

# Teachers' Perceptions and Attitudes on the Benefits and Challenges of ICT Implementation in the Algerian EFL Classrooms: Mohamed Boudief-M'sila University as a Case Study

اتجاهات وتصورات الأساتذة حول فوائد وتحديات توظيف تكنولوجيا الإعلام والاتصال في أقسام الإنجليزية  
كلغة أجنبية في الجزائر: دراسة حالة جامعة محمد بوضياف بالمسيلة

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## Abstract

### Informations about Article

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*In the contemporary era, there is an ongoing and remarkable transformation in the realm of Information and Communication Technologies (ICT), leading to the seamless availability of information. These technological advancements have played a significant role in the field of language education since the 1960s. However, it was not until 1994, with the advent of the internet, that these technologies gained widespread attention from researchers and educators worldwide (Berbar and Ait Hamouda, 2023). Nonetheless, the utilization of ICTs in language teaching is still in its early stages, particularly in many developing countries, including Algeria. Despite the Algerian government's endeavors to encourage the integration of ICT tools in education, several obstacles such as connectivity issues, infrastructure costs, and training limitations hinder both teachers and students from harnessing their full potential. Consequently, this study focuses on investigating The Effects of Information and Communication Technology (ICT) on Students Learning Outcomes in Higher Education. To achieve this objective, a questionnaire comprising both open-ended and close-ended questions was administered to educators within the English department at "Mohamed Boudief" M'sila University. The collected data were analyzed using the Statistical Package for Social Sciences (SPSS 24.0) and a content analysis approach to derive meaningful insights. The findings were synthesized, and recommendations were put forth based on the results.*

## 1-Context of the Study

### 1-1-Background to the Study

Contemporary youth are coming of age in an era defined by the ubiquitous presence of technology (Carstens et al., 2021). The realm of social media platforms and online websites has captured the fascination of children. Additionally, mobile phones, computers, tablets, easily accessible Wi-Fi, gaming consoles, and electronically-driven toys are currently in vogue within society. Students are being raised in an environment where technology is an influential trend. As stated by Klopfer, et al. (2009,

p.1), "Many students spend substantial hours each day engrossed in popular technologies such as Facebook, MySpace, World of Warcraft, or Sim City". In present-day classrooms, technology is increasingly emerging as a central mode of learning. Given the dynamic nature of technology, educators diligently strive to integrate it into their daily teaching efforts to establish a connection between students' passions and the learning process. For Harris (2016, p.21), Educators today are facing immense pressure to deliver a high-quality education aligned with 21st-century standards to their students.

These standards encompass equipping students with the technological and informational proficiencies required to thrive in an ever-evolving, technology-centric world. Educators are persistently seeking technological tools that can enhance their students' learning experiences. Nevertheless, technology, while widely acknowledged as a valuable classroom resource that bolsters learning, also carries potential downsides for student learning. With the advent of new information technology, education is rapidly transcending the constraints of time and space. Yet, every learner still necessitates a supportive framework for lifelong learning success. This framework encompasses parents, friends, mentors, and supervisors who fulfill roles as teachers and coaches. The central objective of the school-to-work movement is to galvanize comprehension and support to ensure students acquire the essential skills, behaviors, values, and insights crucial for effectiveness in all facets of life (Hakim et al. 2000, p. 263 cited in Carstens et 2021, p. 105). Technology holds a significant role in the lives of students. Integrating technology within the educational setting has proven advantageous while also bearing certain disadvantages. Technology has positively influenced student engagement and enthusiasm, facilitating enriched learning experiences. As highlighted by Fisher, et al. (2014, p.5), "Effective learning involves student choices and meaningful engagement within contextual settings". However, the question arises: do these benefits outweigh the potential drawbacks? In a study conducted by Sülzenbrück, et al. (2011) investigating the impact of computer use on motor skills, it was found that modern technology usage could induce changes in fundamental psycho-motor and cognitive abilities. This encompasses the utilization of tools like computers, electronic organizers, navigation systems, and the like. Such trends can raise concerns about students' developmental progress in the classroom. Furthermore, research extensively delves into the pros and cons of technology integration and delves into the underlying reasons for its potential benefits or detriments. Therefore, comprehending the influence of technology on student education is crucial, as it holds the potential to either hinder or enhance the learning experience. The purpose of this research was to provide teachers with valuable insights into optimal teaching methods. Students can gain advantages from well-targeted guidance that fosters their achievements. Additionally,

parents can become aware of how technology shapes their learner's educational journey. The outcomes of this study will augment the current understanding of integrating technology within classroom environments.

### **1–2–Statement of the Problem**

The integration of Information and Communication Technology (ICT) in educational settings has become a global trend with the potential to enhance the teaching and learning process. In the context of Algerian English as a Foreign Language (EFL) classroom, understanding teachers' perceptions and attitudes towards the benefits and challenges of ICT implementation is crucial for effective educational reform. This study aims to investigate the specific issues surrounding ICT integration in the Algerian EFL classroom, with a focus on teachers' perspectives at Mohamed Boudief-M'sila University.

### **1–3–Research Objectives**

The main objectives of the present study are:

To assess the extent to which Algerian EFL teachers at Mohamed Boudief-M'sila University perceive the benefits of ICT implementation in their classrooms.

To examine the attitudes of Algerian EFL teachers at Mohamed Boudief-M'sila University towards the integration of ICT tools and resources into their teaching practices.

To identify and analyze the specific challenges faced by Algerian EFL teachers when they endeavor to incorporate ICT into their instructional methods.

### **1–4–Research Questions**

This research aims to address the following key questions:

What are the perceptions of Algerian EFL teachers at Mohamed Boudief-M'sila University regarding the benefits of ICT implementation in their classrooms? What challenges do Algerian EFL teachers encounter when attempting to integrate ICT into their instructional methods?

3-What strategies and recommendations can be identified to enhance the successful implementation of ICT in Algerian EFL classrooms at Mohamed Boudief-M'sila University?

## **2–The Theoretical Framework**

### **2–1–Definition of the term Information and Communication Technology (ICT)**

The term originated from the convergence of IT

(Information Technology) with communication in the late 1990s, as outlined by the National Encyclopedia (2013). This transition led to the adoption of the term ICT, specifically emphasizing the incorporation of computers within educational contexts. In the perspective of Tinio (2003, p. 4), ICT is defined as a diverse collection of technological tools and resources utilized for purposes like communication, information creation, dissemination, storage, and management. This spectrum of tools encompasses computers, the internet, broadcasting technologies (such as radio and television), and telephony. Furthermore, ICT constitutes a domain encompassing various technologies designed to fulfill functions related to processing information and facilitating communication. This categorization is expressed by Statistics Canada (2008), encompassing desktop and laptop computers, software, peripherals, and internet connections. UNESCO (2002) contributes another angle, viewing ICT as a scientific, technological, and engineering discipline along with a management technique that deals with information handling, its application, and its intersection with social, economic, and cultural aspects. UNESCO also underscores the integration of informatics technology with other interconnected technologies, particularly communication technology. Consequently, UNESCO collaborates with diverse educational communities, ministries, specialized institutions, teachers, and students to unlock the potential of ICT, aiming to enhance the quality of teaching and learning (Lazar, 2016). The transformative impact of these technologies has reshaped societal norms and requisites, underscoring the value ICT bring to educational processes. Ratheeswari (2018, p. 45) contends that educators are pivotal in the educational landscape, asserting that adept teachers can foster creative students by seamlessly integrating new technologies into their curricula. To bridge the gap between present and future teaching and learning needs, educational institutions are actively redesigning their programs (Ratheeswari, 2018).

In summary, ICT, which abbreviates information and communication technologies, represents a diverse array of tools with multiple interpretations. Its evolution from the convergence of IT and communication underscores its emphasis on the use of computers in education (Bouakaz, 2022). Tinio (2003) defines it as a versatile collection of technological resources used for communication and information-related activities. These resources encompass

computers, the internet, broadcasting technologies, and telephony. Additionally, ICT constitutes a domain covering various technologies that process information and facilitate communication, as defined by Statistics Canada (2008). UNESCO (2002) frames ICT as a scientific, technological, and engineering discipline, including management techniques, applied to information handling and its interplay with societal aspects. UNESCO highlights the amalgamation of informatics technology with related technologies, driving its collaboration to unlock the potential of ICT for improved education quality (Lazar, 2016). This technological evolution has reshaped society and elevated the importance of skilled educators who can seamlessly incorporate ICT into teaching methods (Ratheeswari, 2018, p. 45). Educational institutions are responding by redesigning programs to bridge the technology gap between current and future needs (Bouakaz, 2022).

## **2–2–The Use of ICT in Education**

Currently, information and communication technologies (ICT) exert a substantial influence across all spheres of human existence. They occupy prominent roles in business, the workplace, entertainment, and particularly education (Bouakaz, 2022). By integrating technology into the learning process, students assume an active role, enhancing their awareness of necessary information, the reasons behind its necessity, and the methods to obtain it. Bransford, Brown, and Cocking (as cited in Huffaker, 2003, p. 357) believe that active learning assists students in confirming their comprehension of specific information and evaluating when they acquired it. Consequently, integrating technology into education is no longer a mere privilege; it has evolved into an imperative necessity. The integration of internet access into the educational framework liberates students from complete dependence on instructors. This empowerment enables them to harness their own capabilities, utilizing internet resources to engage with information and cultivate self-sufficiency. Jarold and Sue (1992, p. 50) as cited in Saputri et al. (2020, p. 204) contend that self-managed learning fosters self-motivated and self-directed learners, equipping them to adeptly navigate the rapid influx of information. To illustrate, platforms like YouTube and Facebook provide avenues for students and educators to remain current with educational trends. Consequently, learners and educators

no longer need to rely solely on traditional sources such as journals or printed books to stay informed about developments in the educational realm. In this context, ICTs emerge as a potent tool capable of significantly expanding opportunities to enhance the quality of education.

As Davis and Tearle (1999); Lenke and Goughlin (1998), cited by Yusuf (2005, p. 316), Information and Communication Technologies (ICTs) play a role in the acquisition of new skills, heightened learner motivation, establishment of connections between academia, professional work, and the external world, and an improved perception of teaching efficiency. Similarly, Smeets (2005, p. 344) asserts that ICTs present diverse prospects for establishing a robust learning environment. Smeets emphasizes that ICTs increase the accessibility of information resources, encouraging multifaceted consideration of information. Consequently, ICTs enable learners not only to engage with existing information but also to synthesize it into real-world outcomes, moving beyond passive information reception. Although ICTs offer numerous advantages for enhancing teaching and learning, some scholars contend that specific prerequisites are essential for educators to successfully implement ICTs in their classrooms. Zhao and Cziko (2001, p. 6) identify three pivotal conditions that teachers must meet to ensure effective technology integration: they need to believe in the efficacy of technology, be confident that technology won't disrupt the learning process, and possess the competence and resources to effectively employ technology. Another noteworthy researcher, Harris (2002), conducted comprehensive case studies across both primary and secondary schools, investigating innovative pedagogical practices involving ICT. Harris concludes that the benefits of ICT are most effectively realized when self-assured teachers display the willingness to explore new avenues for transforming their classroom dynamics through technology integration. Consequently, the utilization of ICT not only enhances learning environments but also readies upcoming generations for prospective careers within an increasingly technological world (Wheeler, 2001). A particularly significant contribution of ICT in the educational realm is its facilitation of convenient access to remote learning resources.

Plomp, Pelgrum, and Law (2007) assert that accessing knowledge through ICT is essential to stay updated with

new advancements. This implies that the reliance on traditional materials like printed books for both teachers and students is no longer necessary. Instead, ICT enables a diverse range of learning resources to be accessible in various formats and at any location and time. Lim and Chai (2004, p. 3) elaborate that ICT can eliminate physical barriers such as space and time between teachers and students or among students themselves. Correspondingly, Bhattacharya and Sharma (2007, p. 43) posit that ICT facilitates the creation of digital resources like digital libraries, allowing professionals, educators, and learners to access research and course materials conveniently. Such platforms promote the exchange of scholarly content among researchers and academics. Other scholars including Sanyal (2001), Mooij (2007), Cross and Adam (2007), UNESCO (2002), and Bhattacharya and Sharma (2007) similarly contend that ICT transcends geographical limitations, enabling learners to connect from diverse locations.

ICT offers multiple avenues for enhancing education quality. It boosts students' motivation and engagement, aids in acquiring fundamental skills, and enhances teacher training (Noor-Ul-Amin, 2013). For instance, ICT tools like videos, television, and multimedia software that combine visuals with audio can present stimulating and authentic content, fostering engagement and motivation in the learning process (Ibid, p. 39). Furthermore, Heemskerk et al. (2012, p. 1) assert that ICT ensures equitable learning opportunities by accommodating various learning styles. Effectively integrated into education, ICT serves as a catalyst for students' motivation and eagerness to learn. In addition, ICT has the capacity to motivate students to learn foreign languages, particularly English, which holds global significance across various professional domains. The ubiquity of ICT devices like computers, laptops, and tablets in students' lives has prompted the need to integrate their interest in technology into English language learning (Blagojevic, Chevalier, MacIsaac, Hitchcock and Frechette, 2010, p. 1). This is reinforced by Klimova and Poulouva (2014, p. 53), who liken ICT's integration to something as natural as breathing. Consequently, the fusion of English language acquisition with students' tech-driven interests not only enhances communication skills but also promotes international interactions. ICT has been an integral part of students' lives since early childhood, enveloping them both at home and in society,

and increasingly within early education programs (Blagojevic et al., 2010). Klimova and Poulouva (2014, p. 53) emphasize the inherent nature of ICT in contemporary existence. Hence, it becomes imperative to cultivate English language skills while harnessing students' innate interest in ICT to bolster motivation. Trnided et al. (2001), Hawkins (2002), Bryant et al. (2003), Suffori (2006), and Ibe\_Bassej (2009), as cited in Amajuoyi (2012), succinctly outline the advantages of ICT in education as follows: (a) Augmenting students' cognitive abilities by fostering higher-order thinking, problem-solving skills, communication prowess, and comprehension of teaching tools and concepts, (b) Elevating instructional quality, (c) Enhancing the caliber of students' learning by granting access to educational content through ICT facilities, (d) Cultivating students' vital ICT awareness and skills necessary for success, (e) Fostering collaborative learning among students, (f) Supporting an interactive teaching and learning milieu. In essence, the incorporation of ICT within education ushers in novel methods for refining teaching and learning processes. It amplifies motivation and heightens adaptability, enabling learners to attain their educational objectives irrespective of temporal or geographical constraints. The realm of Information and Communication Technology is a considerable field of investigation that captivates the attention of numerous researchers and scholars globally. This examination serves as a precursor to the central research variable of this study, namely the utilization of social media to enhance Speaking Skills in English as a Foreign Language (EFL) within the Algerian Tertiary Context. The role of ICT in education can be outlined as follows: To begin with, it's imperative to recognize that Information Communication Technologies (ICTs) currently exert a pervasive influence over various facets of human existence, playing pivotal roles across workplaces, businesses, education, and entertainment (Mikre, 2011). Additionally, ICTs are widely acknowledged as drivers of transformation in work environments, information management, instructional methods, learning approaches, research methodologies, and information accessibility (Ibid).

Furthermore, the integration of ICTs in education is seen as contributing to the provision of quality education aligned with constructivist principles, a contemporary learning paradigm (Ibid). Furthermore, the literature has extensively discussed the merits of Computer-Assisted

Instruction (CAI). These benefits have been succinctly summarized by Ya-nan (2013, pp. 1281-1282) as follows: CAI enhances the structure of classroom teaching and facilitates interactive engagement. Building on this, Arnold (2000, pp. 12-) identifies additional advantages of CAI. Primarily, it significantly broadens students' access to information, adapting to each student's individual abilities and preferences to enhance personalized instruction. Arnold highlights that students value the immediate interaction and thrive in the self-paced and private learning environment fostered by CAI. Furthermore, computer-based learning experiences tend to captivate students' interest, motivating them to learn while fostering independence and personal accountability. Moreover, CAI has demonstrated efficacy in boosting examination scores, improving student attitudes, and expediting the mastery of specific materials. Although outcomes may vary, substantial evidence underscores CAI's potential to enhance learning across educational levels. Likewise, literature extensively references the advantages of Computer-Assisted Language Learning (CALL) for second and foreign language acquisition (AbuSeileek and Abu Sa'aleek, 2012). According to these authors, computers and associated language learning programs offer learners greater autonomy outside traditional classrooms, enabling them to engage with learning materials at their convenience, regardless of time. In summary, the expansive domain of Information and Communication Technology garners considerable scholarly attention worldwide. This review sets the stage for investigating the use of social media to enhance Speaking Skills in EFL within the context of Algerian tertiary education. The role of ICT in education encompasses far-reaching impacts, permeating workplaces, businesses, education, and entertainment. Additionally, the integration of ICTs aligns with modern learning paradigms and offers a multitude of advantages, including those associated with Computer-Assisted Instruction and Computer-Assisted Language Learning.

Research findings indicate that the utilization of computer-assisted language learning encompasses various reasons, which encompass (a) experiential learning, (b) motivation, (c) elevating students' accomplishments, (d) utilization of authentic study materials, (e) fostering increased interaction, (f) tailoring to individual needs, (g) promoting independence from singular sources of information,

and (h) fostering global comprehension (Lee, 2000). Furthermore, networked computers have been extensively employed as a means of interactive communication within foreign language classrooms since the late 1980s, exhibiting varying levels of success (Kung, 2002). Wang (2006) underscores the advancement of computer-assisted language teaching and learning, particularly with the evolution of microcomputers and the Internet. Computers possess the capability to facilitate a multitude of learning tasks and offer substantial potential as educational tools. Their distinctive attributes can benefit both students and teachers. The crux of this line of research emphasizes that computers can provide personalized attention to learners and deliver tailored responses. They guide learners toward accurate solutions, offer interactive learning, evaluate learners' input, enable repeated activities devoid of human-induced errors, handle extensive interaction volumes, provide feedback to students, accommodate differing learning paces, and impose time constraints for answering questions, especially in testing scenarios.

### **2–3–Challenges of ICT Era**

Cabaleiro-Cerviño and Vera (2020, p. 162163-) emphasize that the incorporation of technology into each vocational school and university necessitates a tailored and regulated approach based on the specific aims and objectives of each institution. This stems from a notable challenge, which is the lack of clarity in the planning and execution of technology integration. This planning should revolve around instilling motivation for technology utilization by employing strategies that transform virtual classrooms into viable alternative learning environments (Freitas et al., 2018). Addressing the current educational challenges entails integrating innovative pedagogical technologies into a more adaptable and open formal education setting, a notion that various scholars have recently underscored (Castañeda and Adell, 2013). Conversely, it is noteworthy that present-day vocational schools don't mandate technological training for instructors. As a result, educators lacking proficiency in technological applications encounter a competitive drawback in the job market compared to those with tech-savvy skills. Teachers without such training find themselves positioned as intermediate staff members without the qualification demanded by the job market (Dahil, Karabulut and Mutlu, 2015). The majority of teachers, in essence, lack

the requisite level of knowledge and teaching experience necessary for effective educational processes (Mendoza, Baldiris and Fabregat, 2015). The educators who are meant to facilitate technological integration find themselves constrained due to the intricacies of the tools and the lack of appropriate academic resources (Dahil et al., 2015). In essence, this underscores the necessity for future educators to acquire applied knowledge about technology usage and subsequently infuse it with pedagogical practices throughout their training to foster professional growth. Likewise, universities encounter challenges linked to their infrastructure, which consequently restricts students' access to computers (Ngampornchai et al., 2016). Within these obstacles, inadequate investments stand out as a prominent concern since the integration of technology demands substantial, long-term financial commitment. Initial prerequisites for institutions include a stable energy supply and infrastructure, both crucial for the successful implementation of reliable ICT systems. The absence of such provisions constitutes a significant hindrance, impeding operational efficiency and internet accessibility (Hamidi et al., 2011). Many technical institutes and universities primarily offer theoretical education due to a scarcity of equipment and technological infrastructure (Dahil et al., 2015). Another challenge stems from students' and educators' perspectives on ICT as tools for reshaping learning and professional environments (Nieto et al., 2005). The limited adoption of e-learning is attributed to inadequate familiarity with technology, deficient computer literacy, unreliable internet services, and the high implementation costs (Folorunso, Ogunseye, and Sharma, 2006). For instance, García-Pérez, Santos-Delgado and Buzón-García (2016) discovered that only a mere ten percent of the teachers in their study exhibited a high level of technological adaptability. Therefore, it is our contention that appropriate training should be an integral part of teachers' educational curriculum. Exploring the critical success factors within the domain of e-learning, experts including professors, ICTS specialists, and researchers, in developing countries identified four primary components: computer training, perceived utility, attitudes toward e-learning, and computer self-efficacy. These factors, as outlined by ICT experts, are deemed essential for optimal ICT utilization among students (Bhuasiri, Xaymoungkhoun, Zo, Rho & Ciganek, 2012).

## Methodology

### Data Collection Instrument

Data was collected through an online survey administered to sixteen (16) teachers from the English department "Mohamed Boudief"- M'sila University. The selection of participants was done through a random process, without considering particular factors like gender or age. The survey consisted of both closed questions, designed to elicit quantitative responses, and open-ended questions aimed at gathering qualitative data, primarily in the form of textual responses.

### Data Analysis Procedures

The examination involved two distinct methodologies: the application of the Statistical Package for Social Sciences (SPSS 24.0) and content analysis. The former refers to computer software utilized for conducting a diverse array of intricate statistical analyses and generating tables and graphs. The latter technique serves to identify the presence of specific terms or sentences conveying particular intentions. Essentially, content analysis delves into the significance of sentences that delineate communicative

purposes. In this study, a form of content analysis known as relational content analysis, or semantic analysis, was employed. This variant of analysis surpasses the mere identification of predetermined terms within a given genre and instead seeks coherent sentences or overarching concepts that convey distinct communicative functions.

## 3–Research Findings and Discussion

### 3–1–Findings and Discussion

Regarding the research tool employed in this study, it was delivered digitally to 16 teachers at Mohamed Boudiaf University of Msila (Algeria). The participants completed the surveys on the same day. The researcher personally gathered the information and subsequently examined it using descriptive statistical methods.

#### 3–1–1–Participants' Key Information

In order to collect preliminary details about the participants, the teachers were asked to indicate their educational degree, Years of teaching experience, and personal familiarity with ICT tools. Table 1 provides an overview of the fundamental attributes of the survey participants.

<b>% Teachers' Degree</b>	<b>Frequency</b>	<b>Percentage</b>
MA	5	31.25%
PhD	8	50%
Professor	3	18.75%
<b>%Years of Teaching Experience</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 5years	2	12.5%
From 5 years to 10 years	3	18.75%
More than 10 years	11	68.75%
<b>%Familiarity with ICT</b>	<b>Frequency</b>	<b>Percentage</b>
Unfamiliar	00	00
Beginner	2	12.5%
Average	9	56.25%
Advanced	5	31.25%
Expert	00	00

**Table1: Participants' Key Information**

The analysis of the initial three questions revealed fundamental insights into the participants. A significant proportion of instructors (50%) has the doctorate degree, 31.25% have the MA(Master). However, only three teachers 18% are professors. These findings demonstrate that the teachers we chose possess satisfactory levels of competence, at least on the surface. This lends a certain level of credibility to our study. The teachers were asked about how many years they had been teaching in the English department at Mohamed Boudief- Msila University. The results tabulated above indi-

cate that 12.5% of those teachers have been teaching on a permanent basis for less than five years, and a total of 18.75% have been teaching from five to ten years. However, the majority of teachers 68.75% have been teaching in the English Department more than ten years. These results indicate that a significant portion of these educators possess a substantial amount of teaching background within their field. Experience is generally regarded as a factor that increases the probability of achieving success. Regarding the third query, participants were requested to delineate their familiarity with ICT tools. The majority of

respondents (56.25%) expressed being moderate users, while 31.25% identified themselves as advanced users. Only a minor percentage (12.5%) affirmed their status as novice users.

**3-1-2-The Use of ICT**

Regarding the fourth question, participants were asked to indicate their usage frequency of ICT tools using a four-tiered scale spanning from “always” to “never.” The distribution of response percentages can be presented in Table 2.

Participate in Social Media	25%	25%	6.25%	25%	18.75%
Use Email for communication with Colleagues	25%	31.25%	00	43.75%	00
Use Email for communication with Students	25%	12.5%	00	62.5%	00
Use the Internet to find information and Resources for lesson preparation	62.5%	12.5%	00	25%	00
Use the Internet to crate educational materials Like Handouts, exams, and homework tasks	62.5%	18.75%	00	18.75%	00
Use a projector linked to a computer during Class	00	31.25%	00	43.75%	00
Use PowerPoint presentation in class	00	25%	00	43.75%	00
Use spreadsheet software to document students' marks	12.5%	25%	18.75%	25%	18.75%
Post lectures and homework tasks for students on the University's website	75%	00	6.25%	18.75%	00
Integrate E-learning into my teaching class	6.25%	18.57%	12.25%	18.75%	43.75%

**Table 2: Frequency of ICT Use**

As indicated in Table 2, a noticeable portion of the survey participants, specifically 25.0%, indicated that they consistently employ information and communication technologies (ICTs) such as mobile phones, computers, and internet connections for engagement on social networks. A similar percentage, also 25.0%, chose options representing both frequent and occasional usage, while 18.7% stated they never use these tools for this purpose. In relation to using email to communicate with colleagues, 31.25% of respondents reported doing so often, and 25% claimed to do so always. In contrast, a larger group, accounting for 43.75% of respondents, mentioned that they communicate with students via email occasionally, with a smaller 25.0% using the internet and emails for student correspondence all the time. A substantial 62.5% of educators expressed that they consistently employ internet searches to acquire information and teaching materials, while 12.5% rely on the internet often for lesson preparation, and the remaining 25% also depend on it to some extent. In terms of utilizing computer applications, particularly word processors, for crafting teaching materials like handouts, tests, exams, and assignments, the majority (62.5%) reported always using them, whereas 18.75% indicated both frequent and occasional utilization. In regard to the utilization of projectors connected to computers within classrooms, 43.75% of respondents

reported occasional usage, while 31.25% indicated frequent use. Similarly, when creating PowerPoint presentations for instructional purposes, 43.75% mentioned doing so sometimes, and 25.0% reported doing so often. When asked about their frequency of using spreadsheets to record students' grades, 25.0% of educators reported doing so frequently or occasionally, while 18.75% stated they never use spreadsheets, and 12.5% consistently use them. In terms of sharing lectures and assignments, a significant majority (81.375%) stated they consistently post these materials on the university website, while 43.75% mentioned they do not incorporate e-learning into their teaching. Regarding ICT-related training, 68.7% of respondents stated they had not received any training, while 31.3% indicated participation in training programs. Those who had received training mentioned that it occurred at various locations: Mohamed Boudief University, Algeria, Boumerdes University, Algeria, An online training provided by Constantine University, Algeria, and The National Institute of Telecommunications and Information and Communication Technology in Algiers, Algeria. The findings from the seventh question indicated that 31.3% of educators have integrated ICT tools into their teaching methods for a span of four to six years, while 25.0% have done so for one to three years, and 18.7% have utilized these tools for over six years. On the other hand, 12.5% stated their non-usage of ICTs for instructional purposes, and an equal percentage of 12.5% refrained from responding to the question.

### 3-1-3-Teachers' Perception of the Usefulness of ICT

In the eighth question, participants were inquired about their perspective on the potential of ICTs to improve the quality of education. The outcome revealed unanimous agreement among all educators (100%) that ICT tools hold significant value for both teaching and learning. Their consensus is that integrating ICT devices into English as a Foreign Language (EFL) classroom is highly advantageous due to the extensive array of benefits and the valuable support they provide. The insights shared by teachers can be summarized as follows:

- ICT contributes to the enhancement of classroom management. Through the integration of such tools, teachers can effectively engage disruptive students and capture their attention.
- These technologies streamline the teaching process by

offering visual and auditory support, accelerating students' grasp of lessons.

- ICT proves to be time-efficient, enabling educators to incorporate additional exercises and numerous illustrative examples related to the subject matter. Their inclusion undoubtedly benefits students' comprehension.
- They transform the teaching and learning experience into a multi-faceted one, delivering information to students through diverse mediums like images, videos, and written texts. This versatility accommodates various learning styles, expanding the avenues for grasping intended concepts.
- ICT establishes an enjoyable, interactive, and productive learning atmosphere.
- Learners can reach out to their instructors anytime through emails, forums, or platforms. This interaction enables students to engage with peers and teachers, hold discussions on various subjects, and access online lectures.
- These tools particularly aid reticent students in participating more comfortably with classmates. In virtual environments, they can freely inquire, collaborate, and share ideas without concerns about peer judgment.
- They elevate learners' motivation by infusing lectures and workshops with an enjoyable element.
- ICT nurture students' communicative proficiencies by exposing them to English as it naturally occurs. This exposure enriches vocabulary and imparts effective language usage.
- These resources serve as boundless repositories of credible information, assisting students in deepening their comprehension of lectures and completing assignments proficiently.

### 3-1-4-Challenges of ICT Integration

The ninth question holds significant importance in assessing whether instructors from Mohamed Boudief University's English department encounter hindrances when integrating ICT tools into their instructional settings. A mere 12.5% responded negatively, while the substantial majority of 87.5% reported facing certain challenges. These obstacles can be condensed into four primary points:

- Scarcity of suitable materials and resources, including data projectors, overhead projectors, computers, and the absence of electrical outlets in many classrooms, all of which hinder the effective utilization of ICT in teaching.

- Students' unfamiliarity with ICT tools. While students are well-versed in various social media platforms, they lack the proper know-how to source dependable information that suits their educational requirements. Even tasks as basic as using word processing can be demanding for them.

- Limited access to the internet at home. Several regions, as well as certain campus areas, still lack internet connectivity and the necessary ICT infrastructure.

- Congested classrooms (approximately 30 students per class). This congestion can disrupt the seamless flow of lectures.

### 3-1-5-Suggested Ways to Overcome ICT Barriers

In the tenth question, participants were prompted to propose strategies for overcoming the obstacles that hinder the effective integration of ICT in the classroom. The participants' suggestions can be summarized in the following points:

- Enhance awareness among both teachers and learners about the significance of ICT in facilitating the teaching and learning process. This involves recognizing ICT as an evolved counterpart to traditional resources like manuscripts and books.
- Provide training for teachers on the appropriate timing and methods for utilizing ICTs, enabling them to leverage the benefits offered by these tools.
- Outfit classrooms with essential ICT resources, such as data projectors.
- Rectify the deficiencies in equipment, including computers and electrical sockets, to establish a digital and conducive environment for teaching and learning.
- Decrease the student-to-teacher ratio in classrooms. This measure aims to enhance learners' comprehension of the presented material and enable teachers to offer personalized attention to each student's needs.

### 3-2-Discussion and Conclusion

The results indicated that participants in the current study possess favorable attitudes towards technological devices.

All teachers recognize the significance of employing ICT as instructional tools and are enthusiastic about integrating them into the teaching and learning process. However, there exists a disconnect between their attitudes and the actual implementation of such devices in the classroom. The study revealed that the utilization of ICT tools for instructional delivery is relatively limited within the classroom context. Their usage is primarily confined to creating teaching materials and activities. Participants expressed concerns about the shortage of equipment and internet access, students' lack of familiarity with technological devices, and the issue of large class sizes. These challenges collectively hinder their successful integration of ICT into the teaching process. These findings align with outcomes observed in Bejaia and Jijel Universities, where similar obstacles to ICT integration were identified. Hence, ensuring effective utilization of ICT in education necessitates providing teachers and students with training on proper tool usage, furnishing teachers with adequate equipment and internet access to support teaching, and reducing class sizes. Nonetheless, this study has limitations, primarily related to the sample size. Despite distributing twenty-five questionnaires, only sixteen responses were received. Additionally, the data collected through the questionnaire solely represent respondents' viewpoints, which might not entirely reflect the actual state of ICT utilization. Furthermore, the study's outcomes are specific to the English department at Mohamed Boudief (Msila) University, making it challenging to generalize the results to other departments and universities. This study serves as a foundational step. Future research should encompass a broader investigation into ICT tool usage across various schools and universities in Algeria. Employing diverse data collection methods, such as classroom observations, could provide concrete evidence of teachers' ICT utilization and shed light on integration challenges in the classroom setting.

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## اتجاهات وتصورات الأساتذة حول فوائد وتحديات توظيف تكنولوجيا الإعلام والاتصال في أقسام الإنجليزية كلغة أجنبية في الجزائر: دراسة حالة جامعة محمد بوضياف بالمسيلة ملخص

الكلمات المفتاحية  
تكنولوجيا المعلومات والاتصال  
التعليم العالي  
نتائج التعلم

يواجه عدد كبير من الطلاب، وخاصة أولئك الذين يعانون من صعوبات في القراءة، تحديات في تطوير مهارات القراءة بطلاقة والتي تعد كفاءات أساسية تكمن وراء كل من النجاح الأكاديمي والتنمية الشخصية. ظهرت ممارسة الاستماع أثناء القراءة كتدخل فعال محتمل لمساعدة القراء المتعثرين من خلال تقديم التعزيز السمعي الذي يتماشى مع القراءة البصرية. تبحث هذه المراجعة، التي ركزت على ست عشرة دراسة تجريبية أجريت بين عامي 2000 و2024، في فعالية الاستماع أثناء القراءة كاستراتيجية وتسعى إلى تسليط الضوء على التأثير التحويلي لدمج الدعم السمعي في تمارين القراءة التي تعزز في نهاية المطاف طلاقة القراءة لقراء اللغة الإنجليزية كلغة أجنبية الذين يعانون من صعوبات. والهدف من هذه الدراسة هو تحديد كيفية تنفيذ استراتيجية الاستماع أثناء القراءة في ممارسة القراءة، وتأثيرها الإيجابي على طلاقة القراءة وحدودها. تقدم نتائج هذه الدراسة دليلاً على تأثيرها الإيجابي على سرعة القراءة والدقة والإيقاع ومستويات الفهم. ومع ذلك، من الضروري الاعتراف بالتحديات المرتبطة بالاستماع أثناء القراءة، بما في ذلك الاعتماد على مستوى كفاءة المتعلم، والحمل المعرفي المحتمل من المعالجة السمعية والبصرية المتزامنة، والحاجة إلى الموارد التكنولوجية الكافية وتدريب المعلمين لضمان تنفيذها المناسب لتحقيق أقصى قدر من نجاح المتعلم.

## Les perceptions et attitudes des enseignants envers les avantages et les défis de la mise en œuvre des TIC dans les classes d'anglais langue étrangère en Algérie : étude de cas de l'Université Mohamed Boudiaf de M'sila

### Résumé

À l'ère contemporaine, une transformation remarquable et continue se manifeste dans le domaine des Technologies de l'Information et de la Communication (TIC), permettant un accès fluide à l'information. Depuis les années 1960, ces avancées technologiques ont joué un rôle significatif dans le domaine de l'enseignement des langues. Cependant, ce n'est qu'en 1994, avec l'avènement d'Internet, que ces technologies ont attiré une attention mondiale de la part des chercheurs et des éducateurs (Berbar et Ait Hamouda, 2023). Néanmoins, l'utilisation des TIC dans l'enseignement des langues reste encore à ses débuts, en particulier dans de nombreux pays en développement, y compris l'Algérie. Malgré les efforts du gouvernement algérien pour encourager l'intégration des outils TIC dans le système éducatif, plusieurs obstacles, tels que les problèmes de connectivité, les coûts des infrastructures et les limites en matière de formation, empêchent les enseignants et les étudiants d'exploiter pleinement leur potentiel. Par conséquent, cette étude se concentre sur l'investigation des Effets des Technologies de l'Information et de la Communication (TIC) sur les résultats d'apprentissage des étudiants dans l'enseignement supérieur. Pour atteindre cet objectif, un questionnaire comprenant des questions ouvertes et fermées a été administré aux enseignants du département d'anglais de l'Université « Mohamed Boudief » à M'sila. Les données recueillies ont été analysées à l'aide du logiciel Statistical Package for Social Sciences (SPSS 24.0) et d'une approche d'analyse de contenu afin de dégager des perspectives significatives. Les résultats ont été synthétisés et des recommandations ont été formulées sur la base des conclusions obtenues.

### Mots clés

Technologies de l'information et de la communication  
Enseignement supérieur  
Résultats d'apprentissage



### Competing interests

The author(s) declare no competing interests

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