Investigating Algerian University EFL Teachers' and Students' Perceptions Regarding the Use and Impact of Digital Devices on Speaking Proficiency

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Ayad abdoulmunem MINH [1*], Prof. Riad BELOUAHEM [2]

[1] *Department of Letters and the English Language, Frères Mentouri University Constantine 1, (Algeria), minhayad@gmail.com*
[2] *Department of Letters and the English Language, Frères Mentouri University Constantine 1, (Algeria), riad.belouahem@hotmail.com*

Abstract

This study explores the impact of digital devices on speaking skill and their integration into language learning. Findings show that freshmen rely heavily on smartphones, the internet, computers, and tablets for academic purposes. A questionnaire was conducted with 65 first-year English students at Abou EL Kacem Saâdallah, Algiers 2 University, followed by interviews with ten university teachers. The study highlights technology's crucial role in academic success, enhancing speaking skills, proficiency, and pronunciation. Teachers confirm frequent student use of language learning apps, social media, and video platforms, with smartphones as the primary tool. They acknowledge benefits such as exposure to native speakers and vocabulary-rich content but emphasize student engagement. While digital tools significantly improve speaking skills, their impact on writing and listening is less evident. Both students and teachers recognize technology's positive influence on language learning, particularly in developing speaking abilities.

Keywords

Digital devices;
Speaking skills;
Technology;
Integration;
Language learning.

التحقيق في تصورات أساتذة وطلبة اللغة الإنجليزية كلغة أجنبية بالجامعات الجزائرية حول استخدام الأجهزة الرقمية وأثرها على مهارة التحدث.

ملخص

تستكشف هذه الدراسة تأثير الأجهزة الرقمية على مهارات التحدث ودمجها في تعلم اللغة. تُظهر النتائج أن طلاب السنة الأولى يعتمدون بشكل كبير على الهواتف الذكية والإنترنت وأجهزة الكمبيوتر والأجهزة اللوحية لأغراض أكاديمية. تم إجراء استبيان شمل 65 طالبًا من السنة الأولى في قسم اللغة الإنجليزية بجامعة أبو القاسم سعد الله، الجزائر 2، تلاه إجراء مقابلات مع عشرة أساتذة جامعيين. تسلط الدراسة الضوء على الدور الأساسي للتكنولوجيا في النجاح الأكاديمي، حيث تعزز مهارات التحدث والكفاءة والنطق. يؤكد الأساتذة الاستخدام المتكرر للطلاب لتطبيقات تعلم اللغة ووسائل التواصل الاجتماعي ومنصات الفيديو، مع كون الهواتف الذكية الأداة الأساسية. كما يشيرون إلى فوائد مثل التعرض للناطقين الأصليين والمحتوى الغني بالمفردات، لكنهم يؤكدون أهمية تفاعل الطلاب. وعلى الرغم من أن الأدوات الرقمية تحسن بشكل ملحوظ مهارات التحدث، إلا أن تأثيرها على مهارات الكتابة والاستماع أقل وضوحًا. ويقر كل من الطلاب والأساتذة بتأثير التكنولوجيا الإيجابي على تعلم اللغة، لا سيما في تطوير مهارات التحدث.

الكلمات المفتاحية

الأجهزة الرقمية؛
مهارات التحدث؛
التكنولوجيا؛
الإدماج؛
تعلم اللغة.

* *Corresponding author. E-mail: minhayad@gmail.com*
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I- Introduction :

Speaking is an essential skill in language learning, as it allows students to communicate and express themselves effectively in everyday situations. Yet, many students find it challenging to speak confidently and fluently. Traditional methods often lack enough opportunities for interactive practice. Enter digital devices, which have become game-changers in language teaching. With tools like smartphones, tablets, and computers, students now have access to a wealth of resources, from language apps to video calls, that make learning more dynamic and engaging. These devices allow for interactive speaking activities like voice recordings, real-time conversations, and language games, helping students practice in authentic ways. Moreover, digital tools empower students to learn at their own pace and build confidence. By integrating technology into lessons, teachers can create environments where speaking skills thrive. This paper, therefore, explores how digital devices can be used to enhance students' speaking proficiency and create more engaging, effective language learning experiences.

I.1. Definition of the Speaking Skill

Speaking is one of the four fundamental language abilities that humans use to communicate, along with listening, reading, and writing. Meaning is created through this process, which involves both providing and receiving information. Speaking is a two-way process in which both the speaker and the listener actively participate. Richard (2008) underlined the necessity of mastering speaking abilities in English.

Speaking is the process of constructing meaning through the exchange of verbal information, requiring both the production and reception of speech (Florez, 1999). It is also defined by *(*Brown, 2004*)* as an interactive process involving producing and processing information, where success depends on linguistic, social, and cultural norms. For this reason, learning to talk is considered a difficult skill that requires a lot of practice and experience. Furthermore, speaking, according to Harmer (2007), is the capacity to communicate ideas, feelings, and thoughts verbally in a clear and fluid way; this frequently calls for spontaneity and improvisation. Speaking, which includes both linguistic correctness and communicative skill, is the vocal application of language to interact with others (Bygate ,1987)

I.2. Objectives of Teaching the Speaking Skill in EFL Settings

Students are expected to actively engage in speaking tasks when learning speech. Speaking is included in the curriculum as a crucial skill that students need to acquire. Lastly, it is critical that students learn how to talk, especially in schools. According to Hammer (2007, p.123), "there are three main reasons for getting students to speak in the classroom."

It is noteworthy to say that speaking activities provide students the opportunity to rehearse in a safe classroom setting and practice speaking in real life situations. Second, speaking exercises that encourage students to use any or all of the languages they are proficient in give teachers and students feedback. Thirdly, the more chances students have to use the different linguistic components they have stored in their memory banks, the better.

Teaching speaking has a number of benefits, according to Baking and Westrup (2003). First of all, it enables students to begin using the new language they are learning. Second, spoken education reinforces the development of functional language while also assisting students in identifying their areas of strength and weakness. Thirdly, teaching children to communicate makes it easier and more fluid for them to do.

I.3. Educational Technology

I.3.1. Definition

Educational technology is becoming more and more integrated into all aspects of teaching and learning, including English language instruction, with the goal of improving student learning outcomes. But, the concept of educational technology has struggled to come up with a clear, concise definition (Damian, 2019). Ely (1972, p. 36) defines educational technology as a "field involved in the facilitation of human learning." It is related to the development, administration, and use of instructional materials (Robinson et al. 2008).

Christenson (2010) defines ICT as the process of obtaining information through telecommunications. It is similar to information technology (IT), which encompasses mobile phones, wireless networks, the Internet, and other communication methods. Thanks to this innovative teaching strategy, schools may now access the internet. Activities such as video conferencing allow teachers to integrate the outside world into the classroom (Nomass, 2013). Using computers to teach English allows students to communicate with one another, share ideas, and enhances their spoken performance and communicative abilities, according to Harmer (2007).

I.3.2. Types of Digital Devices Used in Education

I.3.2.1. Laptops and Tablets

Laptops and tablet computers is the next innovative device to hit the educational technology sector. Wachsmuth (2003) stated that its design and handwriting functionality challenges the way faculty and students integrate tablet computers into their teaching and learning process. Tablets are becoming widely used in schools, offering a variety of options, including numerous web apps and applications tailored to different operating systems. With so many choices available for teachers and students, it can be helpful to explore the diverse ways these tools are making a positive impact across various subject areas. Pedagogy is related to how teachers teach, and the strategies they use in their work. The role of tablets in shaping pedagogy has been a key focus of the Tablets for School initiative. Their effectiveness largely hinges on how well a school's learning approach aligns with and incorporates the use of tablets (Clark, 2004).

I.3.2.2. Smartphones

During the 1990s, advancements in technology revolutionized classroom teaching. The growth of computers, along with the release of new and improved Microsoft products, resulted in devices that were smaller, more efficient, and user-friendly. These technological strides paved the way for wireless devices like PDAs and mobile phones, enabling greater mobility in learning activities. By 2010, a wide range of technologies, including desktop computers, laptops, and notebooks, had become commonplace in classrooms, significantly enhancing the educational environment.

I.3.2.3. E-readers

The huge transformation in learners' access and interaction with learning materials has been a result of the implementation of e-readers into the educational settings. E-readers, such as the Amazon Kindle and other devices, have become significant tools for enhancing literacy and engaging learners with content in more dynamic ways. Their ability to store vast amounts of content, reducing the need for physical textbooks and promoting a more sustainable approach to learning is one of the major advantages of using e-readers in the process of teaching and learning. Research shows that the portability of e-readers allows students to access academic resources anytime and anywhere, thus enhancing their learning flexibility (Johnson, 2020).

I.3.2.4. PowerPoint Presentation

Slides and PowerPoint are widely used in classrooms due to their portability, ease of use, and versatility. Preparing and editing presentations is simple and becomes easier with practice. PowerPoint allows easy reorganization of slides through basic cut-and-paste methods. The Cognitive Load hypothesis (Sweller, 2011) suggests that poorly structured instructions can increase cognitive strain, especially when information is too complex for students to process. Drouin (2013) found that while students often prefer PowerPoint lectures, there may be a gap between their perception of learning and actual learning outcomes. PowerPoint can enhance presentations with visuals, sounds, and videos, helping to maintain audience focus on the main concepts. With pre-designed themes and templates, creating engaging and attractive presentations has become effortless. As a result, PowerPoint is now a staple tool in classrooms worldwide.

I.3.2.5. Projections/Data show

Teachers increasingly use projectors, including the more recent version called "Data show," widely in classrooms. It is a device designed to project a large image from a computer screen onto a surface. It is regarded as an important instrument. It is a device designed to project a large image from a computer screen onto a surface. It is regarded as an important instrument. Teachers can easily and attractively present their lessons by using a projector. Abdullah (2014) claims that it is a tool for introducing subjects to students. When a lesson is delivered visually, learners are more engaged because they can see the photos, maps, and graphics. PPT is another tool that students can utilize to present their work.

I.3.3. The Importance of ICT in FL Teaching and Learning

The traditional learning and teaching environment has undergone significant transformation in the twenty-first century. The use of ICTs has improved the efficiency of both the teaching and learning processes. In today's classrooms, the latter has given EFL students and their teachers several chances to learn and teach successfully. Through the use of ICT communication tools and social networking sites like blogs, wikis, Facebook, discussion groups, and emails, the integration of ICTs into the classroom fosters collaborative learning and increases student understanding. These tools facilitate communication and teamwork by conducting activities that call for debate and idea sharing.

According to Anderson (2010), ICT introduces substantial advantages and resources that change the teaching and learning environment. By using multimedia to engage many senses, it enhances the learning process and supports a variety of learning styles and skills, including those of slower learners. By choosing the right resources to meet the course objectives and enhance the learning experience, ICT integration helps teachers prepare their lessons. Additionally, educators have access to a variety of teaching resources, including smartphones, computers, and video. Projectors are a useful tool for efficiently delivering the curriculum; they enable teachers and students to work together to give excellent instruction.

Additionally, the ICT environment draws students' attention and enhances their cognitive and critical thinking abilities. Additionally, it makes it easier for teachers and students to obtain knowledge about anything at any time and from any location, increasing the flexibility of how courses are delivered. They can better compose their work and prepare and convey their knowledge in a variety of ways thanks to this procedure. According to Tinio (2002), there are many reasons for integrating technology into foreign language instruction which make it very important. First, technology makes real content available online. Second, it provides access to a greater range of language and information sources. Additionally, it provides language learners with other avenues for communication with people outside of their teachers and peers. Technology thus makes it possible to concentrate on a single area of the lesson (vocabulary, pronunciation). Additionally, it saves the students' time and increases their autonomy and enjoyment. Lastly, it improves students' critical thinking, creativity, and productivity.

II– Methods and Materials:

In the present study, a mixed-methods approach was used, combining a questionnaire (quantitative) and interviews (qualitative) with university students and teachers. The questionnaire consists of 21 questions organized into five main sections, while the interview contains 14 questions.

II.1. Sampling and Participants

The researcher used a random sampling technique to give all participants an equal chance of selection. Therefore, the targeted sample consisted of 67 first-year students out of 202 at Abou EL Kacem Saâdallah, Algiers 2 University. Similarly, the interview was conducted with 10 teachers from different universities.

II.2. Research Hypothesis

H1: The questionnaire will show that the students believe digital devices positively impact their speaking proficiency.

H2: The interview will show that teachers view digital devices as effective for improving speaking proficiency, but also recognize challenges in managing distractions.

III- Results and discussion :

The results of the questionnaire and the interview can be synthesized and categorized as follows:

III.1. The Questionnaire's Results:

III.1.1. Use of Technological Devices

- The results from Q8 show that all 67 freshmen use technological devices, with no exceptions. This suggests that digital devices are deeply integrated into their lives, likely for academic, social, and personal use. The absence of "No" responses emphasizes the pervasive role of technology in their education and daily activities, confirming that it is essential in modern student life.

Option	N	%
Yes	67	100
No	0	0
Total	**67**	**100**

Table 1: Students' Use of Technological Devices

- The most commonly used tools and devices, as shown in Q9, by students are: smartphone, the internet, computer and tablets with 97%, 86.5%, 70% and 67% respectively.

Option	N	%
a	65	97
b	47	70
c	45	67
d	16	24
e	58	86.5
f	29	43.2

Table 2: Technological Devices Used by Students

- Most freshmen in Q10 use digital devices regularly, with 65.6% using them daily for academic or personal reasons. A smaller group uses them less frequently, while a few use them rarely or only occasionally. The data highlights that digital devices are a key part of freshmen's daily lives

Option	N	%
a	44	65.6
b	19	28.2
c	4	5.9
d	1	1.5
e	1	1.5
f	0	0

Table 3: Frequency of Technological Devices' Usage

- Q12 indicates that freshmen use digital devices for a range of purposes, with the majority using them for academic (54%), social (59.7%), and personal tasks (77.6%; 58%). A smaller group uses devices for work-related reasons, while fewer use them for other purposes. The data highlights the importance of digital devices in students' lives, suggesting that universities should invest in digital resources and provide guidance on managing screen time for better well-being.

Option	N	%
a	52	77.6
b	40	59.7
c	39	58
d	15	22.3
e	36	54
f	0	0

Table 4: Reasons for Using Technological Devices

III.1.2. Benefits of Using Digital Devices

- Answers to Q13 state that nearly all freshmen (94%) use digital devices for studying, emphasizing their crucial role in modern education. Only a small percentage (6%) do not rely on technology for academic purposes, highlighting the growing influence of digital tools in learning.

Option	N	%
Yes	63	94
No	4	6
Total	**67**	**100**

Table 5: Using Technological Devices for Studying

- The results in Q15 point out that nearly all freshmen (99%) believe technology benefits education, with only 1% disagreeing. This strong positive perception suggests that students view digital tools as essential for academic development. The findings imply that universities should continue investing in digital learning platforms, while also addressing the concerns of the few who disagree.

Option	N	%
Yes	66	99
No	1	1
Total	**67**	**100**

Table n° 06: Students' Perception of Technology Usage

- As indicated in Q 16, the most recognized benefit of technology in education is easy access to information (97%), followed by enriching vocabulary (55.2%) and improving pronunciation through exposure to native speakers (48%). Other benefits were less frequently mentioned, suggesting that students prioritize access to information and language development when it comes to technology use in education

Option	N	%
a	65	97
b	37	55.2
c	32	48
d	4	6
e	8	12
f	26	39
g	4	6
h	0	0

Table n° 07: The Benefits of Using Technology in Education

III.1.3. Impact of Digital Devices on the Speaking Skill

- Answers to Q18 demonstrate that the majority of participants (91.1%) believe that technology positively impacts their speaking skills, while 8.9% do not. This suggests that most students find technology, such as language apps and voice tools, helpful for improving speaking abilities. However, the small percentage who

saw no improvement may reflect challenges or limited engagement with these tools. Overall, the data indicates that technology is generally viewed as beneficial for enhancing speaking skills.

Option	N	%
Yes	61	91.1
No	6	8.9
Total	**67**	**100**

Table n° 08: The Impact of Technology Usage on Speaking Skill

- Q19 denotes that the majority of participants reported improvements in general language skills, pronunciation, and grammar through digital devices. Fewer participants noted improvements in vocabulary, reading comprehension, listening, and writing, with the lowest gains seen in writing and listening skills. Overall, digital tools seem to be most effective for enhancing general language proficiency and pronunciation, but less so for writing and listening skills.

Option	N	%
a	49	72.8
b	45	67.3
c	51	76.2
d	30	45.5
e	14	21.3
f	22	33.7
g	7	10.4

Table n° 09: The Aspects of Speaking Improved by Technological Devices

III.2. The Interview's Results:

- Answers to Q5, Q6, Q7 indicate that most teachers reported that their students use technology to improve speaking skills, with a particular emphasis on language learning apps, social media, and video platforms. All ten teachers affirmed that they encourage the use of technology for language development, unanimously agreeing on its benefits. Additionally, smartphones were highlighted as the primary tool for language learning, with several teachers specifically noting their widespread use among students.
- In Q8, Q9, Q10, Q11, Most teachers believe technology is highly beneficial for improving speaking skills, noting advantages such as exposure to native speakers through podcasts, videos, and online interactions, which help improve pronunciation. They also highlight the access technology provides to vocabulary-rich content. However, some teachers cautioned that the effectiveness of technology depends on how students use it. Additionally, concerns were raised about challenges students face, including difficulties navigating platforms, limited access to technology, and poor internet connectivity, such as slow connections or lack of devices.

IV- Conclusion:

This article provides a brief overview of the speaking skill, followed by a discussion on educational technology. It then explores Information and Communication Technologies (ICTs) in general, with a focus on digital devices and their role in the teaching and learning process. As found in this study, the students' questionnaires uncovered that digital devices are an integral part of freshmen's lives, used for academic, social, and personal purposes. Most students rely on smartphones, the internet, computers, and tablets, with a majority using these devices regularly, especially for academic activities. The data also shows that technology plays a

significant role in students' academic success, with almost all freshmen using digital tools for studying, and nearly all believing technology benefits their education. Furthermore, the majority of students also report improvements in speaking skills, general language proficiency, and pronunciation through technology, although gains in writing and listening skills were less pronounced. These findings highlight the importance of technology in modern education, suggesting universities should continue to invest in digital resources and address challenges like limited engagement or access to devices. On the other hand, the teachers' interview revealed that most of them reported that students use technology, especially language learning apps, social media, and video platforms, to improve speaking skills. All teachers encouraged its use, highlighting smartphones as the primary tool for language learning. While teachers generally agreed on the benefits of technology, such as exposure to native speakers and access to vocabulary-rich content, they also noted that the effectiveness depends on how students engage with these tools. Lastly, concerns were raised about challenges like difficulty navigating platforms, limited access to devices, and poor internet connectivity. All in all, both students and teachers recognize the significant role of technology in improving speaking skills. This highlights the widespread belief in the positive impact of digital resources on language development.

- Appendices:

Students' Questionnaire

Dear students, you are kindly invited to participate answering this questionnaire to collect data on the impact of digital devices on speaking proficiency. Your contribution is of a great importance. Thank you for your collaboration.

Section 1 : Background Information

1. How old are you?

2. What is your gender?

a. Male b. Female

Section 2: English proficiency

3. How long have you been studying English?

4. How would you describe your level in English?

a. Beginner
b. Intermediate
c. Advanced
d. Other

5. Do you have any certificates of English proficiency?

a. Yes b. No

6. In case your answer is yes, which certificate do you have?

7. How did you learn the English that you know? (Tick all possible answers)

a. At school
b. From TV
c. From reading
d. From travelling/visiting foreign countries
e. From technological devices (hardware and software)
f. Other

Section 3: Use of Technological Devices

8. Do you use technological devices?

a. Yes b. No

9. Which technological devices do you use? (Tick all possible answers)

a. Smartphone
b. Computer
c. Tablet
d. Datashow
e. Internet
f. Other

10. How often do you use technological device?

a. Always
b. Usually
c. Sometimes
d. Rarely
e. Never
f. Other

11. How long do you spend on digital devices per day?

a. Less than an hour
b. More than an hour
c. More than two hours
d. Other

12. Why do you use technological devices? (Tick all possible answers)

a. For pleasure
b. To communicate with people
c. To get information
d. To work
e. To study
f. Other

Section 4: Studying via Technological Devices

13. Do you use technological devices to study?

a. Yes b. No

14. In case your answer to the previous question is yes, how do you use technological devices to study?

a. To check for information online
b. To find books and articles
c. To do exercises
d. To get courses online (via Youtube, Moodle, Google Classroom...)
e. To read e-books
f. Other

15. Do you think technology use is beneficial for students?

a. Yes b. No

16. What are the benefits of using technology in education?

a. To get information easily
b. To enrich one's vocabulary
c. To listen to native speakers and develop a good accent
d. To communicate with foreigners
e. To keep in touch with teachers/fellow students
f. To provide extra practice
g. To get feedback
h. Other

17. What are the shortcomings of technological devices in education?

a. Waste of time
b. Invalidity of information/sources
c. Health issues (eyes, back, neck...)
d. Other

Section 5: Technology and the Speaking Skill

18. Did the use of technological devices improve your speaking skills?

a. Yes b. No

19. Which device was the most helpful with your speaking? How did it help you?

20. What aspect(s) did it improve? (Tick all possible answers)

a. Pronunciation

b. Accent

c. Vocabulary

d. Grammar

e. Stress and intonation

f. Fluency

g. Other

21. Do you have any further suggestions?

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