suggested in research in relation to the possibility of developing learning autonomy through the use of technology.

**Table(7): Frequency of Integrating Technological Devices and Procedures in Teaching Activities**

Items	Never	Always	Often	Sometimes
Digital Feedback	100%	00.00%	00.00%	00.00%
E. portfolios	100%	00.00%	00.00%	00.00%
E. references	50.00%	00.00%	12.50%	37.50%
Wikis	87.50%	00.00%	12.50%	00.00%
Blogs	75.00%	12.50%	12.50%	00.00%
Internet	50.00%	12.50%	37.50%	00.00%
E- mails	37.50%	12.50%	25.00%	25.00%
Social networking	75.00%	12.50%	00.00%	12.50%
E. learning	00.00%	62.50%	12.50%	25.00%
Mobiles	62.50%	12.50%	12.50%	12.50%
Computers	00.00%	75.00%	25.00%	00.00%
Overhead projectors	62.50%	25.00%	12.50%	00.00%
Interactive whiteboards	100%	00.00%	00.00%	00.00%
Language laboratories	50.00%	37.50%	12.50%	00.00%

**-If your answer to item 6 is "No", is it because**

It is calculated that **75%** of the category of teachers who said that they do not utilize technological tools in their teaching argue that no technological means are available in their institution and the remaining part (**25%**) claim that there are no pedagogical models on how to use technology.

**3-4-Discussion and Analysis of Results**

What can be drawn from the data above is that using technology for EFL learning can be said to be non-systematic. In fact, the whole issue is restricted to the use of computers, E. learning, digital dictionaries installed on smartphones and the internet in order to have access



to social networks and information. What is more, only **08.86%** of the students considered the use of technology for EFL learning ‘interesting’. This clearly indicates that they were not fully motivated for integrating the procedure under study. One more thing is that their perception of the benefits of technology for EFL learning is unfortunately confined to ‘having easy and quick access to information’; an element that is only part of the whole learning process. Successful and fruitful integration and implementation of EFL teaching and learning in the arms of technology can be assisted by many factors including:

- The availability of technological devices and media;
- An encouraging learning environment that recognizes the core and essential advantages of instructional technology;
- Learners’ awareness and recognition of the various benefits of technology if positively exploited in the field of EFL learning;
- Training teachers and learners on the use of various technological procedures and techniques.

## Conclusion

With the aim of exploring the extent to which technology is incorporated in EFL teaching and learning in one of Algeria’s higher institutions, the reasons behind this and teachers and learners’ attitudes towards instructional technology, the findings revealed that technology is partly integrated into the educational context. That is to say, a traditional flavor still dominates EFL classrooms in the sense that both teachers and learners rely on ordinary tools and materials in the teaching/learning process; something that they are familiar with. The integration of technology for educational purposes is neither intensive nor systematic. Of course, the reasons behind this are many and varied; so far, the problem arises as to the ways of changing the present situation in order to cope with the new emerging and more sophisticated teaching methods and techniques imposed by the spread of Covid-19. Educational decision-makers are also called upon to exploit research findings regarding educational technology, and teacher training should be expanded to include the use of ICTs for educational purposes.

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## التكنولوجيا للأغراض التعليمية: تدريس وتعلم اللغة الإنجليزية كلغة أجنبية في التعليم العالي الجزائري

### ملخص

#### الكلمات المفتاحية

التعليم المبني على التكنولوجيا  
تعليم وتعلم الإنجليزية كلغة أجنبية  
التعليم العالي  
أدوات تكنولوجيا

تتمحور الدراسة الحالية حول موضوع معاصر مرتبط باستعمال التكنولوجيات الحديثة في تعليم وتعلم الإنجليزية كلغة أجنبية في التعليم العالي في الجزائر. لقد تم بحث مختلف خصائص استعمال التكنولوجيا لأغراض تعليمية. تهدف الدراسة إلى استكشاف استخدام التكنولوجيا وإدماجها في تعليم وتعلم اللغة الإنجليزية في التعليم العالي الجزائري. يمكن أن يكون لهذا أهمية كبيرة للأساتذة والطلاب الذين يتعرفون على دور التكنولوجيا في التعليم. بالإضافة إلى ذلك، يُطلب منهم أيضًا تشغيل الأدوات والوسائط التكنولوجية وفقًا للظروف المتغيرة في جميع أنحاء العالم. المعلومات المتحصل عليها تم جمعها عن طريق وسيلة الاستبيان. تظهر النتائج بأن إدراج التكنولوجيا في عملي التعليم والتعلم مقتصر على بعض الوسائط والطرق التكنولوجية والتعليم عن بعد، فضلًا عن ذلك فإن هذا الاستعمال يفتقر إلى التتابع والاعتماد على نماذج تعليمية معينة قد تساعد على توجيه وتحسين الأداء

### La technologie à des fins pédagogiques : Enseignement et apprentissage de l'ALE dans l'enseignement supérieur Algérien

#### Résumé

La présente étude soulève une question qui est liée à un débat actuel sur l'enseignement basé sur la technologie dans l'enseignement et l'apprentissage de l'ALE dans l'enseignement supérieur algérien. Une enquête sur les différentes caractéristiques de l'utilisation de la technologie à des fins éducatives est menée. L'étude vise à explorer l'utilisation de la technologie et son incorporation dans l'enseignement et l'apprentissage de l'ALE dans l'enseignement supérieur algérien. Cela peut être d'une grande importance pour les enseignants et les étudiants qui auraient une idée de la place de la technologie dans l'éducation. De plus, ils sont également tenus d'exploiter les outils technologiques et les médias en fonction de l'évolution des conditions dans le monde entier. Les données ont été collectées en s'appuyant sur le questionnaire comme outil de recherche. Les résultats révèlent que la question à l'étude est simplement limitée à certains dispositifs et procédures technologiques et à l'enseignement à distance. De plus, la mise en œuvre est ni systématique ni basée sur des modèles d'enseignement ou d'apprentissage spécifiques pour l'orientation et l'amélioration.

#### Mots clés

Enseignement basé sur la technologie  
enseignement et apprentissage de l'ALE  
enseignement supérieur  
dispositifs technologiques