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Enhancing English Speaking Skills: A Case Study of
First-year Students at Guanfoud Mohamed and Aisso El
Salleh Middle Schools in M'Sila**

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Declaration

We, **Bensaoucha Hassina** and **Dilmi Rima**, hereby declare that the graduation project entitled: "**Exploring the Role of Digital Pronunciation in Enhancing Speaking Skills: A Case Study of First-Year Students at Guanfoud Mohamed and Aisso El Salleh Middle Schools in M'Sila**", submitted in partial fulfillment of the requirements for the Master's degree at the Department of Letters and English Language, University of M'Sila, is our original work.

This work has not been submitted previously, in whole or in part, for any academic degree or diploma at this or any other institution.

All sources of information used have been properly acknowledged and referenced throughout the report.

This work was completed under the supervision of **Benkhelifa Imene**.

DEDICATION

This work is dedicated to my dear parents (Saleh and Fatiha)

who left this world but never left my heart.

Your love, sacrifices, and prayers shaped who I am today.

I ask God to count this work among your good
deeds and to grant you the best of rewards for all you
have given me.

To my husband, Rafaa, and my daughters, Anfel, Hadjer, and Takwa -
your patience, love, and encouragement have been my strength
throughout this journey.

To my beloved brothers: Abdnour and his family , Khaled,
Mohamed, and Aymen,
and my dear sisters: Randa and Nada,

To my second mother, Barkahoum - thank you for your endless love
and support.

To my aunt Kheira

To my second family: Fahima, Chaima and Amira.

To my dear friend with whom I shared this work,
and to all my classmates and friends I have met along the way -
thank you for being part of this meaningful journey.

Hassina.

DEDICATION

I dedicate this work to:

My beloved family , who encourage and support me with their
prayers and efforts.

To my brother and sisters,

To my beloved husband Sebaa Alaa

his constant love and strength throughout the years,

Without him, and his ability to raise my spirits when I was most
discouraged,

I could never have made it this far.

Dear husband, you were the wind beneath my wings.

To my dear friends with whom I shared this work,
and to all my classmates and friends I have met along the way.

Thank you all for being part of this journey.

Rima.

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Abstract

The rapid advancement of digital technology has significantly influenced educational practices worldwide, particularly in the field of English as a Foreign Language (EFL) instruction. In response, EFL educators have increasingly integrated digital tools into their teaching methodologies to support the development of learners' listening and speaking skills. This study investigates the effectiveness of digital pronunciation tools in enhancing the speaking proficiency of first-year middle school students at Guanfoud Mohamed and Aissou El Salleh schools in M'Sila, Algeria. Focusing on tools such as ELSA Speak and YouGlish, the research examines their impact on pronunciation accuracy, fluency, and learner confidence. The study employs a quasi-experimental mixed-methods design, combining quantitative assessments (pre- and post-tests) with qualitative data gathered through classroom observations and teacher questionnaires. The results revealed measurable improvements in learners' oral performance, along with increased engagement and motivation. Teachers generally expressed positive attitudes toward the use of digital tools, with their perceptions shaped by factors such as technological readiness, training, and perceived usefulness. Despite these gains, the study also identified persistent challenges including limited digital literacy, inadequate infrastructure, and insufficient professional development. These findings emphasize the potential of digital tools to transform EFL instruction, particularly when strategically implemented and supported by institutional frameworks. The study concludes with practical recommendations to foster more effective integration of technology in under-resourced educational settings, aiming to create more inclusive and interactive language learning environments.

Keywords: Digital tools, EFL instruction, ELSA Speak, Middle school education, Speaking proficiency, YouGlish.

List of Abbreviations

ACTFL : American Council on the Teaching of Foreign Languages

AI : Artificial Intelligence

Apps : Applications

BBC: British Broadcasting Corporation

CALL : Computer-Assisted Language Learning

COVID : Coronavirus Disease

DR : Doctor

EFL : English as a Foreign Language

ELSA: English Language Speech Assistant

ELT : English Language Teaching

ESL : English as a Second Language

ICT : Information and Communication Technology

LMS : Learning Management System

SPSS : Statistical Package for the Social Sciences

TAM : Technology Acceptance Model

TELL : Technology-Enhanced Language Learning

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**General
Introduction**

General Introduction

The importance of the English language in today's globalized world is widely acknowledged. It functions as a global lingua franca, enabling communication among people from diverse linguistic and cultural backgrounds across various domains, including business, education, science, technology, and entertainment (Crystal, 2003). Given its widespread use, acquiring proficiency in English has become increasingly essential. To attain such proficiency, learners must develop competence in the four foundational language skills: listening, speaking, reading, and writing. Among these, listening and speaking are particularly significant due to their immediate relevance to real-world communication and their vital role in fostering interpersonal interaction (Richards, 2008)

Oral skills, in particular, form the foundation of effective language acquisition. They enable learners to engage meaningfully in diverse communicative situations, thereby making the learning process more authentic and interactive. However, despite ongoing educational reforms and the growing emphasis on communicative language teaching, many middle school learners in Algeria, especially in regions such as Msila, continue to face difficulties with spoken English pronunciation, a crucial aspect of oral proficiency, remains one of the most challenging skills to master. This difficulty is often exacerbated by factors such as limited vocabulary, performance anxiety, and low self-confidence (Derwing and Munro, 2015).

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In response to these persistent challenges, both EFL teachers and learners are increasingly turning to digital tools and resources to enhance the development of listening and speaking skills. Platforms such as podcasts, video conferencing applications, and YouTube channels have become valuable supplements to traditional classroom instruction (Godwin-Jones, 2018). Technological advancements, particularly in speech recognition, artificial intelligence, and machine learning, have significantly improved the functionality of digital pronunciation tools. These innovations offer learners immediate, personalized feedback, enabling them to identify and correct pronunciation errors in real-time, thereby promoting greater autonomy and more effective language learning.

1- Literature Review:

In recent years, improving learners' oral proficiency, particularly their pronunciation, has become a central goal in English as a Foreign Language (EFL) instruction, especially in contexts where learners have limited exposure to English beyond the classroom. In Algeria, and notably in the M'Sila region, middle school learners continue to face persistent challenges in speaking English. These difficulties are due to limited contact with authentic English pronunciation, teacher-centered instruction, and a curriculum that prioritizes grammar and writing over communicative competence. Pronunciation, defined as the accurate production of sounds and intonation patterns, is not merely about sounding correct; it is essential for intelligibility and for fostering

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learners' confidence (Gilbert, 2008). Traditional approaches, such as choral repetition or imitation of the teacher, often fall short because they lack individualized feedback and fail to replicate authentic communication. Consequently, educators and researchers have increasingly turned to digital technologies as a more dynamic and effective means of supporting pronunciation and speaking development.

This shift toward integrating technology in the EFL classroom reflects a broader movement toward learner-centered teaching. Digital tools, particularly those designed to enhance pronunciation, provide learners with access to authentic speech, personalized feedback, and opportunities for independent practice. Platforms such as Elsa Speak, Speechace, and Forvo utilize speech recognition and AI technologies to offer instant, tailored feedback, enabling learners to adjust their pronunciation in real-time. These tools also assist learners in engaging with critical features of spoken English, such as stress, rhythm, and intonation, that are often overlooked in traditional instruction. Research supports their effectiveness: Levis (2018) and McCrocklin (2020) demonstrate that these technologies not only improve pronunciation but also increase learner confidence and motivation, especially among younger users who tend to be more receptive to digital formats.

Empirical evidence from various educational contexts reinforces these findings. For example, Hasan and Hoon (2023) found that secondary students in Malaysia who used Speechace significantly improved their pronunciation in

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both segmental features (e.g., vowel and consonant sounds) and suprasegmental features (e.g., intonation and stress). Similarly, a study in Saudi Arabia by Alshammari (2022) showed that learners who used Elsa Speak for just 15 minutes daily over six weeks experienced notable improvements in fluency and pronunciation accuracy compared to those taught through conventional methods. Although research in Algeria is more limited, it echoes these positive results. Saoudi and Bouarfa (2021), in a study conducted in Constantine, observed that learners using mobile pronunciation apps gained greater confidence and valued the opportunity to practice at their own pace. However, they also identified significant barriers to implementation, including limited teacher training, low digital literacy among both learners and staff, and inadequate infrastructure—challenges that are particularly pronounced in less-resourced areas such as M'Sila.

The value of digital pronunciation tools is further reinforced by educational theory. Vygotsky's Sociocultural Theory emphasizes the importance of social interaction and guided learning or scaffolding in language development. Digital tools can serve as mediators, supporting learners within their zone of proximal development by offering timely feedback and opportunities for interaction, such as speech comparison features and participation in online communities. Additionally, Davis's (1989) Technology Acceptance Model (TAM) helps explain why some teachers and students are more inclined to adopt these tools. TAM suggests that users are more likely to embrace technology if they

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perceive it as both useful and easy to use. In Algerian schools, fostering these perceptions is crucial for successful implementation. This requires not only access to the tools themselves but also institutional support, teacher training, and curriculum adjustments that integrate digital learning effectively.

In conclusion, digital pronunciation tools offer clear advantages for enhancing EFL learners' speaking skills, especially in contexts where traditional classroom methods and teacher availability are limited. These tools empower learners to take greater control of their learning, promote consistent practice, and foster a more engaging learning environment. Although international studies have already demonstrated their effectiveness, Algeria, particularly regions such as M'Sila, faces specific challenges that must be addressed to unlock its full potential. With appropriate support and thoughtful integration into teaching practices, digital tools can help learners overcome existing barriers and develop the oral English skills needed to thrive in an increasingly connected world.

2- Problem Statement:

Although digital pronunciation tools are increasingly used in both classroom and informal learning contexts, their actual impact on learners' speaking skills, particularly at the middle school level, remains underexplored. In Algeria, many middle school learners, especially in regions such as M'sila, continue to face significant challenges in speaking English fluently and confidently. Pronunciation emerges as a key obstacle, often due to limited practice

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opportunities, low exposure to authentic language input, and a lack of self-confidence. This study focuses on first-year students at Guanfoud Mohamed and Aisso El Salleh middle schools in M'sila to examine how digital tools can support the development of their speaking skills. By investigating both the benefits and limitations of these technologies, the research seeks to provide practical insights into how they can be more effectively integrated into English language teaching, helping to bridge the gap between technological potential and classroom realities.

3- Research Objectives:

The main objectives of this research are;

- 1- To investigate how digital pronunciation tools can support the development of English-speaking skills among first-year middle school students in M'sila.
- 2- To assess the impact of these tools on learners' pronunciation accuracy , fluency, and confidence.
- 3- To examine teachers' attitudes toward the use of digital pronunciation tools in the EFL classroom.
- 4- To identify challenges and limitations associated with the use of digital pronunciation tools in the classroom.
- 5- To propose practical recommendations for integrating digital tools into the English curriculum in M'sila middle schools.

4- Research Questions:

The study will seek to answer the following key questions:

- 1-How effective are digital pronunciation tools in improving the speaking skills of first-year middle school students in Msila?
- 2- What types of digital pronunciation tools are most commonly used by teachers in Msila's middle schools?
- 3- What improvements in learners' speaking confidence can be observed through the use of these tools?
- 4- What barriers exist in implementing digital pronunciation tools in the classroom, and how can they be overcome?
- 5- How do teachers perceive the use of digital pronunciation tools in enhancing learners' Language skills?

5- Research Methodology:

This study adopts mixed methods approach, combining qualitative and quantitative research methods to gather comprehensive data.

• Participants:

The sample consisted of approximately 140 first-year middle school learners from four classes across two middle schools in M'Sila: Guanfoud Mohamed and Aisso El Salleh. Each class had an average of 35 students. All learners participated in both the pre-test and post-test phases of the study.

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- **Data collection:**

Pre-Test and Post-Test: Students will take a pronunciation test before and after using the digital tools. The test will assess their ability to pronounce English words and sentences accurately.

- **Surveys /Questionnaires:**

Middle school teachers will complete surveys to gauge their experiences and satisfaction with the tools. Questions will focus on aspects such as ease of use, perceived improvement, and challenges faced.

- **Observation:**

The researcher will observe learners' usage of digital tools in the classroom setting to assess engagement, interaction, and progress.

- **Data Analysis:**

Quantitative: The pre-test and post-test results will be analyzed using statistical methods to identify significant improvements in learners' pronunciation.

Qualitative: Data from surveys and observations will be coded and analyzed thematically to identify common trends and insights related to learners' experiences and challenges faced in using the tools.

6- Significance of the Study:

This study is significant as it investigates how digital pronunciation tools can support first-year middle school learners in M'Sila, specifically at Guanfoud Mohamed and Aisso El Salleh schools, in developing their English

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speaking skills. Learners at this stage often struggle with pronunciation, which can negatively impact their confidence and willingness to engage in spoken activities. By integrating user-friendly digital tools into the learning process, this research explores practical strategies for making pronunciation practice more engaging, accessible, and responsive to individual needs. It also offers valuable insights for teachers seeking innovative approaches to enhance oral communication in the classroom, particularly in contexts where traditional resources are limited. Ultimately, this study contributes to a broader understanding of how technology can play a meaningful role in improving language learning outcomes and fostering greater confidence among young English learners.

7- Structure of The dissertation:

This dissertation is made up of two parts: a theoretical and a practical one. The theoretical framework consists of one chapter that is divided into three sections. The first section highlights the importance of speaking and pronunciation in English learning for EFL middle school students. The second section discusses the integration of digital tools in English language teaching, highlighting their benefits in enhancing engagement, personalization, and language skills. It also addresses key challenges such as a lack of teacher training, technical issues, and limited institutional support, emphasizing the need for better resources and support for effective implementation. The third one critically examines the role of digital tools—namely Duolingo, ELSA

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Speak, Zoom, and YouTube—in supporting the development of English-speaking skills among learners by improving pronunciation, fluency, and engagement through interactive and flexible features. It also notes challenges such as limited access, learner fatigue, and the need for proper training, stressing the importance of combining technology with effective teaching methods.

The second chapter of this dissertation focuses on the practical aspect of the study, aiming to address its research questions and objectives. This chapter offers a comprehensive explanation of the research methodology by describing the questionnaires administered to teachers. Following this, it proceeds to analyze and interpret the main findings, exploring their implications. Finally, it discusses the significant limitations of the study and provides recommendations for pedagogical strategies and future research endeavors.

Chapter One:

**Theoretical Foundations of Using
Digital Tools to Enhance Speaking
and Pronunciation Skills in EFL
Contexts**

Chapter One: Theoretical Foundations of Using Digital Tools to Enhance Speaking and Pronunciation Skills in EFL Contexts

Chapter One: Theoretical Foundations of Using Digital Tools to Enhance Speaking and Pronunciation Skills in EFL Contexts

Introduction

Speaking is one of the most essential skills in language learning and teaching. Developing such a skill for learners remains a significant challenge due to limited exposure, lack of practice, and pronunciation difficulties. In recent years, the advancement of technology has brought new opportunities to those learners to learn new languages as well as teachers to teach. Among these advancements are digital tools that specifically target pronunciation and oral communication.

This chapter explores the nature of speaking skills, its importance, and how digital tools can be integrated into the learning process to enhance learners' speaking performance. It also discusses the relationship between technology and speaking development, supported by theoretical insights, with a focus on the context of middle school learners. The chapter aims to show how digital tools can support learners in becoming more confident, fluent, and effective speakers of English.

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Section One: Speaking and Pronunciation Skills in EFL Learning

Contexts Introduction:

Speaking is an important skill as it helps people communicate and convey their thoughts or messages to others. Therefore, it is one of the essential skills that learners need to master when learning English. Speaking plays a central role in foreign or second language teaching and learning. It has held a significant place throughout the history of language education, and many linguists have provided various definitions of speaking as a skill.

This section presents a detailed overview of speaking and pronunciation skills in EFL learning contexts. It begins by defining speaking as a language skill and highlighting its importance in communication. The section also explores the key aspects that make up speaking. Additionally, it discusses the main factors that influence learners' speaking abilities. Its aim is to provide a clear understanding of the components that shape and support the development of speaking skills in EFL learners .

I- Definition of Speaking Skills:

Speaking plays a central and important role in language learning. According to Tarigan (2008), “speaking is a language skill that is developed in a child’s life, which is only preceded by listening skills, and at that period, speaking skills are learned.” This means that speaking is a productive skill through which learners express ideas, emotions, and intentions. Without the

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ability to speak, the language learning process remains incomplete, as communication is limited to passive understanding. Supporting Tarigan's view, it is clear that developing speaking skills should be a priority in language learning and teaching, as it reflects both the learner's mastery of the language and their ability to interact effectively in real-life situations.

Tarigan (2008) also emphasizes that speaking is more than just producing word, it is a powerful mean of communication that shapes how people interact and connect with each other. Speaking is not only about forming sentences, but also about participating in a process where meaning is shared. It involves interaction between two or more individuals, where one expresses an idea and the other responds. This back-and-forth exchange builds a relationship between speaker and listener, which is the essence of communication. Therefore, speaking is not just a language skill, but also a social act that helps build understanding and relationships among people.

Wilson (1983) stated that speaking is not just about producing sounds or words, but about building a meaningful connection between the speaker and the listener. In any communicative situation, the speaker must apply several rules: logical, psychological, and linguistic. These include organizing ideas clearly (logic), considering the listener's feelings and perspective (psychology), and using correct language forms (linguistics). This makes speaking a complex skill that goes beyond knowing vocabulary and grammar. It becomes an intentional act aimed at sharing meaning and achieving

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understanding. As Wilson highlights, the ultimate goal of speaking is communication itself to ensure the message is clearly received and has the intended effect.

Richards (2008) explains that speaking allows individuals to perform tasks, express and develop ideas, and make sense of different aspects of the world. When learners can speak English fluently, they are better able to communicate their thoughts and engage in meaningful interactions. Strong speaking skills in English also give learners access to up-to-date information in fields such as science, technology, and health. Furthermore, Richards presents speaking as a multi-functional skill that plays a vital role in both academic and social contexts. He emphasizes the importance of English fluency, particularly for learners, as it enables them to communicate clearly and confidently that can enhance classroom participation, academic achievement, and social engagement.

Brown (1994) describes speaking as a dynamic and interactive activity in which individuals construct meaning together through both producing and receiving spoken language, requiring real-time processing of information. He emphasizes that speaking is not a one-way act but a two-way, interactive process. This means that when someone speaks, they are not merely producing words, they are participating in a communicative exchange that involves creating, interpreting, and negotiating meaning. Speaking, therefore,

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is a complex cognitive skill that demands attention, memory, and the ability to respond appropriately based on the context and the input received.

Brown (1994) describes speaking as a dynamic and interactive activity in which individuals build meaning together through both producing and receiving spoken language, requiring real-time processing of information. He emphasizes that speaking is not a one-way act but a two-way, communicative process. Similarly, Brown (1998) highlights that speaking involves the active construction and negotiation of meaning, where speakers must interpret input and formulate appropriate responses. This view presents speaking as a complex cognitive skill that demands attention, memory, and interactional awareness. Together, these definitions underline the multifaceted nature of speaking, integrating both pedagogical and theoretical dimensions.

To conclude, speaking is one of the most essential components of language learning, as it plays a central role in communication and human interaction. It enables individuals to convey thoughts, exchange ideas, and build relationships. Speaking is more than just the production of words; it is an active, dynamic process involving understanding, interaction, and the co-construction of meaning. Mastery of speaking allows learners to engage effectively in real-life communication.

As learners develop their speaking skills, they gain the ability to participate confidently in discussions, express opinions, resolve problems, and navigate various communicative situations. Moreover, speaking contributes to

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personal development by enhancing self-expression, building confidence, and fostering critical thinking skills.

Ultimately, the development of speaking skills is not just a linguistic goal, but a practical necessity. By providing learners with strong oral communication abilities, language education empowers them to function meaningfully and effectively in the wider world. It prepares them not only to use the language, but also to live through it: socially, intellectually and professionally.

II- The importance of Speaking The English Language for Middle School Learners

Human beings are considered God's greatest creation, and language is one of the most valuable gifts given to them. The ability to speak is a powerful and meaningful skill that allows people to connect, express, and understand one another. English, being one of the most broadly spoken and influential languages in the world, offers many opportunities for personal, academic, and professional growth. For non-native middle school learners, learning English helps build confidence and provides a solid foundation for future success. It also encourages classroom participation, improves pronunciation and vocabulary, and prepares learners for higher education, where English is often the main language of instruction.

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1- Foundation for Academic Success

Speaking English clearly is essential for middle school learners, as it lays the foundation for academic success across all subjects. Strong oral communication skills enhance students' ability to engage meaningfully in different areas of learning. Developing speaking proficiency supports participation in classroom discussions, improves comprehension of instructional content, and promotes effective collaboration during group work and peer interactions. These skills are vital contributors to overall academic achievement (Schultz, 2023).

2- Development of Communication Skills

Middle school plays a crucial role in shaping learners' communication skills. Engaging in speaking activities enhances their ability to express ideas clearly, improve active listening, and interact socially. These communication skills are valuable both in academic settings and daily interactions, as they build self-assurance and strengthen social relationships. Schultz (2023) emphasizes that speaking and listening skills are directly tied to academic success and should be taught explicitly in the classroom.

3- Preparation for Future Opportunities

As an international language, English provides access to a wide range of educational and professional opportunities. Developing strong speaking skills in English from an early age enables learners to obtain information, participate

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in global conversations, and pursue academic and career paths where clear and effective communication is essential (The Indian Public School, 2023).

4- Enhancement of Critical Thinking and Creativity

Engaging in English-speaking activities aids learners in structuring their ideas, thinking logically, and communicating clearly. These activities stimulate both critical thinking and creative expression by encouraging learners to evaluate information, form reasoned opinions, and solve problems—skills essential for academic success and personal growth (Thuong, 2024).

5- Support for Language Development

Regular practice in speaking English reinforces learners' vocabulary, grammar, and pronunciation. It also aids in the development of listening skills and overall language fluency, contributing to more effective communication across all areas of learning. Research by Akbarian (2023) emphasizes that vocabulary development plays a crucial role in teaching speaking, as learners with a larger vocabulary have more ease in communication.

To conclude, speaking skills are essential for middle school pupils, as they play a crucial role in shaping academic success, personal growth, and future opportunities. At this stage, learners need to express their ideas clearly, participate actively in discussions, and interact effectively with others. Developing strong speaking abilities not only helps them better understand their lessons but also boosts their confidence and overall communication skills.

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Fluency in speaking prepares learners to engage with the global community and to pursue academic and professional opportunities in the future. Moreover, regular speaking practice enhances vocabulary, grammar, pronunciation, and listening skills which are key components for becoming fluent and effective communicators. Ultimately, supporting learners in developing their speaking skills during middle school lays a strong foundation for lifelong learning and success across diverse areas of life.

III- The Aspects of Speaking Skill

Two key elements are recognized as essential for the success of English language learners: accuracy and fluency. These aspects serve as primary indicators of both language proficiency and effective communication. For middle school learners, it is important to clearly distinguish between accuracy—the correct use of vocabulary, grammar, and pronunciation—and fluency—the ability to speak smoothly and confidently. At the same time, balanced attention should be given to designing learning activities that foster the development of both accuracy and fluency simultaneously.

1- Accuracy

In the context of second and foreign language education, accuracy refers to the “ability to produce grammatically correct sentences” (Richards, Schmidt, Kendrick, & Kim, 1992) . Harmer (2001) expands this definition by

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emphasizing that accuracy also includes the correct use of vocabulary, grammar, and pronunciation. Similarly, Thornbury (2000) highlights that these three elements are the primary criteria most teachers consider when evaluating a learner's proficiency in using the language system. Therefore, to achieve accuracy in oral expression, facilitate comprehension, and engage their listeners, language learners should focus on producing speech that is both correct and complete. They should be well-informed and proficient in the use of:

a-Vocabulary

Vocabulary is a fundamental component of the language learning process. Learners must not only acquire new words but also understand their meanings and know how to use them appropriately in context. According to Thornbury (2002), vocabulary knowledge enables learners to recognize different categories of words, including lexical words such as nouns, verbs, adjectives, and adverbs. As well as function words, like determiners, particles, and prepositions. A strong vocabulary base helps learners select accurate words and phrases, allowing them to express their thoughts more clearly and effectively during spoken communication.

b- Grammar

Grammatical structures are essential to producing accurate and meaningful speech. They include the rules governing word formation, sentence

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structure, and overall syntactic organization. Learners need to understand how different parts of a sentence such as morphemes, phonemes, words, phrases, and clauses are structured and how they function together to convey meaning. As Ur (1996) emphasizes, mastery of grammar is crucial for learners to build well-formed sentences that are both correct and communicatively effective.

c- Pronunciation

Correct pronunciation involves the “production of sounds, stress patterns, rhythmic structures, and intonation of the language” (Florez, 1999). This means that learners must be able to articulate sounds clearly, apply appropriate stress, maintain natural rhythm, and use proper intonation. Mastering these elements helps learners speak more naturally and be easily understood during communication. Effective pronunciation enhances overall oral fluency and reduces misunderstandings in both academic and everyday interactions.

2- Fluency

Fluency is a key component of speaking skills, particularly in communicative language teaching. According to Skehan, as cited in Thornbury (2000), fluency is defined as the “ability to produce language in real time without undue pausing or hesitation.” In other words, speaking fluently means using the language easily and confidently to express thoughts, ideas, and opinions across a variety of situations. The focus of fluency is not on perfect

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grammatical accuracy, but rather on speaking in a natural, smooth, and comfortable manner.

Richards et al. (1992) explain that fluency is what gives speech a natural and realistic quality. It involves features such as rhythm, intonation, stress, speaking rate, and the use of pauses, interjections, and even interruptions—all of which mirror native-like communication. Therefore, in developing fluency, learners should be encouraged to focus on meaning and context, rather than overly worrying about grammatical correctness. As Thornbury (2000) emphasizes, fluency describes a level of communicative proficiency where learners can speak spontaneously and effectively. This includes the ability to maintain a conversation, respond appropriately, and adapt language use to different social and communicative contexts.

a the ability to produce [...] spoken language with ease

b the ability to speak with a good but not necessarily

perfect command of intonation, vocabulary, and grammar

c the ability to communicate ideas effectively

d the ability to produce continuous speech without causing comprehension difficulties or a breakdown of communication.”

(Richards et al, 1992, p. 204).

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To conclude, both fluency and accuracy are essential components of effective spoken communication in English. While fluency allows learners to express their thoughts naturally and confidently, accuracy ensures that their speech is clear, correct, and appropriate. Striking a balance between the two is key to achieving communicative competence. As highlighted by Skehan (as cited in Thornbury, 2000) and Richards et al. (1992), fluency relates to the rhythm, flow, and spontaneity of speech, whereas accuracy focuses on the correct use of grammar, vocabulary, and pronunciation. In this light, language teaching should aim to integrate both elements, helping learners to speak with ease and precision simultaneously.

IV- Pronunciation as a Component of Speaking Skills

Pronunciation plays a crucial role in the development of effective oral communication skills in English language learning. Accurate pronunciation helps ensure that a speaker's message is clearly understood by the listener. On the other hand, unclear or incorrect pronunciation can lead to miscommunication, even when the speaker has a strong command of grammar and vocabulary. Therefore, pronunciation should be regarded as a central aspect of both language teaching and learning. As Morley (1991) points out, effective pronunciation not only enhances learners' intelligibility but also boosts their confidence and increases their willingness to engage in meaningful communication.

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1- Definition of Pronunciation

Pronunciation is a fundamental aspect of spoken language and effective communication. Cook (1996, as cited in Pourhosein Gilakjani, 2016) defines pronunciation as the process of producing sounds in English, which is developed through sound repetition and the correction of errors. As learners engage in practice, they gradually form new speech habits and overcome challenges, especially those influenced by interference from their first language. Similarly, Yates (2002, as cited in Pourhosein Gilakjani, 2016) emphasizes that pronunciation is not merely about sound production, but about using sounds to convey meaning. These perspectives suggest that pronunciation is not just a mechanical skill but an essential part of second language communication.

Pronunciation is commonly viewed as the arrangement of speech sounds in a way that supports clear and effective communication, both from the speaker's and the listener's perspectives (Paulston & Bruder, 1976). It also refers to the accepted or standard way of articulating words within a given language community (Otlowski, 1998). Furthermore, Richards and Schmidt (2002) define pronunciation as the process of producing specific sounds accurately. These definitions emphasize that pronunciation is not only about how sounds are formed, but also about how those sounds are understood and socially accepted in real communication.

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To sum up, these definitions highlight that pronunciation is not merely a mechanical act of producing sounds, but a key element in achieving mutual understanding through standardized and intelligible speech. It plays a vital role in language learning, as it directly affects a learner's ability to communicate clearly and be understood by others. Therefore, effective pronunciation is essential for successful spoken communication in any second language context.

2- Elements of Pronunciation

Pronunciation consists of several essential elements that contribute to clear and effective speech, including:

- a) **Segmental features:** These refer to the individual sounds of a language, specifically consonants and vowels.
- b) **Stress:** The emphasis placed on certain syllables within words (word stress) or on particular words within sentences (sentence stress).
- c) **Intonation:** The variation of pitch while speaking, which can convey different meanings or emotions.
- d) **Rhythm:** The pattern of stressed and unstressed syllables in speech, giving spoken language its natural flow.
- e) **Connected speech:** The way words are linked or joined together in natural spoken language, affecting pronunciation in fluent speech.

These components work together to help speakers communicate clearly and naturally (Celce-Murcia, Brinton, & Goodwin, 2010).

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To sum up, these principal elements form the foundation of proficient oral communication. Each element plays a distinct role in enhancing intelligibility, fluency, and listener comprehension. Mastery of these features supports meaningful interaction across diverse communicative settings. Therefore, a well-rounded focus on pronunciation is essential in any effective language learning curriculum.

3- The importance of Pronunciation in Speaking Skills

According to Gilbert (2008), pronunciation is more than just producing sounds correctly; it is fundamentally about how well others understand a speaker's speech. Good pronunciation helps build credibility and fosters a stronger connection between the speaker and the listener. Moreover, it enhances the speaker's social presence and influences how they are perceived by others. In many communicative contexts, appropriate pronunciation not only facilitates comprehension but also promotes acceptance and inclusion within the linguistic community. Therefore, mastering pronunciation is essential for effective and confident spoken communication.

V- Factors Influencing Learners' Speaking Abilities

Based on teaching experience, many learners face difficulties expressing their thoughts orally in English. This challenge is often linked to several influential factors that negatively impact the learning process and prevent learners from actively practicing and improving their speaking skills. This issue

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affects even those who possess theoretical knowledge of the language system. Knowing a foreign language goes beyond memorizing rules; it requires the ability to apply that knowledge effectively in real communication. Understanding linguistic theory does not necessarily translate into practical speaking proficiency.

Numerous scholars have investigated the factors influencing speaking performance in a foreign or second language from different perspectives. These factors can be summarized into the following key elements.

1- Age or Maturational Constraints

A significant number of researchers agree that acquiring a foreign or second language, particularly speaking skills at an early age provides learners with a greater chance of reaching advanced proficiency compared to those who begin learning later in life. While developmental stages may be similar, young learners benefit from natural exposure to real-time spoken language and are less affected by social awareness or cultural barriers. Additionally, children's brains are inherently more adaptable and flexible during early development. However, this plasticity gradually decreases over time through a process known as fossilization, where the brain becomes less receptive to new linguistic input (Johnson & Newport, 1989).

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2- Aural Medium

Difficulties in understanding spoken language often lead to challenges in responding appropriately, as listening plays a fundamental role in the development of speaking skills. This is because listening naturally precedes speaking in language acquisition. As Shumin (1997) notes, the transient nature of spoken language along with features such as loosely structured syntax, incomplete sentences, false starts, and frequent use of fillers poses significant challenges for EFL learners. These elements can hinder comprehension and negatively affect learners' ability to develop strong speaking competence.

3- Socio-Cultural Factors

Communication breakdowns often occur when language learners struggle to select contextually appropriate expressions or terms in a foreign or second language. This difficulty frequently arises from the influence of their own cultural norms, which can interfere with accurate language use and interpretation. Additionally, many learners lack proficiency in the nonverbal aspects of communication specific to the target language. Nonverbal cues including gestures, eye contact, and body language can vary significantly across cultures and may lead to miscommunication. As Shumin (1997) notes, effective oral communication in a foreign language requires more than linguistic accuracy; it also demands an understanding of the cultural and paralinguistic conventions that shape meaning in specific contexts.

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4- Affective Factors

Oxford, R. L. (1990) emphasizes that one of the most crucial determinants of success or failure in language learning is the learner's affective domain, which encompasses emotions and feelings. This concept is further elaborated by Johnson and Johnson (1999), who describe "affective" as relating to emotional aspects. These affective factors include emotions, self-esteem, empathy, anxiety, attitude, and motivation, all of which significantly influence learners' ability to acquire and use a new language effectively (Shumin, 1997).

The complexity of learning a foreign or second language significantly influences learners' anxiety levels (Brown, 1994, as cited in Shumin, 1997). Learners may experience inhibition or anxiety due to various factors encountered throughout the educational process, particularly those related to the language itself. Additional variables such as public speaking in front of peers or during language classes, classmates' behavior, learners' performance in comparison to others, assessment situations, and the attitudes of native speakers towards learners also play important roles (Johnson & Johnson, 1999). These affective factors are interconnected and impact learners' speaking abilities, as Shumin (1997, p. 8) explains:

“Sometimes, extreme anxiety occurs when EFL learners become often leads to discouragement (lose of motivation) and a general.

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sense of failure (emotion). Adults, unlike children, are concerned with how they (adult learners) are judged by others. They are very cautious about making errors in what they say, for making errors would be a public display of ignorance, which would be an obvious occasion of "losing face" (loss of self-esteem/confidence that leads to a negative attitude toward speaking in this language).”

The presence of such affective factors can impede EFL learners’ progress in developing speaking skills, often resulting in slow, limited, and inhibited improvement.

To conclude, communication is the central goal of learning English as a foreign or second language, with speaking playing a crucial role in achieving this objective. Within the EFL teaching and learning context, the development of speaking skills requires focused attention and structured instruction. To support learners in becoming proficient English speakers, teachers must implement a variety of instructional practices aimed at building both linguistic competence and confidence. These practices help learners fully engage in classroom interactions and take advantage of speaking opportunities (Parrott, 1993).

Teachers should carefully reflect on the core purposes of teaching spoken English by analyzing its essential components and recognizing the key factors influencing EFL learners’ speaking abilities, as previously discussed. A

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thorough understanding of these aspects, along with regular exposure to meaningful language input and thoughtfully designed speaking tasks, enables educators to develop effective teaching strategies. In other words, a detailed exploration of the elements of speaking, combined with adequate language practice, can guide instruction and progressively support learners in achieving fluency and accuracy in spoken English.

Section Two: The role of Digital Tools in Language Education

I- Introduction:

With the rapid pace of technological development, digital tools have become an integral part of modern education, especially in the teaching of English as a second or foreign language. These tools have helped shift traditional classrooms into more dynamic, interactive spaces where learning can be personalized and more engaging. Teachers now have access to a wide range of resources ,from learning management systems and digital assessment platforms to video conferencing tools and online educational materials, that allow them to better meet learners' diverse needs. When used effectively, these tools can increase learners motivation, encourage active participation, and support language development in ways that feel more connected to the real world. However, the integration of digital tools is not without its challenges.

In light of this context, this section provides a comprehensive review of the literature related to the use of digital tools in English language teaching (ELT).

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It discusses the various digital tools commonly used in ELT, outlining their functions, benefits, and associated challenges. Furthermore, it offers an overview of how these tools contribute to the development of speaking skills and enhance the overall learning experience in both traditional and online environments.

II- Background

In today's era of cultural globalization, English has established itself as a dominant and broadly preferred language for communication, education, and international discourse (Laura-De La Cruz et al., 2022). This global prominence has led to an increasing adoption of English as the medium of instruction, not only in English-speaking nations but also in countries where it is used as a second language (Visaltanachoti et al., 2021). Particularly in developing countries like Indonesia and the Philippines, educational reforms have emphasized the integration of English across various academic levels. This movement is driven by the belief that fluency in English enhances individuals' opportunities in the global job market, which in turn contributes to national socio-economic development and international competitiveness (Maramag-Manalastas & Batang, 2018). Supporting this, a United Nations report noted that a significant number of member states prefer to use English in diplomatic communications (Ortiz, 2013, as cited in Laura-De La Cruz et al., 2022).

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access and engagement, digital tools have also addressed longstanding challenges in education—namely, the lack of stimulating and creative instructional approaches. Traditional teaching methods have often been criticized for failing to maintain learner attention, a concern echoed by Patra et al. (2022). Similarly, Kamarulzaman et al. (2018) highlight that a lack of engaging pedagogies limits students' motivation and active participation. In contrast, integrating technology into the classroom has made English language learning more engaging and relevant, particularly as digital literacy becomes increasingly vital to personal and national development (Mullis et al., 2012).

To meet the demands of 21st-century education, Nahar et al. (2021) stress the importance of instructional strategies that encourage active learning. As educational technologies evolve, it becomes imperative for educators to stay informed and equipped to implement these tools effectively. The quality of instruction—highlighted by Batjo and Ambotang (2019) as a key factor in educational success—depends largely on how well teachers can align their use of technology with pedagogical principles and content knowledge. Mucundanyi and Woodley (2021) further support this view, asserting that a comprehensive understanding of pedagogy, subject matter, and technology is essential for optimizing student learning. Avelino and Ismail (2021) propose the use of a theoretical framework based on the Technology Acceptance Model to evaluate

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ESL teachers' preparedness for integrating Fourth Industrial Revolution technologies in language teaching.

Digital tools also empower students by enabling more personalized and self-directed learning experiences. Learners can now access a wide range of online resources that cater to individual learning styles and needs (Mishra et al., 2020). As traditional instructional approaches are increasingly seen as outdated, educators are encouraged to adopt innovative, technology-supported strategies that meet the evolving expectations of modern education (Nahar et al., 2021).

III- Definition of digital tools:

In today's educational landscape, a wide variety of innovative and engaging strategies are being developed through the integration of digital tools and resources. These advancements are fundamentally transforming how teaching and learning occur by incorporating technology into every aspect of the educational process. Digital tools are broadly defined as technological devices and applications that facilitate learning through electronic means. These encompass physical hardware such as computers, tablets, and smartphones, in addition to a vast array of software applications and online platforms specifically designed to foster interactive and meaningful educational experiences (Walker & White, 2013). By utilizing these tools, educators are

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able to create more engaging and student-centered learning environments that support various learning styles and preferences.

Furthermore, Beatty (2010) expands on this definition by describing digital tools as any form of electronic technology that supports teaching and learning activities. This includes the use of multimedia content, interactive educational software, online communication platforms, and mobile learning applications. Beatty emphasizes that the primary objective of incorporating these tools into education is to enhance both the effectiveness of instruction and the depth of student engagement. Digital tools are meant to provide flexible and adaptive learning opportunities, making education more accessible and personalized for diverse learners.

According to Freeman et al. (2017), digital tools are “technological resources that are used to support teaching and learning by providing access to content, facilitating communication, and enabling interaction between instructors and learners.” Similarly, Selwyn (2012) defines digital tools as components of educational technology that enable the transformation of traditional instructional practices into more dynamic, student-centered, and interactive experiences.

In the context of language education, digital tools specifically refer to technologies that assist in language acquisition, practice, and assessment such

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as language learning apps (e.g., Duolingo, Quizlet), multimedia content, virtual reality environments, and speech recognition systems. González-Lloret and Ortega (2014) emphasize that digital tools in language learning offer opportunities for authentic communication, collaborative tasks, and contextualized input that are often difficult to achieve through traditional means. These tools are considered crucial in 21st-century education because they support flexibility, personalization, and accessibility, making learning more engaging and aligned with digital-age competencies (Hockly & Dudeney, 2014).

In conclusion, digital tools and educational resources represent an extensive and dynamic range of technological solutions aimed at improving the quality of both teaching and learning. These tools empower educators and students alike by offering innovative ways to interact with educational material, collaborate with peers, and access a wealth of information. As a result, they contribute significantly to creating more effective, inclusive, and enriched learning experiences that align with the demands of modern education.

IV- Types of Digital Tools

In today's dynamic educational environment, digital tools play a crucial role in supporting meaningful learning experiences. Far beyond their technical functions, these tools help educators connect with learners in more interactive,

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inclusive, and personalized ways .By understanding the various types of digital tools available, educators can make informed decisions that enhance learning outcomes and foster a more connected and responsive educational landscape.

1- Learning Management Systems (LMS)

Learning Management Systems (LMS) have become a vital component of modern education, offering students continuous access to course materials and learning resources. These platforms also enable educators to track learner progress, provide personalized feedback, and foster more interactive and engaging learning experiences. During the COVID-19 pandemic, LMS platforms, such as EdX, played a crucial role in ensuring educational continuity and expanding access to free learning resources worldwide. As digital education has become increasingly central, LMS platforms have proven to be indispensable tools for supporting remote and mixed learning environments (Goldin et al., 2022).

2- Video Conferencing Tools

Video conferencing tools such as Zoom and Microsoft Teams became essential for maintaining communication between educators and learners, particularly in remote learning environments. These platforms enabled real-time interaction through video, audio, and chat features, allowing participants to engage in discussions, share resources, and collaborate virtually. However,

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despite their advantages, these tools also contributed to the emergence of "Zoom fatigue"—a form of mental and physical exhaustion associated with extended screen time. This phenomenon has led educators to explore strategies that enhance student engagement while reducing cognitive overload (Windram et al., 2023; Alhlak et al., 2013).

3- Digital Assessment Tools

Digital assessment tools support educators in efficiently designing and grading exams, often providing a range of question formats and instant feedback. These platforms frequently include security features such as browser lockdowns and webcam monitoring to maintain academic integrity. With access to real-time data on student performance, educators can adapt their teaching strategies and offer timely, personalized feedback to enhance learning outcomes (Goldin et al., 2022).

4- Cloud-Based Data Storage

Cloud-based storage systems, such as Google Drive and OneDrive, have transformed how educational materials are stored, shared, and accessed. These platforms provide secure, flexible, and scalable storage solutions, enabling both students and educators to retrieve and manage files from virtually anywhere. In addition to basic storage functions, many cloud systems offer advanced features

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such as virtual machine hosting, further extending their utility in educational settings (Li & Tang, 2023; Udvaros & Czakóová, 2021).

5. Collaborative Document Tools

Collaborative document tools, such as Google Docs and Microsoft Office 365, facilitate real-time collaboration by allowing multiple users to edit the same document simultaneously. These platforms enhance group work efficiency through features like live updates, version tracking, and in-document commenting, which streamline communication, accelerate decision-making, and boost overall productivity (Tang et al., 2022)

6. Game-Based Learning Tools

Game-based learning tools incorporate elements of video games—such as challenges, repetition, and achievement—to enhance student engagement with educational content. Platforms like Kahoot! are particularly effective in developing skills such as critical thinking, communication, and decision-making, as they promote active participation and friendly competition in a motivating, interactive environment (Hung et al., 2012).

7. Digital Libraries and Databases

Digital libraries and databases, such as Google Books and Project Gutenberg, provide easy access to a wide range of academic resources,

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including e-books, journals, videos, and audio files. These platforms support both online and offline access, enabling students to conduct research and broaden their knowledge using readily available educational content (Alordiah et al., 2023).

8. Virtual and Remote Laboratories

Virtual and remote laboratories bring hands-on science learning into the digital space, allowing learners to explore experiments and develop practical skills without needing access to a physical lab. Tools like Labster and PhET make this experience more accessible by offering safe, affordable ways to simulate complex experiments. This is especially useful in subjects like chemistry and physics, where traditional labs can be costly, time-consuming, or even dangerous (Heradio, de la Torre, & Dormido, 2016; Trentsios, Wolf, & Frerich, 2020).

9. Digital Whiteboards

Digital whiteboards are online tools designed to replicate the familiar experience of traditional classroom whiteboards. Platforms such as Miro and Jamboard allow users to draw, write, and insert images during virtual meetings, enabling real-time collaboration in virtual classrooms or group settings. These tools promote active participation, enhancing student engagement and supporting dynamic group discussions. As a result, students can interact more

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meaningfully with both the content and their peers (Goldin, Rauch, Pacher, & Woschank, 2022).

10. Digital Notebooks

Digital notebooks, such as OneNote and Evernote, support educators in organizing class activities, assignments, and learner's performance records in a centralized and structured format. These tools contribute to greater transparency and traceability, enabling both teachers and students to monitor academic progress more effectively. As a result, they help foster a more organized and efficient classroom environment (Zain, 2021).

11. Virtual Teaching and Webinars

With the rise of virtual teaching during the COVID-19 pandemic, platforms such as Zoom and Microsoft Teams became essential for delivering webinars, lectures, and training sessions. However, the frequent and prolonged use of these platforms has led to what is now commonly referred to as "Zoom fatigue"—a condition characterized by mental and physical exhaustion resulting from extended virtual interactions. To mitigate these effects, strategies such as promoting active participation and fostering a sense of community have been recommended, as they can enhance engagement and reduce cognitive strain on learners (Windram, Neal, & McMahon, 2023).

12. YouTube for Educational Content

YouTube has emerged as a prominent platform for video-based learning, with users consuming billions of hours of content each day. While its accessibility and global reach make it a valuable tool for informal learning, there remains a notable gap in academic research evaluating its effectiveness in formal educational contexts. Despite this, as (Pires, Masanet, Tomasena, and Scolari 2022) highlight, YouTube presents significant opportunities for enhancing learner engagement outside traditional classroom environments. These and other digital tools have transformed the educational landscape by enabling more flexible, accessible, and interactive learning experiences.

V- Benefits of Digital Tools in Classroom

We live in a digital age where technology has become an essential part of daily life. As Cohen et al. (2010) noted, technology is now deeply embedded in people's routines, and access to digital tools is more widespread than ever before. This rapid growth in technology has significantly shaped the way English as a Foreign Language (EFL) is taught and learned. Dudeney and Hockly (2007) attribute this shift largely to improved internet connectivity and the rise of a generation of learners who are comfortable with digital environments.

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Digital tools offer both teachers and learners new ways to enhance the language learning experience. According to (Cutter 2015, as cited in O’Hara et al., 2013), these tools help learners connect classroom learning with real-life situations. They also strengthen language and literacy skills by making learning more meaningful and relevant. Similarly, (Mohamed 2014) highlights that Information and Communication Technology (ICT) bridges the gap between school and the outside world by providing authentic resources that improve language skills. Digital tools empower learners with greater independence and motivation, encouraging more active participation in class.

Furthermore (Genc, 2009) emphasizes the value of digital tools in providing access to authentic, high-quality learning materials that support the development of reading, writing, speaking, and listening skills. In addition to their accessibility, these tools are often cost-effective and help increase interest in distance education. However, (Genc ,2009) also reminds us that technology is meant to support teaching—not replace the teacher. Educators must be actively involved in using digital tools to create a more effective and engaging learning environment.

Various studies have confirmed the positive role of digital tools in EFL education. These tools make language learning more interactive by introducing features like virtual simulations, interactive tasks, and language-based games. These methods make learning more enjoyable and effective for learners. In

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addition, digital platforms allow for personalized learning by analyzing each learner's performance and providing tailored feedback, which helps address individual learning needs (Harsha Vardhini, 2023).

One key advantage of digital tools is the ability to offer immediate feedback through automated grading and real-time assessments. This quick feedback loop enables learners to identify and correct mistakes early, supporting a process of continuous improvement. Learners also benefit from access to a wide variety of online materials, such as videos, e-books, language applications, and interactive platforms, that cater to different learning preferences and skill levels. These tools also develop digital literacy skills, which are essential in today's technology-driven world (Harsha Vardhini, 2023).

Despite these benefits, several challenges must also be considered. Digital tools can occasionally distract learners, leading to reduced focus during online sessions. Therefore, it is essential for teachers to implement strategies that sustain learner engagement. Moreover, the success of digital learning is highly dependent on reliable internet connectivity and access to appropriate devices. Without these, disparities in learning opportunities may arise. Another concern involves over-reliance on technology, which can limit valuable face-to-face interactions—an essential component of effective language acquisition (Harsha Vardhini, 2023).

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In conclusion, digital tools have significantly enhanced the teaching and learning of English by enabling more flexible and personalized learning experiences. However, their use should be intentional and complemented by traditional instructional methods. When applied effectively, these tools can play a vital role in supporting learners' development of strong language skills (Harsha Vardhini, 2023).

VI- Challenges in the Integration of Digital Tools in English Language Teaching

The integration of digital tools in English language teaching (ELT) has been widely recognised for its potential to enhance pedagogical practices and learner engagement. However, a growing body of literature highlights a range of challenges that hinder its effective implementation in English classrooms. One of the most frequently cited issues is the lack of training and professional knowledge among English teachers regarding the effective use of digital tools. Several studies have pointed out that teachers often possess limited technical and pedagogical knowledge necessary for the meaningful integration of digital technologies into language instruction (Abugohar et al., 2019; Djiwandono, 2019). (Chuah and Kabilan 2021), for example, emphasised the need for specialised training in tools such as chatbots, which are often underutilised due to insufficient teacher preparation. This lack of expertise restricts teachers' ability to design suitable activities, provide adequate guidance, and fully exploit

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the pedagogical affordances of such tools (Al-Mubireek, 2020; Önalán & Kurt, 2020; Nguyen, 2022).

Technical difficulties also represent a major barrier to the effective use of digital tools in ELT. Poor internet connectivity, outdated or insufficient hardware, lack of access to necessary software, and minimal technical support were all reported as obstacles that not only disrupt classroom instruction but also discourage teachers from incorporating technology into their lessons (Canals & Al-Rawashdeh, 2019; Zhang & Yu, 2022; Nguyen, 2022). As pointed out by Ashely-Welbeck and Vlachopoulos (2020), such disruptions undermine the continuity and engagement of lessons, ultimately impeding learning outcomes.

Another critical issue involves the lack of institutional support and coherent policy frameworks. The absence of structured support mechanisms, including clear institutional guidelines and continuous professional development, has been shown to negatively impact teachers' willingness and ability to adopt digital tools in their teaching (Abugohar et al., 2019; Al-Mubireek, 2020; Vien et al., 2019). Teachers often require not only technical infrastructure but also administrative and pedagogical support tailored to their specific needs (Önalán & Kurt, 2020; Garib, 2022; Meirovitz et al., 2022). Without such institutional backing, efforts to sustain the integration of digital technologies are likely to falter.

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Time constraints further compound these issues. As highlighted by Djiwandono (2019) and Dhillon and Murray (2022), teachers often struggle to find time within their already demanding schedules to develop digital literacy, explore new teaching tools, and adapt their methodologies. This often results in a reliance on traditional, more time-efficient approaches to teaching, even if they are less engaging or effective.

Moreover, student-related challenges present an additional layer of complexity. Learners' familiarity with conventional teaching methods, low digital literacy, and reduced motivation in online settings create difficulties for teachers attempting to implement technology-enhanced language learning (Garib, 2022; Souheyla, 2022; Kim Anh, 2022). These factors can lead to decreased learner engagement and hinder the overall effectiveness of digital instruction.

The disconnect between theoretical understanding and the practical application of digital tools is another major concern. Meirovitz et al. (2022) underscored that while some teachers may possess basic knowledge of digital tools, they often lack the pedagogical insight required to integrate them meaningfully into their instructional design. This concern is echoed by Kim Anh (2022), who noted that the absence of digital and pedagogical integration skills prevents teachers from creating learning activities that align with language learning objectives.

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In addition, resource limitations, including lack of appropriate digital content, insufficient technical support, and the absence of ministry-level guidelines, pose significant challenges to teachers (Foltyn & Polok, 2022; Nguyen, 2022). The unavailability of these essential components can inhibit teachers' ability to evaluate and implement digital tools effectively.

Finally, external environmental factors, such as poor internet connectivity, disruptive home environments, and parental interference, have been found to negatively affect the success of online and technology-mediated learning (Keshtiarast et al., 2022; Souheyla, 2022; Kim Anh, 2022). These contextual factors can impede communication, reduce learner participation, and compromise the overall learning experience.

In conclusion, while there is widespread recognition of the potential benefits of digital tools in ELT, the literature clearly demonstrates that numerous challenges persist. These include insufficient training, technical and infrastructural constraints, lack of institutional and policy support, time limitations, learner readiness issues, and external disruptions. Addressing these challenges requires a collaborative effort among teachers, educational institutions, and policymakers to ensure the provision of ongoing training, adequate resources, clear guidelines, and supportive teaching environments (Sim & Ismail, 2023)

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Section Three: Integrating Digital Tools to Enhance Speaking and Pronunciation Skills in EFL Learners

I- Introduction:

Digital technologies have emerged as valuable tools in supporting language instruction. Platforms such as Duolingo, ELSA Speak, Zoom, and YouTube offer innovative features including personalized feedback, speech recognition, gamification, and flexible access to authentic language input. These tools not only assist in improving learners' pronunciation and fluency but also contribute to motivation, engagement, and autonomous learning.

Despite their benefits, the successful integration of digital tools into speaking instruction depends on various factors, including teacher readiness, learner motivation, and technological infrastructure. This section explores the effectiveness of selected digital platforms in enhancing English speaking skills, focusing on their pedagogical potential, learner impact, and the challenges involved in their classroom implementation.

II- Effectiveness of Digital Tools in Enhancing Speaking Skills

Many researchers argue that digital tools can enhance learners' learning through personalized feedback, repeated practice, and interactive features that are often missing in traditional classrooms. In pronunciation training, these

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tools can show learners how closely their speech matches native pronunciation, helping them improve accuracy and fluency.

Nevertheless, some studies emphasize that the success of these tools depends on how well they are integrated into the educational system, learner motivation, and access to technological infrastructure. With the evolution of multimedia, internet resources, and innovations like Computer-Assisted Language Learning (CALL), English language education has become more interactive and learner-centered. As noted by the American Council on the Teaching of Foreign Languages (ACTFL), tools such as tablets, mobile devices, and interactive whiteboards now play an essential role in modern language classrooms. Learners are increasingly using everyday digital communication texting, calling, emailing to build language proficiency.

A range of studies supports the positive impact of digital tools on pronunciation learning. For instance, Al-Qudah (2012) found that Jordanian learners improved significantly with computer-assisted instruction. Similarly, CALL software enhanced the pronunciation of Kenyan students (Ong'onda & Muindi, 2016), and Taiwanese learners showed measurable progress using MyET software (Liu & Hung, 2016). Iranian students using web-based learning tools outperformed peers in traditional settings (Rahnavard & Heidar, 2017), and Indonesian students using PowToon experienced gains in both motivation and pronunciation (Syafitri et al., 2018).

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Digital integration has also empowered educators by simplifying lesson planning, enhancing content delivery, and providing access to diverse teaching resources (Kale, 2018; Tan et al., 2018). However, Tan et al. (2018) and Yagci (2015) observed that many teachers use these tools superficially due to a lack of deeper pedagogical training. Kale (2018) stressed that successful use requires aligning tools with instructional goals rather than limiting them to basic tasks.

Flewitt et al. (2015) emphasized the importance of combining technical skills with teaching strategies to boost literacy. Hutchison and Colwell (2015) highlighted the need for further research into the role of apps and digital platforms in promoting active learning. Spooner et al. (2015) demonstrated that iPads could support comprehension in learner with learning disabilities through interactive apps.

Alavi et al. (2016) and Chu et al. (2015) advocated for teacher training in using devices like tablets and computers to support both learning and accessibility. They emphasized adopting approaches aligned with learners' cognitive preferences, such as visual learning, to deepen understanding. Without active learner engagement, the benefits of digital tools may not be fully realized (Alavi et al., 2016).

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According to James (2018), effective communication, like any form of art, requires both skill and intention. In language education, technologies such as CALL systems, mobile applications, and AI-powered tools have enhanced pronunciation training by providing real-time feedback and personalized learning experiences. Speech recognition technologies, as discussed by Oladipupo and Adebayo (2016), help learners independently identify and correct errors, fostering consistent practice and self-directed learning

To sum up, using technology in teaching speaking brings a number of positive results on the part of the learners. Goh (2016) stated that technology in teaching speaking develops language fluency, accuracy and complexity. As well, Akkara, Anumula and Mallampalli (2020) stated that using technology in teaching speaking improves students' speaking fluency and coherence, lexical resource, grammatical range and accuracy and pronunciation. More so, technology in teaching speaking improves students' speaking skills and employing such has a positive impact on learners speaking skills, fluency, and pronunciation. It also overcomes students' speaking difficulty (Hamad, Metwally & Alfaruque,

III- The effectiveness of Digital Platforms on Enhancing Speaking Skills: An analysis of Duolingo, ELSA Speak, Zoom, and YouTube in Language Learning"

In recent years, digital platforms have played a Pivotal role in transforming language education, particularly in the development of speaking skills. Platforms such as Duolingo, ELSA Speak, Zoom, and YouTube offer innovative approaches to pronunciation practice, learner engagement, and pedagogical support. This study analyzes the effectiveness of these platforms in improving oral communication among language learners.

1- Enhancing Speaking Skills Through Digital Pronunciation Platforms

The digital pronunciation platforms, including Duolingo, Zoom, ELSA Speak, and YouTube, have been identified as critical instruments in the enhancement of students' oral communication competencies. Duolingo, for instance, provided methodical exercises aimed at enriching vocabulary, refining pronunciation, and fostering fluency. As reported by Nur Hanifah & Harsul Lisan (2024), Rahmawati (2024) indicated that learners engaging with Duolingo exhibited significant advancements in their speaking proficiencies, demonstrating consistent progress in both pronunciation and grammatical accuracy. ELSA Speak, which is engineered to deliver instantaneous feedback on pronunciation, facilitated students' concentration on aspects such as

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intonation, stress, and precise articulation. Anggraini (2022) discovered that participants utilizing ELSA Speak experienced systematic enhancements over three learning cycles, with scores escalating from an average of 70 in the initial cycle to 80 in the concluding cycle. Zoom was recognized for its interactive functionalities, including breakout rooms, which enabled learners to practice speaking in smaller collaborative groups. Fitriani Guci & Siahaan (2021) demonstrated that students utilizing Zoom outperformed those in traditional classroom settings, attributing this to Zoom's more engaging and cooperative design. YouTube contributed an additional dimension by granting access to a wide array of video content, including debates and instructional tutorials. Wahyuni & Utami (2021) underscored that students who engaged in speaking practice through YouTube videos not only bolstered their confidence but also enhanced their pronunciation and fluency by emulating native speakers. Furthermore, these platforms provided learners with the flexibility to access content at their convenience, thereby rendering the educational process more adaptable to individual preferences.

2- Learner Engagement and Motivation

A primary advantage of utilizing technology-enhanced language learning (TELL) tools was the elevation of motivation and engagement among learners. Duolingo, through its gamified framework, sustained learner interest by incentivizing progress with points and badges, as noted by Nur Hanifah &

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Harsul Lisan (2024). Similarly, ELSA Speak energized students by delivering personalized feedback and monitoring their advancement, thus rendering the learning experience more interactive and pleasurable (Anggraini, 2022). Zoom facilitated collaborative learning opportunities that encouraged active participation and aided learners in overcoming their apprehension about speaking. Risma (2021) observed that activities such as role-playing within Zoom breakout rooms promoted engagement and provided a supportive setting for speaking practice. Concurrently, YouTube afforded students the chance to simultaneously practice listening and speaking, thereby maintaining their engagement throughout the learning process (Wahyuni & Utami, 2021). The integration of visual and auditory stimuli on YouTube significantly enhanced their capacity to imitate and comprehend linguistic subtleties effectively.

3- Pedagogical Advantages and Innovations

The incorporation of digital tools into pedagogical strategies introduced novel methodologies for the enhancement of speaking skills. Zoom facilitated real-time interactions, which permitted educators to conduct live discussions and activities (Fitriani Guci & Siahaan, 2021). ELSA Speak concentrated on the improvement of pronunciation through targeted exercises, rendering it particularly beneficial for students facing challenges with specific phonemes or intonation patterns (Anggraini, 2022). YouTube supported self-directed learning by enabling learners to select videos aligned with their interests and

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practice speaking by mimicking native speakers. This adaptability catered to diverse learning styles and fostered autonomy in learning (Wahyuni & Utami, 2021). Duolingo, through its meticulously organized curriculum, established a robust framework for learners to systematically develop their oral communication competencies (Rahmawati, 2024). By integrating these resources, educators were able to develop a flexible pedagogical approach that effectively addressed the needs of learners at both foundational and advanced levels of speaking proficiency."

4- Challenges and Limitations of Using Digital Pronunciation Tools

While digital pronunciation tools offer significant advantages in language learning, several limitations hinder their effectiveness in certain contexts. One of the primary challenges is limited access to stable internet connections and adequate digital devices, particularly in under-resourced areas, which restricts equitable learning opportunities (Iberahim et al., 2023). Additionally, extended use of synchronous platforms like Zoom can contribute to learner fatigue, diminishing motivation and concentration during prolonged sessions (Putri & Suryaman, 2022). The suitability of specific tools also varies by proficiency level; for example, Duolingo has been found to be more effective for novice learners but less beneficial for advanced users who require spontaneous, real-time speaking practice (Jiang et al., 2021). Moreover, applications such as ELSA Speak depend heavily on environmental conditions, including access to

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quiet settings and high-quality microphones, to deliver accurate pronunciation feedback (Anggraini, 2022). Addressing these limitations necessitates a balanced instructional approach that integrates digital resources with traditional teaching methods. Furthermore, equipping both educators and learners with the necessary training to use these tools effectively is essential for maximizing their educational potential.

Conclusion

The results of the research show that digital pronunciation tools have become a useful and effective way to teach speaking skills. These tools serve as an extra resource for teachers, going beyond traditional lecturing methods. Instead of relying on outdated approaches such as chalk-and-board instruction, teachers now use modern technology as a key part of their teaching. Digital tools offer a more creative and engaging way to teach and learn languages, helping both teachers and students. They allow teachers to share some responsibility for learning with the learners, encouraging learners to take a more active role in their progress. As technology continues to grow, so do the opportunities for new and effective methods in language teaching. These tools help improve learners' listening and speaking skills by offering interactive tasks, real-life audio materials, and personal feedback. Teachers can design more dynamic lessons that support different learning styles and needs, giving students the tools to become confident and skilled speakers.

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Building on this foundation, the next chapter will discuss the practical side of the study, including the research methods, data collection, and an analysis of learners' experiences with the chosen digital platforms. This will help to better understand how these tools work in real classrooms and how they can support future English language teaching.



Chapter Two:

**Research Methodology,
Results, and Discussion**

Chapter Two: Research Methodology, Results, and Discussion**I- Introduction:**

This chapter outlines the methodology and procedures employed to conduct the present study, which investigates the role of digital pronunciation tools in enhancing English speaking skills among first-year middle school learners in M'sila. The primary aim of this research is to examine whether the use of these tools can contribute to improvements in learners' pronunciation, fluency, and overall speaking performance within a classroom context.

To achieve this objective, the chapter presents the research design, provides a description of the participants, and details the data collection instruments, which include a pre-test, a post-test, and a teachers' questionnaire. Additionally, the chapter explains the procedures followed throughout the study and the methods used for analyzing the collected data in order to address the research questions.

All procedures were carried out in accordance with ethical standards, ensuring the protection of participants' rights, privacy, and informed consent throughout the research process.

Section One: Description of the Research Methodology

This section describes the overall design of the study, which aims to explore the use of digital tools in developing students' speaking skills. It explains the type of research adopted and the reasons for choosing it, as well as how the

study was structured to collect and analyze data effectively. The goal is to ensure that the research process is clear, logical, and appropriate for addressing the main questions of the study.

II- Research Design:

This study adopts a quasi-experimental design, selected due to practical constraints within the school setting. This approach enables the researcher to observe measurable changes in learners' speaking performance resulting from the integration of digital pronunciation tools into regular English lessons.

Specifically, the research employs a one-group pre-test/post-test design, meaning that the same group of participants was assessed both before and after the intervention, without the inclusion of a control group. This design allows for the comparison of learners' performance over time to evaluate the impact of the digital tools.

While quasi-experimental designs do not fully control for all extraneous variables that may influence the outcomes, they are widely accepted in educational research, particularly in real-world classroom contexts where implementing strict experimental controls is often impractical.

III- Research Setting and Participants

The study was conducted in two public middle schools: Aissou Salah and Genfoud Mohamed, both located in rural areas of M'sila Province, Algeria. These schools are part of the national education system and follow the standard English language curriculum prescribed for first-year middle school learners.

The setting was chosen due to its limited access to advanced technological resources, which reflects the broader challenges faced by rural schools in Algeria.

Two categories of participants were involved in the study: teachers and learners.

First, the learners' sample consisted of 140 first-year middle school pupils from four intact classes. These students were between 11 and 14 years old and had been studying English as a foreign language for less than one year. All participants took part in both the pre-test and the post-test. The selection aimed to represent a typical group of rural learners with limited exposure to spoken English outside the classroom.

Second, the teachers' sample included 30 middle school English teachers from various schools in both rural and urban areas of M'sila. They were selected using purposive sampling, based on their experience in teaching English and their willingness to provide feedback through a structured questionnaire. These teachers contributed valuable qualitative data regarding their experiences, challenges, and perspectives on the use of digital pronunciation tools in teaching speaking skills.

IV- Instruments of Data Collection

In order to obtain data aligned with the aims of the study , Three key instruments were utilized : a pre-test , a post-test and a teacher questionnaire .

1- Pre-test and Post-test

The pre-test and post-test were developed to assess students' speaking skills before and after the use of digital pronunciation tools. Both tests focused on key components of oral proficiency, including pronunciation accuracy, fluency, and intelligibility. The speaking tasks were aligned with the learners' curriculum and language level and included word and sentence reading, repetition exercises, and guided speaking prompts.

The same format was used for both the pre-test and the post-test to ensure consistency in assessment. The pre-test was administered prior to the implementation of the digital tools, while the post-test took place at the end of the intervention period. Each learner's performance was evaluated using a speaking rubric adapted from established language assessment frameworks. Scores were assigned based on clarity, pronunciation, and fluency.

2- Teacher Questionnaire

The teacher questionnaire was designed to collect qualitative data on the use of digital pronunciation tools in classroom settings. It consisted of 18 questions, combining multiple-choice items, closed-ended, and open-ended questions. The questionnaire covered several key themes, including access to digital resources, frequency of use, perceived benefits, challenges, and suggestions for improvement.

A total of 30 English teachers responded to the questionnaire. Their feedback offered valuable insights into the practical application of digital tools

in speaking instruction, their effectiveness in enhancing learners' speaking abilities, and the challenges faced in implementing such technologies in both rural and urban school contexts.

V- The procedures of the Study

The study was conducted over a period of 3 months and followed three main stages: the pre-test, the intervention using selected digital pronunciation tools, and the post-test. All procedures took place during regular English language classes in two middle schools in M'sila.

a. Pre-test Phase: After completing the first trimester using traditional teaching methods, a pre-test was administered to assess learners' speaking skills. The test consisted of three tasks: reading words aloud, repeating modeled sentences, and responding to simple oral prompts. All responses were audio-recorded and later evaluated using a standardized speaking rubric focusing on pronunciation, fluency, intonation, and overall clarity. The purpose of the pre-test was to establish a baseline for measuring the impact of the digital tools introduced during the intervention phase.

b. Intervention Phase: During the second trimester, learners participated in an intervention program where two digital pronunciation tools—YouGlish and ELSA Speak—were integrated into classroom instruction to support the development of their speaking skills.

- **YouGlish:** This tool was used to expose learners to authentic English pronunciation through video clips featuring native speakers. Students engaged

in listening and imitation activities, focusing on word stress, intonation, and sentence rhythm.

- **ELSA Speak:** This mobile application, powered by artificial intelligence, provided learners with personalized pronunciation feedback. learners completed daily exercises involving word and sentence repetition and received real-time corrections to improve their pronunciation and fluency.

Throughout the intervention, the teacher guided the learners through each activity, ensuring that the digital tools were used effectively and aligned with the speaking objectives outlined in the curriculum. The activities were specifically designed to reinforce key pronunciation features such as vowel clarity, consonant articulation, and sentence intonation. Learners engaged in a combination of individual and group speaking practice using the selected digital tools, allowing for both personalized feedback and peer-supported learning. This structured guidance helped learners make meaningful connections between digital practice and real-world communication in English.

c. Post-test Phase: In the final week of the study, the same speaking test used during the pre-test phase was re-administered as a post-test under identical conditions. Learners' spoken responses were audio-recorded and evaluated using the same standardized rubric applied in the pre-test, focusing on pronunciation, fluency, intonation, and overall clarity. This approach ensured consistency in assessment and enabled a direct comparison between pre-test

and post-test results, allowing the researcher to evaluate the effectiveness of the digital pronunciation tools on learners' speaking performance.

At the same time, a structured questionnaire was distributed to 30 English teachers working in middle schools across various areas of M'sila. The aim was to collect their insights on the integration of digital pronunciation tools into their teaching practices, as well as to identify the challenges they encountered. The teachers' responses provided valuable qualitative data that complemented the learners' test results, offering a broader perspective on the practicality and impact of using digital tools to support speaking instruction in diverse classroom settings.

VI- Data Analysis Procedures

The data collected in this study were analyzed using both quantitative and qualitative methods to provide a comprehensive understanding of the impact of digital pronunciation tools on learners' speaking skills, as well as to explore teachers' perceptions of their implementation. The analysis procedures were carefully designed to ensure the validity and reliability of the findings.

The pre-test and post-test results were analyzed quantitatively to measure the degree of improvement in learners' speaking performance following the intervention. The test scores were entered into the Statistical Package for the Social Sciences (SPSS). Descriptive statistics—including means and standard deviations—were calculated to compare overall learner performance before and after the use of the digital tools. This analysis allowed the researcher to assess

the effectiveness of the intervention, which involved the use of YouGlish and ELSA Speak AI.

The data obtained from the teacher questionnaire were analyzed using a combination of descriptive statistics and qualitative content analysis. Closed-ended responses were tabulated and presented in terms of frequencies and percentages, providing a general overview of teacher experiences. Open-ended responses were examined thematically to identify recurring patterns and key themes, such as perceived benefits, classroom challenges, and suggestions for improving the integration of digital pronunciation tools.

This mixed-methods approach to data analysis offered a well-rounded perspective, combining measurable outcomes from learner assessments with rich qualitative insights from teachers. Together, these findings contributed to a deeper understanding of how digital tools can support the development of English speaking skills in middle school classrooms.

1- Validity and Reliability of the Instruments

To ensure the accuracy and trustworthiness of the research findings, special attention was given to the validity and reliability of the instruments used in this study.

Content validity was established by designing the pre-test and post-test in alignment with the speaking objectives outlined in the national English curriculum for middle school learners. The test tasks were selected to reflect authentic speaking situations and were designed to assess key components of

speaking proficiency, including pronunciation, fluency, and intonation. To further ensure validity, the test items and scoring rubric were reviewed by two experienced English language teachers and two university instructors. Their feedback helped confirm that the tasks were appropriate in terms of language level, clarity, and pedagogical relevance for first-year middle school learners.

Similarly, the teacher questionnaire was developed to align with the research objectives. The items were carefully examined for clarity, neutrality, and relevance to the use of digital pronunciation tools, particularly within rural educational contexts.

To ensure reliability, consistent procedures were followed during both the pre-test and post-test administration. The speaking tests were conducted under similar classroom conditions, with clear instructions provided to all participants. For the teacher questionnaire, a pilot version was distributed to a small group of English teachers to assess the clarity and reliability of the items. Feedback from this pilot helped refine the final version of the questionnaire.

By addressing both validity and reliability, the study aimed to ensure that the instruments accurately measured the intended constructs and produced consistent results across participants.

2- Ethical Considerations

All necessary ethical principles were carefully followed to ensure the protection of participants and the integrity of the study. Prior to the

commencement of data collection, official authorization was obtained from the school administration.

Informed consent was obtained from all participants involved in the study. Teachers who completed the questionnaire were informed of the purpose of the research and were assured that their responses would remain anonymous and would be used solely for academic purposes. Learners also participated voluntarily, and their involvement posed no risk to their academic standing or well-being.

The study was designed to avoid any form of harm or disruption to the normal learning process. The intervention was fully integrated into the existing English curriculum and classroom activities, ensuring a natural and supportive learning environment.

By adhering to ethical research practices, the study aimed to uphold the principles of responsible academic inquiry while fostering a respectful and safe environment for all participants.

In conclusion, this chapter detailed the research methodology adopted to explore the impact of digital pronunciation tools on the speaking skills of first-year middle school learners in M'sila. A quasi-experimental design was selected to accommodate the real-world classroom context, allowing for the assessment of learners' performance before and after the integration of digital tools. The instruments—including pre-tests, post-tests, and a teacher questionnaire—were carefully designed and validated to ensure the reliability

and accuracy of the data collected. Ethical standards were also upheld throughout the research process to protect participants' rights and maintain academic integrity.

The combination of quantitative and qualitative approaches provided a comprehensive framework for evaluating the effectiveness of the intervention and understanding teachers' perspectives. The following chapter presents the results of the study and offers a detailed discussion of the findings in light of the research questions and related literature.

Section Two: Result and Discussion

I- Pre-test and Post-Test Data Analysis :

This part presents the pre-test and post-test results of four first-year middle school classes from two schools in M'sila. The data reflect learners' speaking performance before and after using digital pronunciation tools. Descriptive statistics were used to compare scores and assess improvements in pronunciation, fluency, and intonation, providing insight into the effectiveness of the intervention.

1- Group H1:

	N	Minimum	Maximum	Moyenne	Ecart type
H1P	35	3.00	14.00	7.6286	3.35266
H1PO	35	5.00	15.00	9.0000	3.50630
N valide (listwise)	35				

The descriptive results indicate that the mean score on the pre-test (H1P) was 7.63, with scores ranging from 3.00 to 14.00 and a standard deviation of

3.35. Following the intervention, the mean post-test score (H1PO) increased to 9.00, with a slightly wider range (5.00 to 15.00) and a standard deviation of 3.51. This improvement suggests that learners in this group benefitted positively from the digital instruction, rEFlecting a general enhancement in their speaking skills.

2- Group R1 :

	N	Minimum	Maximum	Moyenne	Ecart type
R1P	35	2.00	14.00	6.6857	3.42801
R1PO	35	4.00	15.00	8.7143	3.49429
N valide (listwise)	35				

In this group, the average pre-test score (R1P) was 6,69, with values spanning from 2.00 to 14.00 and a standard deviation of 3.43. After the digital pronunciation intervention, the mean score (R1PO) rose to 8.71, and scores ranged between 4.00 and 15.00, with a standard deviation of 3.49. The results show a clear improvement in performance, especially considering this group started with the lowest average. It may be inferred that these learners, possibly having more difficulties at the outset, responded particularly well to the tools used.

3- Group H2:

	N	Minimum	Maximum	Moyenne	Ecart type
H2P	35	4.00	14.00	7.8286	3.27635
H2PO	35	5.00	15.00	9.3714	3.56524
N valide (listwise)	35				

The mean score before the use of digital tools (H2P) was 7.83, with a score range of 4.00 to 14.00 and a standard deviation of 3.28. Post-intervention result

(H2PO) revealed an increase to an average of 9,37, with a range of 5.00 to 15.00 and a standard deviation of 3.57. The upward trend in both the mean and maximum values indicates that learners in this group demonstrated notable progress, likely due to increased exposure to authentic pronunciation tools.

4- Group R2:

Finally, group R2 its pre-test means score (R2P) is 7.50, ranging from 2.00 to 14.00, and a standard deviation of 3,71. Its post-test result (R2PO) exhibited a marked improvement, with a mean score of 9.28, a slightly expanded range (5.00 to 15.00) and a standard deviation of 4.03. These figures reinforce the positive influence of the intervention and indicate that the tools used were accessible and engaging enough to impact learners in rural settings effectively.

A close examination of the pre-test and post-test scores reveals a consistent pattern of improvement that indicates the integration of digital pronunciation tools had a positive influence on learners' speaking performance. While each group demonstrated gains, the extent and nature of the progress varied slightly, reflecting differences in learners' starting points, classroom contexts and possibly their engagement with the tools provided.

When we compare the data, we affirm that while the degree of progress differed slightly, all four groups experienced measurable development in their speaking performance. These variations likely reflect the complex interplay between learners' prior competence, their access to and familiarity with technology, and their responsiveness to the features of the digital tools

employed. The results underscore the flexible utility of pronunciation-focused applications in fostering oral language development among middle school learners across diverse educational settings.

Overall, the descriptive data reveal consistent improvements in all four groups after the implementation of digital pronunciation tools. The increases in average scores and the preservation of moderate standard deviations suggest that learners not only progressed but did so in relatively uniform manner across the classrooms. The rise in post-test scores across rural groups further supports the argument that these tools can bridge the exposure gap between urban and rural learners, offering equal opportunities for oral language improvement. These findings align with earlier research that emphasizes the value of digital tools in enhancing learners' speaking skills in a second language, particularly in terms of improving pronunciation, fluency, and self-confidence. They also highlighted the need to incorporate accessible and practical digital resources into language instruction, even in schools with limited resources.

II- Teachers Questionnaire Data Analysis

1. This part presents the analysis of the data collected through the teacher questionnaire. The aim is to gain insights into teachers' qualifications, experiences, the access to technology, and their views on the use of digital pronunciation tools in teaching English speaking skills. The responses help to understand the current practices, challenges, and the potential for integrating such tools in middle schools.

1- Administration of the Questionnaire

This questionnaire is directed to middle school teachers of English . The teachers' questionnaires were administered to the teachers through online meetings.

2- Description of the Teachers' Questionnaire

The teachers' questionnaire aims to investigate the teachers' perceptions towards the integration of digital pronunciation tools in language learning and the extent to which it affects learners' speaking and listening abilities. It encompasses different types of questions, ranging from multiple-choice questions to open-ended questions and yes or no questions. The questionnaire is composed of eighteen questions.

3- Analysis and Discussion of the Main Finding of the Teachers' Questionnaire

Question One: Name and place of work

The responses of this question indicate that the participating teachers work in various middle schools. across different places in M'sila, province. This diversity in school settings provides a broader perspective on the availability and use of digital tools. It also adds richness to the data by rEFlecting a range of teaching conditions and resource availability within the same regional context.

Question Two: Qualifications

1. Qualification :

- License
 - Master
 - Magister / Doctorate
- Other : _____

Options	Effective	Percentage
License	15	50%
Master	13	43%
magister/doctorate	2	7%
	30	100%

Table 1: Teachers' Qualifications

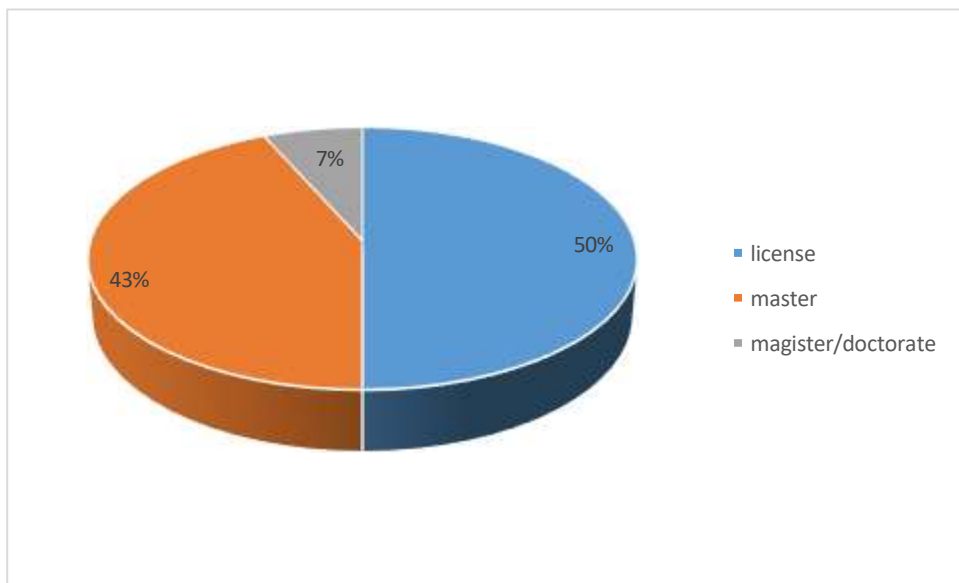


Figure 1: Teachers' Qualifications

The results show that 50% of teachers hold a license degree , while 43% have a Master's degree . Only 7% possess a Magister or Doctorate . This indicates that most participants have basic or advanced academic training, which may support their ability to use digital tools in teaching. However, the

low number of highly advanced degrees suggests limited access to further academic development in the area.

Question 3 : Teaching Experience

Years of English teaching experience:

- Less than 5 years
- 5–10 years
- More than 10 years

Options	Effective	Percentage
less than 5 years	9	30%
5-10 years	10	33%
more than 10 years	11	37%
	30	100%

Table 2: Teaching Experience

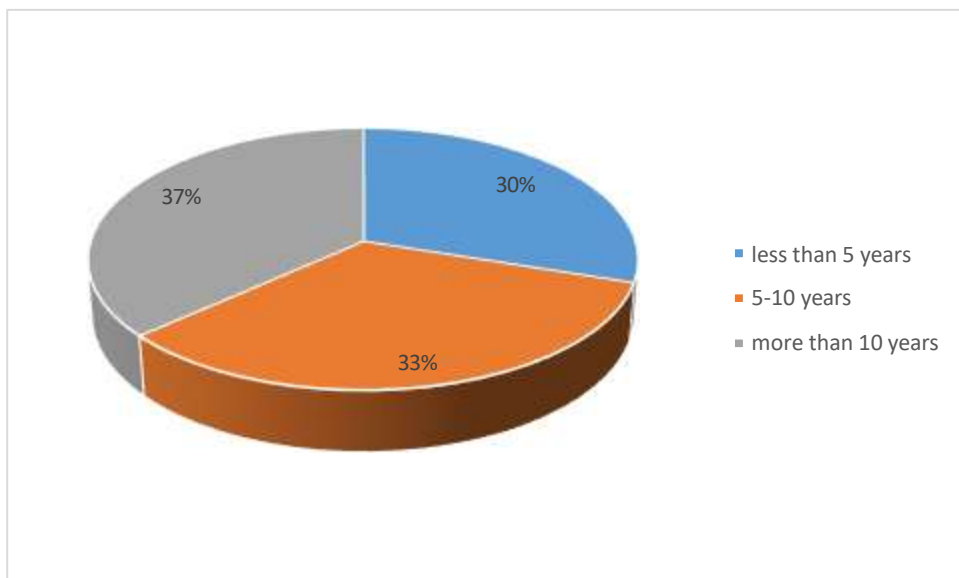


Figure 2: Teaching Experience

The table presents the teaching experience of the 30 participating teachers. the results show that 30% (9 teachers) have less than 5 years, 33% (teachers) have been teaching for 5 to 10 years and 37% (11 teachers) have more than 10 years of teaching experience. This distribution reveals a balanced range of experience levels among participants, with a slight majority having over a decade of teaching. This diversity supports a broader understanding of how different levels of professional experience shape teachers' views on the integration of digital pronunciation tools.

Question 4: Do you work in:

- Urban area
- Rural area

<input type="radio"/> Options	Effective	Percentage
urban area	17	57%
rural area	13	43%
	30	100%

Table 3: Work Area

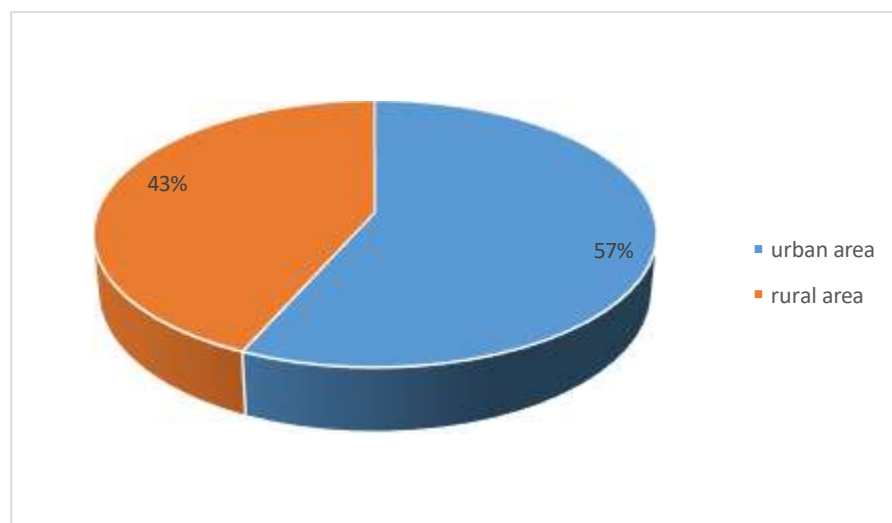


Figure 3: Work Area

The responses collected from 30 teachers indicate the distribution of their workplace locations, 57% (17 teachers) work in urban areas and 43 % (13 teachers) work in rural areas. This distribution suggests that the sample includes a mix of perspectives from both urban and rural educational settings. It helps assess the accessibility and applicability of digital pronunciation tools in both urban and rural areas.

Question 5 : Have you received training in ICT (Information and Communication Technology) or digital language teaching tools?

- Yes
- No

<input type="radio"/> Options	Effective	Percentage
Yes	10	33%
No	20	67%
	30	100%

Table 4: Teachers` ICT Training

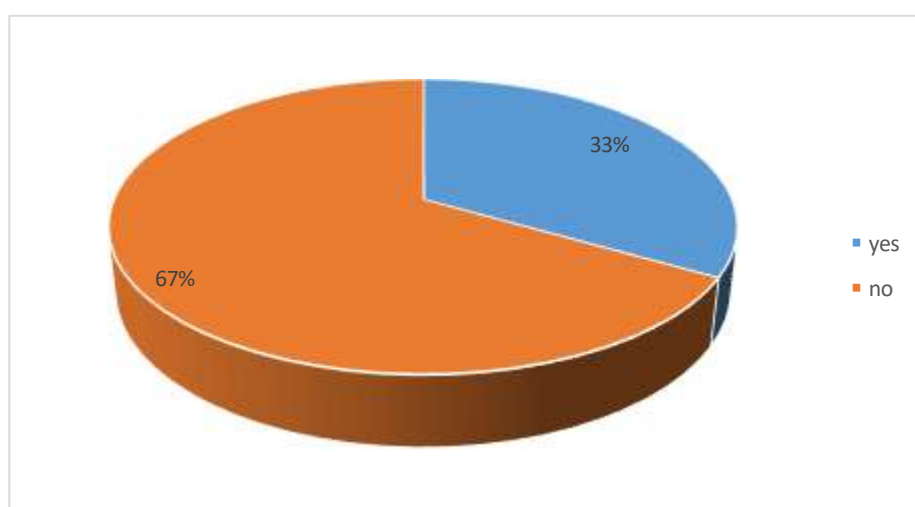


Figure 4: Teachers` ICT Training

This item aimed to determine whether the teachers had received any training related to ICT or digital tools used in language teaching. As shown in the table, only 10 teachers (33%) reported having received such training, while 20 teachers (67%) indicate they had not. These results suggest that the majority of teachers lack formal training in digital instruction, which may hinder the effective integration of technological tools into the language classroom.

Question 6: Do you have access to digital resources in your school (e.g., computers, tablets, smartboards, internet)?

- Yes
- No
- Limited

Options	Effective	Percentage
Yes	9	30%
No	7	23%
Limited	14	47%
	30	100%

Table 5: Access to Digital Resources

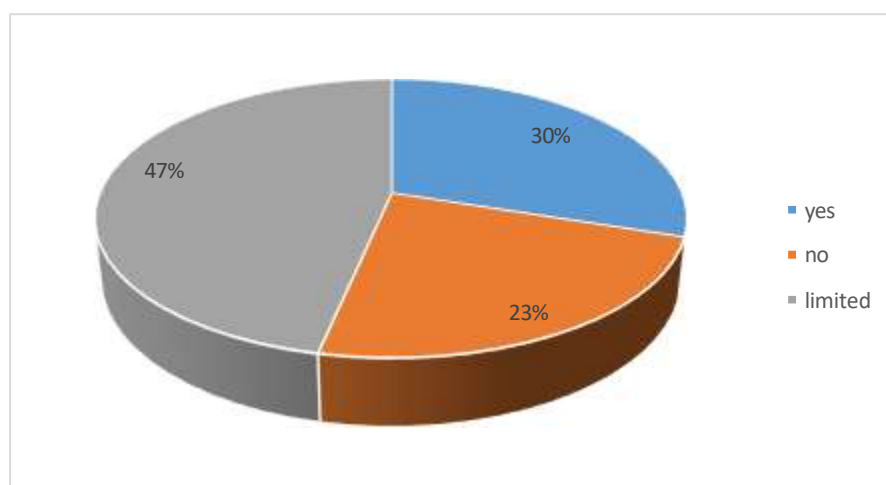


Figure 5: Access to Digital Resources

This question investigated the availability of digital resources in the schools where the teachers work, such as computers, tables, smart boards, and internet access. Out of the 30 teachers surveyed, only 9 teachers (30%) stated they had access to these tools, while 7 teachers (23%) reported no access at all. A large group, 14 teachers (47%), indicated that they had a limited access to such resources. These results reveal a significant disparity in resource availability, with nearly half of the participants reporting restricted access. So, this limitation can pose a considerable challenge to the effective use of digital pronunciation tools in Algerian middle school classrooms.

Question 7: Which types of digital tools do you use in your English classes?

(Select 'all that apply')

- A. Audio pronunciation apps (e.g., Google Translate, Forvo)
- B. Video-based tools (e.g., YouTube, YouGlish)
- C. Mobile apps (e.g., ELSA Speak, Duolingo, BBC Learning English)
- D. Speech recognition tools
- E. Interactive classroom platforms (e.g., Kahoot, Quizlet)

Options	Effective
A	16
B	17
C	4
D	6
E	3

Table 6: Types of Digital Tools Used in English Classes

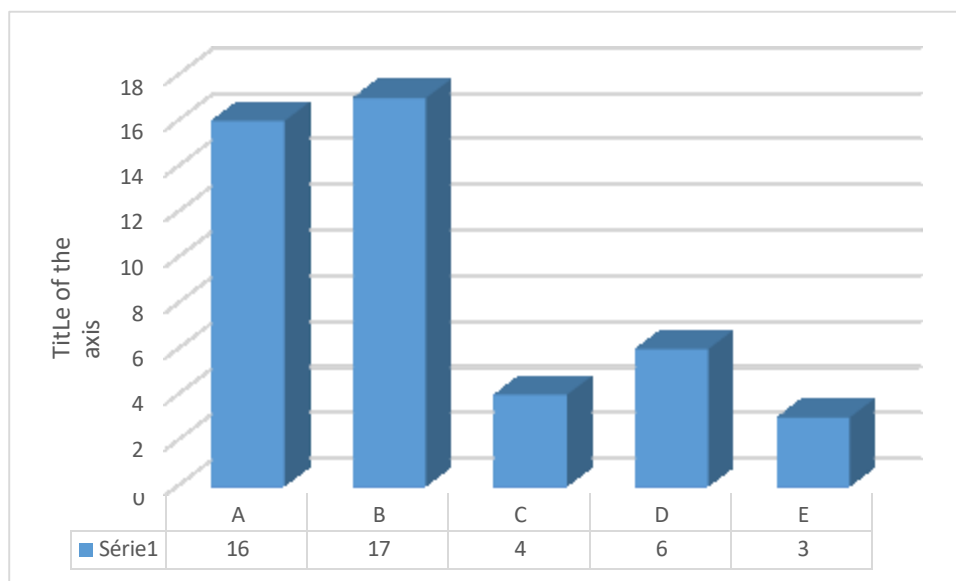


Figure 6: Types of Digital Tools Used in English Classes

This question aimed to explore the range of digital tools used by teachers to support English language instruction. Teachers were allowed to select more than one tool. The result shows varied preferences among 30 participants.

These findings indicate that teachers in M'sila's middle schools primarily rely on familiar, accessible tools like Youtube and Google translate for pronunciation and listening practice. In contrast, more advanced or interactive tools such as mobile apps and speech recognition technologies remain underutilized, possibly due to limited training or technological constraints in middle schools.

Question 8 : How often do you use these tools for teaching speaking or pronunciation?

- Always
- Often
- Sometimes
- Rarely
- Never

<input type="radio"/> Options	Effective	Percentage
always	3	10%
often	1	4%
sometimes*	22	72%
rarely	3	10%
never	1	4%
	30	100%

Table 7: Frequency of Using Digital Tools for Teaching Speaking .

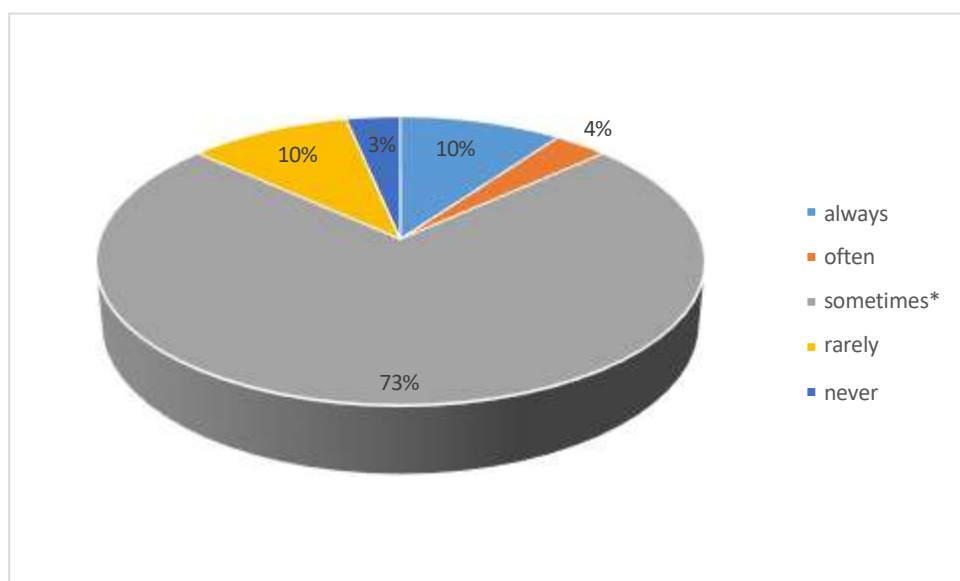


Figure 7: Frequency of Using Digital Tools for Teaching Speaking .

This item investigated how often teachers incorporate digital tools specifically for teaching speaking and pronunciation.

The data shows that the majority of respondents (72%) use digital tools occasionally when teaching speaking and pronunciation. Only a small portion of teachers reported using such tools regularly (i.e., "always" and "often"), accounting for a combined 14%. Meanwhile, another 14% of participants indicated rare or no usage at all.

These findings suggest that while there is some integration of digital tools in oral language instruction, their use remains infrequent and inconsistent. This may reflect factors such as limited resources, lack of training, or low digital literacy among teachers. It highlights the need for more structured support and training to help educators incorporate digital pronunciation tools more effectively and confidently in their classrooms.

Question 9 : Do you integrate pronunciation-focused activities (e.g., repeat-after-me, listen and record, speech imitation)?

- Yes
- No
- Sometimes

Options	Effective	Percentage
Yes	20	67%
No	2	6%
sometimes	8	27%
	30	100%

Table 8: The integration of Pronunciation-Focused Activities

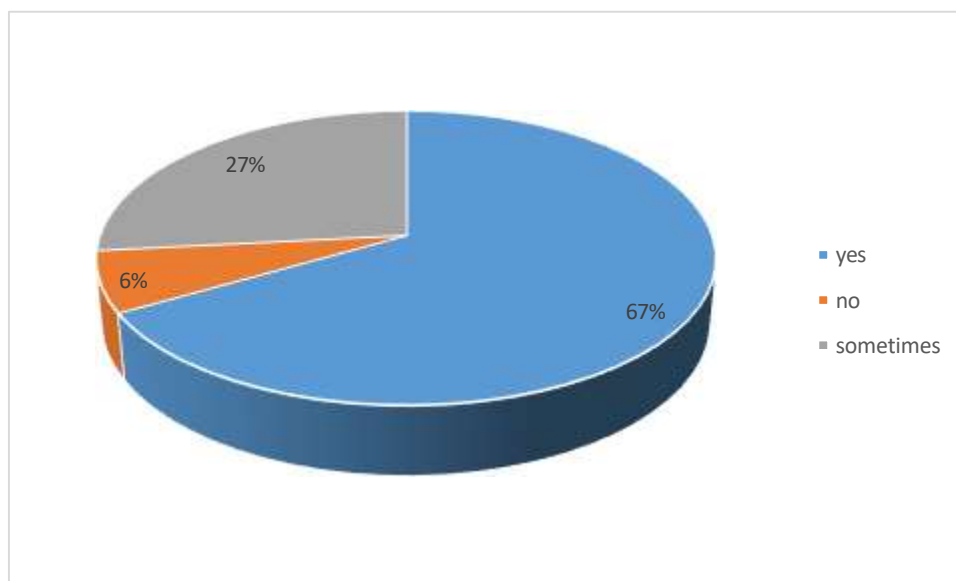


Figure 8: The integration of Pronunciation-Focused Activities

This question aimed to determine whether teachers actively incorporate pronunciation-specific techniques such as "repeat-after-me, listen and record, speech imitation" into their teaching practice. The majority of teachers (67%) integrate such activities while only (6%) do not use them at all. The rest of teachers (27%) reported using them occasionally. When compared to responses from question 8 where only a small number regularly used digital tools for teaching pronunciation. It becomes clear that teachers still rely more on traditional methods.

This preference may be explained by the fact that such techniques are easier to apply, do not require training or devices, and are more familiar to teachers. In contrast, digital tools may seem more complex or less accessible, especially in rural and semi-rural schools where resources and internet access can be limited.

Overall, the findings suggest that while teachers are aware of the importance of pronunciation instruction, they tend to use traditional methods because they are more practical in their teaching context.

Question 10: To what extent do you agree that digital pronunciation tools help improve the following aspects of your students' speaking skills?

(Please rate from 1 = Not at all to 5 = Very significantly)

In term of:

Pronunciation accuracy / Fluency and natural speech flow / Word stress and intonation / Listening and repeating ability / Confidence in speaking aloud / Vocabulary usage in speaking.

Speaking activity	Average rating (1-5)
Speaking skills	4,1
Pronunciation accuracy	4,2
Fluency and natural speech flow	3,1
Word stress and intonation	3,4
Listening and repeating ability	4,2
Confidence in speaking aloud	3,9
Vocabulary usage in speaking .	4,2

Table 9: Usefulness of Digital Tools for Speaking Activities

This question measured the teachers' perceptions of how effective digital pronunciation tools are in enhancing specific aspects of learners' speaking skills. High agreement was found in areas like pronunciation accuracy, listening and repeating, and vocabulary usage, all scoring 4,2, indicating that teachers believe digital tools strongly support these elements of speaking.

Speaking confidence also received a high score of 3.9, showing that most teachers observed improved learner self-assurance when speaking English aloud. The lowest rating was for fluency and natural speech flow (3.1), suggesting that while digital tools help in structured speech tasks, they may be less effective for promoting spontaneous and smooth speech. At last, word stress and intonation scored a moderate 3.4, indicating some benefit but perhaps less consistency or clarity in results.

In general, teachers showed strong positive attitudes toward the use of digital pronunciation tools, especially for improving core pronunciation skills, vocabulary, and confidence, while spontaneous fluency and prosody may require more interactive or extended practice methods.

Question 11 : In your experience, do learners engage more with speaking activities when digital tools are involved?

- Yes, much more
- Somewhat more
- No change
- Less engagement

Options	Effective	Percentage
yes, much more	23	77%
somewhat more	6	20%
less engagement	1	3%
	30	100%

Table 10: Learners Engagement with Speaking Activities when Using Digital Tools .

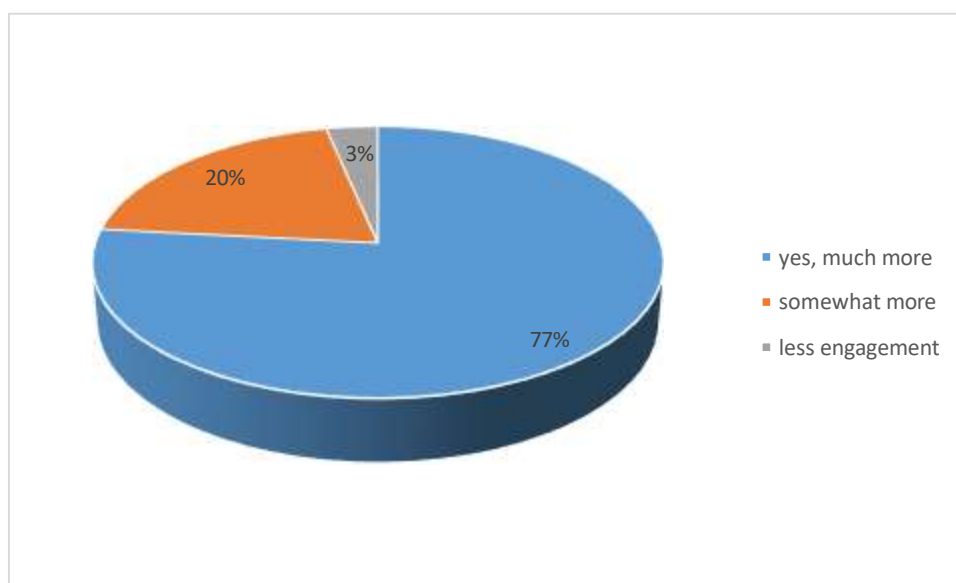


Figure 9: Learners Engagement with Speaking Activities when Using Digital Tools .

This question aimed to explore teachers' perceptions of how digital tools influence learners' engagement in speaking activities. The majority of teachers (77%) reported that learners engage much more in speaking activities when digital tools are used, while another 20% observed a moderate increase in engagement. Notably, none of the participants reported no change, and only one teacher (3%) Perceived a decrease in engagement.

These findings clearly suggest that the use of digital tools has a positive impact on learner participation in speaking tasks. The interactivity, novelty, and multimedia features of digital applications likely contribute to a more engaging learning environment, especially when compared to traditional approaches.

This is also highlights the potential of digital tools to motivate learners, even in under-resourced or rural settings, provided that access and guidance are available.

Question 12: What type of speaking activities do digital tools help with the most? (Select all that apply)

- A. Dialogue practice
- B. Pronunciation drills
- C. Word/sentence repetition
- D. Listening and imitating native speakers
- E. Spontaneous speech or roleplay
- F. Peer assessment or self-recording

Options	Effective
A	19
B	17
C	8
D	15
E	8
F	4

Table 11: Types of Speaking Activities Teachers Found Most Supported by Digital Tools .

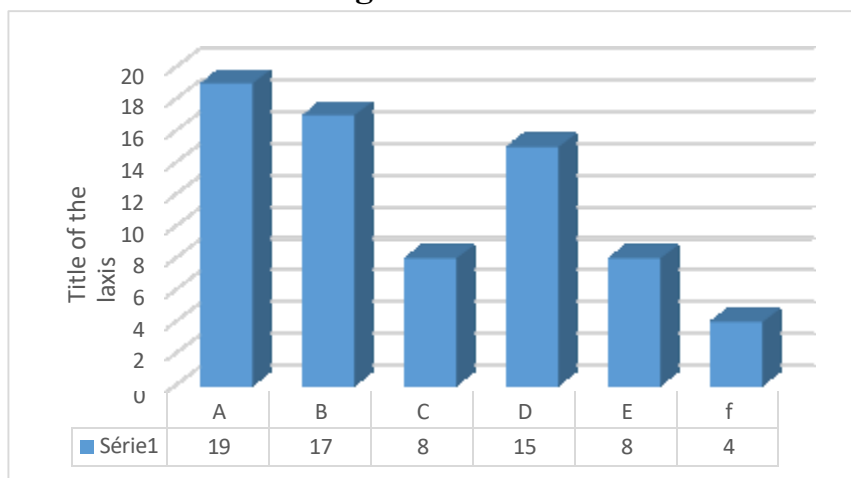


Figure 10: Types of Speaking Activities Teachers Found Most Supported by Digital Tools .

This question aimed to identify which types of speaking activities teachers found most supported by digital tools. According to the data mentioned, the most supported speaking activities through digital tools are dialogue practice (63%) and pronunciation drills (57%). These are followed by listening and imitating native speakers (50 %), which rEFLECTs the value teachers place on exposing learners to authentic pronunciation and intonation.

Less frequently supported activities include word/sentence repetition (27%), spontaneous speaking or role play (27%), and peer/self-assessment (13%). These lower percentages may rEFLECT either limited familiarity with tools that support such functions, or perhaps the teachers' belief that these activities require more face-to-face interaction or guidance.

Overall, the data indicates that digital tools are primarily valued for structured and guided speaking practice, especially those focused on improving articulation, pronunciation, and interactive dialogue.

Question 13 : Have you observed improvement in learners' speaking confidence since using digital tools?

- Yes
- Slightly
- No
- Not applicable

Options	Effective	Percentage
yes	17	57%
No	1	3%
slightly	12	40%
	30	100%

Table 12: Learners' Speaking Confidence After Using Digital Tools .

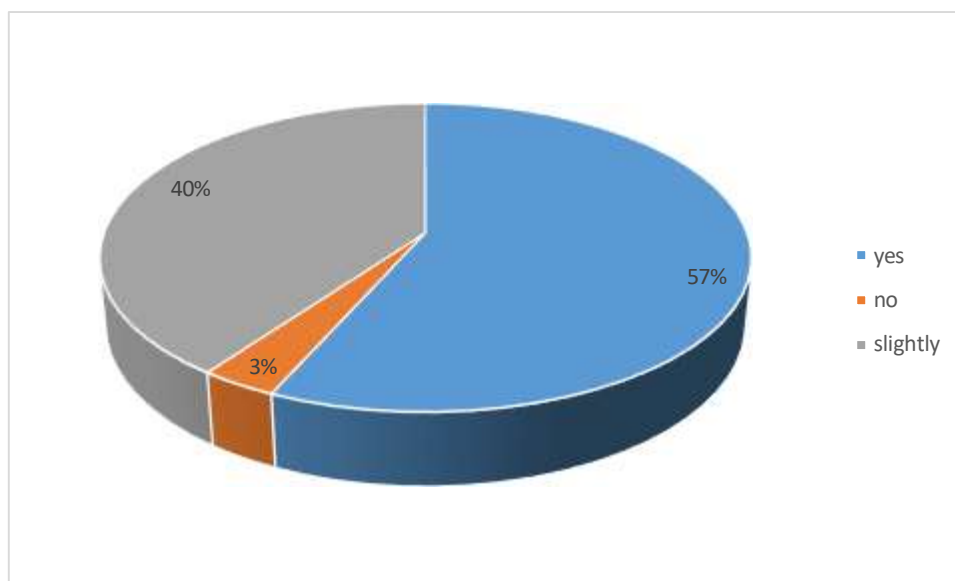


Figure 11: Learners' Speaking Confidence After Using Digital Tools .

This question aimed to explore whether teachers noticed any improvement in learners' speaking confidence after using digital tools. The shown results indicate that the majority of teachers observed positive outcomes, either significant or moderate, in learners' confidence when using digital pronunciation tools. It rEFLeCts the motivational impact of technology in encouraging learners to speak more without fear of mistakes.

Question 14 :What challenges do you face in using digital tools for speaking/pronunciation teaching? (Select all that apply)

- A. Poor internet connectivity
- B. Lack of digital devices
- C. Overcrowded classrooms
- D. Lack of learner motivation
- E. Lack of teacher training
- F. Curriculum constraints
- G. Tools not adapted to student level

Options	Effective
A	16
B	24
C	24
D	4
E	4
F	9
G	3

Table 13: The challenges Teachers Faced in Using Digital Tools .

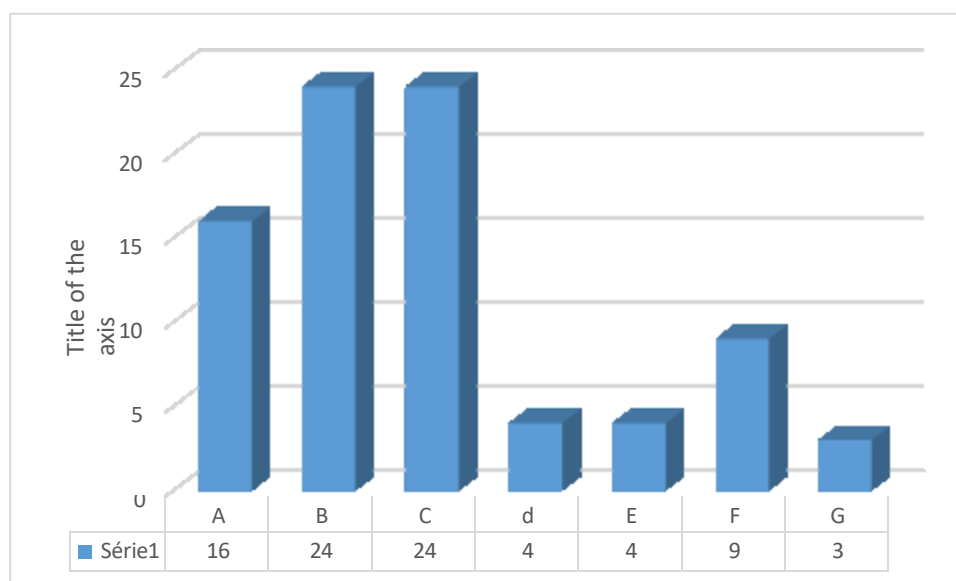


Figure 12: The challenges Teachers Faced in Using Digital Tools .

Question 14 investigated the main challenges teachers face when using digital tools to teach speaking and pronunciation. The responses highlighted several key barriers, the most common issues were the lack of digital devices and overcrowded classrooms, each selected by 24 teachers (80%). Poor internet connectivity was also a major obstacle, reported by 16 teachers (53%). For curriculum constraints were mentioned by 9 teachers (30%), suggesting limited flexibility in lesson planning. Both lack of learner motivation and insufficient teacher training were reported by 4 teachers (13%). Finally, 3 teachers (10%) noted that the digital tools used were not suited to learners' language levels.

These findings suggest that while teachers are generally open to using digital tools, logistical and structural limitations, especially related to resources and class size still pose significant challenges in rural and semi-rural contexts.

Question 15: What type of support would you need to integrate digital pronunciation tools more effectively?

- a. More training/workshops
- b. Access to better tools and resources
- c. Time in the curriculum
- d. Administrative support
- e. Peer collaboration

Options	Effective
A	18
B	21
C	0
D	21
E	7

Table 14: Type of Support Needed to Integrate Digital Tools .

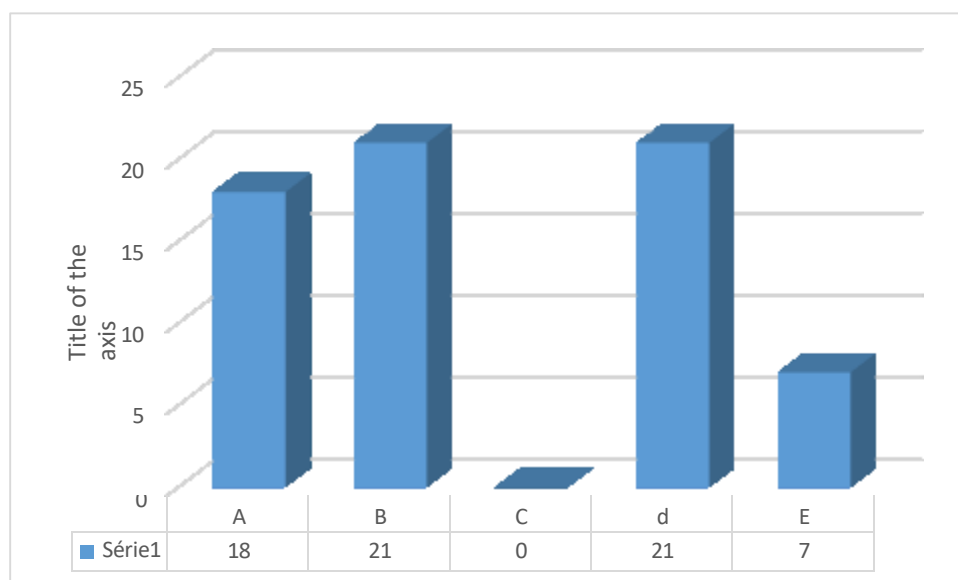


Figure 13: Type of Support Needed to Integrate Digital Tools .

This question explored the types of support teachers feel they need in order to integrate digital pronunciation tools more effectively in their classrooms. The responses revealed several key needs: first, Access to better tools and resources and administrative support were the most selected, each chosen by 21 teachers (70%), showing that both infrastructure and school leadership are essential for effective implementation. Second, Training workshops were also in high demand, with 18 teachers (60%) expressing the need for professional development. After that, Peer collaboration was mentioned by 7 teachers (23%), reflecting interest in sharing experiences and strategies with colleagues. Finally, none of the teachers (0%) selected Time in the curriculum as a challenge, which suggests that teachers may feel digital tools can be integrated within existing lesson structures.

These results highlight that, for most teachers, the problem is not time—but rather a lack of resources, institutional backing, and hands-on training.

Question 16 :In your opinion, how do digital pronunciation tools contribute to the overall development of English speaking skills in middle school pupils?

The responses of this question provided by the teachers identify common themes regarding the perceived benefits of using digital pronunciation tools in developing English speaking skills among middle school learners. The major themes that emerged are as follows:

1. Immediate Feedback and Error Correction:

Many teachers highlighted that instant feedback is one of the key benefits of digital tools. They mentioned that these tools help learners identify and correct their mistakes on the spot, which reinforces proper pronunciation habits.

Examples: - “They provide immediate feedback”.

- “Help learners to recognize and correct their errors”.

- “allowing them to identify and correct pronunciation errors independently”.

2. Improving Pronunciation Accuracy:

Digital tools help achieving the accuracy in pronunciation. Teachers believed that repeated exposure to correct models, especially native speaker examples can improve learners' ability to articulate words more precisely.

Examples: - “Correct pronunciation, fluency...”,

- “Ensures pronunciation accuracy”.

- “pronounce words clearly and correctly”.

- “Articulate words correctly”.

3. Increased Confidence and Motivation:

Several responses mentioned that digital tools boost learners' confidence and make them more engaged and motivated in class. Teachers noticed that when learners feel supported through technology, they are more willing to participate in speaking activities.

Examples: - “Boosting confidence”.

- “Speak loudly ” .
- “Builds their confidence”.
- “Learners will be more motivated and involved”.
- “Develop and improve their English speaking”.

4. Exposure to Native Pronunciation and Authentic Language

A key benefit mentioned was the exposure to authentic English spoken by native speakers. This helps learners develop a more natural speech pattern and better listening comprehension.

Examples: - “Exposed to native speaker resources”.

- “Exposure to authentic accents”.
- “Using YouTube to learn basic lessons”.
- “Listen and imitate native speakers”.

5. Enhanced Fluency and Listening Skills

Teachers also observed that digital tools support the development of fluency and listening, especially through repeated practice and interactive formats.

Examples: - “Fluency and natural speech”.

- “Enhance the listening and speaking skills”.
- “ Repeat and practice”.
- “Fluency, accuracy, and listening comprehension.

6. Technological Integration and Curriculum Relevance

Some teachers emphasized that with the rise of educational technology, digital tools are now essential in the classroom . They suggested that these tools should be regularly integrated into curriculum.

Examples: - “Digital tools are a must now”.

- “Should integrate them very often,”

- “due to the development of technology in education.”

Overall, teachers expressed strong support for digital pronunciation tools. their responses suggest that these tools enhance pronunciation accuracy, increase learner motivation, support fluency and listening. These tools are also seen as valuable in bridging the gap between traditional instruction and modern, technology-enhanced learning.

Question 17: Do you think such tools should be systematically included in rural middle school English classes in M’sila? Why or why not?

The responses to Question 17 show a strong consensus among teachers on the importance of integrating digital pronunciation tools in rural middle school in M’sila. Many emphasized that such tools can link the educational gap between rural and urban learners by providing access to native pronunciation models and authentic language input. Teachers also highlighted that these tools significantly enhance learners’ motivation and engagement, particularly in settings where traditional teaching methods may seem less stimulating. Moreover, the tools were seen as beneficial for teachers themselves, especially

those with limited training in pronunciation instruction, as they support independent learning and provide structured activities. Several respondents stressed the positive impact of digital tools on improving speaking skills, including fluency, accuracy, and learner confidence. Furthermore, the responses reflect a strong belief that digital pronunciation tools are not only useful but necessary for improving English speaking instruction in rural areas.

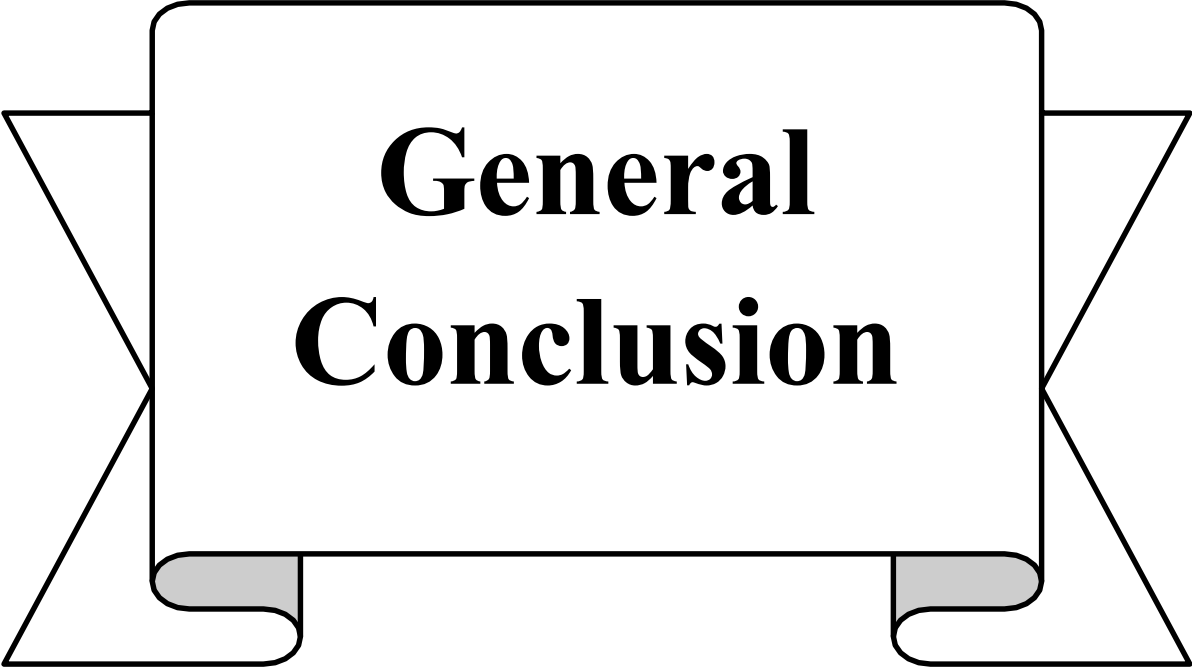
Question 18: What specific tools or methods do you recommend for improving speaking and pronunciation through digital means?

The responses to Question 18 provide a rich and diverse range of digital tools and methods that teachers recommend for improving learners' speaking and pronunciation skills. The most frequently cited tools include ELSA Speak, YouGlish, Duolingo, BBC Learning English, and Google's pronunciation feature. Teachers also suggested using AI tools, voice-enabled applications, and video-based platforms like YouTube to immerse learners in authentic listening and speaking practice.

Teachers also mentioned the importance of methods like virtual exchanges, digital escape rooms, and interactive quizzes, which can motivate learners and make practice more dynamic. Learning through songs, podcasts, and watching subtitled videos was also cited as a way to enhance listening comprehension and pronunciation, especially when followed by repetition and voice recording.

The aim of this chapter is to describe the methodology of the study. It explains the research design, population and sampling, and tools of data collection. It also deals with the analysis and interpretation of data gathered. In this respect, the results have shown that EFL teachers have positive perceptions towards the integration of digital pronunciation tools to enhance learners' level in pronunciation.

The results confirm The combination of both tests' results and teacher feedback highlights the positive role of digital tools can play in improving speaking skills, while also pointing to the need for structural support, training and investment in technology.



**General
Conclusion**

General conclusion

General conclusion

This research aimed to investigate the role of digital pronunciation tools in improving the speaking skills of middle school learners in M'sila . It focused on how these tools can help enhance learners' pronunciation, fluency, confidence and engagement. Moreover, this research aimed at investigating the effective methods and strategies of teaching the speaking skill. The study departed from 3 principle research questions:

The study used both pre-test and post-test with learners, as well as questionnaire for English middle school teachers in the region. The goal was to understand the current situation of speaking instruction, assess the impact of digital tools and highlight teachers' perspectives on their use in the classroom.

The analyzed results that was gathered through the pre/post-tests, and the questionnaire conducted with middle school English teachers in M'sila. The pre-test revealed that learners initially struggled with key aspects of speaking, particularly pronunciation accuracy, fluency and confidence. These challenges confirmed the need for more effective strategies to support speaking skills in the classroom. After the implementation of digital pronunciation tools, the post-test showed noticeable improvements. Learners demonstrated clearer pronunciation, more natural speech patterns, and willingness to speak in the class. This progress indicates that digital tools can positively affect learners' speaking performance when used consistently and with proper guidance.

General conclusion

In addition to the learners' tests, the teachers' questionnaire offered valuable insight into current teaching practices, challenges and perceptions. Most teachers expressed interest in using such tools but faced a lot of barriers as lack of resources, training and internet access especially in rural and semi-rural areas. Despite these obstacles, the majority agreed that digital pronunciation tools enhance learners, motivation, confidence and participation in speaking activities.

The combination of both tests' results and teacher feedback highlights the positive role digital tools can play in improving speaking skills, while also pointing to the need for structural support, training and investment in technology.

This research ends up with a series of practical recommendations for enhancing speaking instruction through digital means.

- Teachers are encouraged to use digital pronunciation tools such as ELSA speak, YouGlish, Google pronunciation, and YouTube videos during oral expression classes. These tools help learners hear and imitate correct pronunciation and improve their speaking fluency.
- Organizing workshops and training sessions for English teachers on how to use digital tools effectively in the classroom.

General conclusion

- Increasing the number of hours dedicated to oral expression. At least four hours per week are recommended to allow enough time for learners to practice speaking and improve their pronunciation
- Teachers should create a supportive classroom atmosphere where learners feel safe to speak and make mistakes. Encouragement and positive feedback help build learners' confidence.
- Schools should provide language labs with internet access, computers, headphones and microphones. This environment supports effective speaking practice using digital tools.
- Learners should be encouraged to use English outside the classroom Through mobile apps, videos, songs, and online communication.
- The English curriculum should be updated to include the use of digital pronunciation tools and speaking activities that match the learners' needs and the modern learning environment.

Despite the valuable insights provided by this research, several limitations should be acknowledged:

- the study was limited to a small sample of middle school learners and teachers in M'sila, which may affect the generalizability of the findings to other regions or educational levels.
- The research focused specifically on the use of digital pronunciation tools to improve speaking skills, without addressing other digital tools or broader language competencies such as listening, interaction, or fluency.

General conclusion

- Time constraints and limited access to advanced technological resources may have influenced the effectiveness of the practical sessions.
- learners' varying levels of motivation and familiarity with digital tools may have impacted their performance.

These limitations underscore the need for future studies involving larger samples, more diverse educational contexts, and a broader exploration of digital learning tools and their effects on language development.



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A graphic featuring a central white rectangular box with rounded corners and a black border. The box is flanked by two triangular shapes pointing outwards, resembling a ribbon or banner. At the bottom of the box, there are two small, shaded, rounded rectangular elements that look like the corners of a book or a scroll. The word "Appendices" is written in a bold, black, serif font in the center of the white box.

Appendices

Appendices

Appendix 01: Teachers' questionnaire

Dear Teacher,

This questionnaire is part of a research project examining the impact of digital pronunciation tools on students' speaking skills. Your insights are highly valuable. All information will remain confidential and used solely for academic purposes.

Section A: Teacher Profile

1. School name (optional):

Qualification:

License

Master

Magister / Doctorate

Other:

2. Years of English teaching experience:

Less than 5 years

5–10 years

More than 10 years

Do you work in:

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Urban area

Rural area

3. Have you received training in ICT (Information and Communication Technology) or digital language teaching tools?

Yes

No

If yes, please specify:.....

Section B: Use of Digital Tools in the Classroom

4. Do you have access to digital resources in your school (e.g., computers, tablets, smartboards, internet)?

Yes

No

Limited

5. Which types of digital tools do you use in your English classes? (Select all that apply)

Audio pronunciation apps (e.g., Google Translate, Forvo)

Video-based tools (e.g., YouTube, YouGlish)

Mobile apps (e.g., ELSA Speak, Duolingo, BBC Learning English)

Speech recognition tools

Interactive classroom platforms (e.g., Kahoot, Quizlet)

○ Other:.....

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6. How often do you use these tools for teaching speaking or pronunciation?

Always

Often

Sometimes

Rarely

Never

7. Do you integrate pronunciation-focused activities (e.g., repeat-after-me, listen and record, speech imitation)?

Yes

No

Sometimes

Section C: Perceived Impact on Speaking Skills

10. To what extent do you agree that digital pronunciation tools help improve the following aspects of your students' speaking skills?

(Please rate from 1 = Not at all to 5 = Very significantly)

Speaking Skill	1	2	3	4	5
Pronunciatioaccuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluency and natural speech flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Word stress and intonation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Listening and repeating ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confidence in speaking aloud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vocabulary usage in speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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11. In your experience, do students engage more with speaking activities when digital tools are involved?

- Yes, much more
- Somewhat more
- No change
- Less engagement

12. What type of speaking activities do digital tools help with the most?

(Select all that apply)

- Dialogue practice
- Pronunciation drills
- Word/sentence repetition
- Listening and imitating native speakers
- Spontaneous speech or roleplay
- Peer assessment or self-recording

13. Have you observed improvement in students' speaking confidence since using digital tools?

- Yes
- Slightly
- No
- Not applicable

Section D: Challenges and Needs

14. What challenges do you face in using digital tools for speaking/pronunciation teaching? (Select all that apply)

- Poor internet connectivity
- Lack of digital devices
- Overcrowded classrooms
- Lack of student motivation
- Lack of teacher training
- Curriculum constraints
- Tools not adapted to student level

Other:

15. What type of support would you need to integrate digital pronunciation tools more effectively?

- More training/workshops
- Access to better tools and resources
- Time in the curriculum
- Administrative support
- Peer collaboration

Other:

Section E: Your reflections and Suggestions

16. In your opinion, how do digital pronunciation tools contribute to the overall development of English speaking skills in middle school pupils?

(Please write your answer below)

.....

17. Do you think such tools should be systematically included in rural middle school English classes in M'sila? Why or why not?

.....

18. What specific tools or methods do you recommend for improving speaking and pronunciation through digital means?

.....

Appendix 02 : Request Letter

[Dilmi Rima / Ben Saoucha Hassina]

[English Department]

[Mohamed Boudiaf university]

[10/01/2025]

To:

[teacher's Full Name]

[Her Position]

[English Department]

[Mohamed Boudiaf University]

Subject: Request for Authorization to Conduct Pre- and Post-Test

Dear Dr./Prof. [teacher's Last Name],

I hope this letter finds you well.

I am writing to respectfully request your authorization to conduct the pre- and post-tests as part of my research entitled "[Exploring The Role of Digital Pronunciation Tools in Improving English Speaking Skills in M'sila's Middle

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Schools]”. These tests are intended to measure participants’ progress and assess the effectiveness of the intervention I will be applying.

Your approval is essential to proceed with this stage of the research. I appreciate your continued support and guidance throughout this project.

Thank you in advance for your time and consideration.

Sincerely,

[Dilmi Rima / Ben Saoucha Hassina]

[Master’s Students]

[Mohamed Boudiaf University]

Appendices

Appendix 03 :PRE-TEST: Speaking Skills Evaluation

Level: 1MS

Duration: 15–20 minutes

Task One : listen and repeat (5pts)

Hello - School - Teacher - Book - listen - Thank you

Task Two : Read the following sentences aloud . (5pts)

1. My name is Ahmed
2. I am from Algeria
3. This is my father
4. He is a fireman
5. I can speak English

Task Three : Answer the following questions orally. (5pts)

1. What is your name ?
2. How old are you ?
3. Where are you from ?
4. What is the job of your father ?
5. Do you have a pet ?

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Appendix 04: POST-TEST: Speaking Skills Evaluation (After Using Digital Pronunciation Tools)

Level: 1MS

Duration: 15–20 minutes

Task One : Listen and repeat (5pts)

Good morning- Copybook - Pupil - Brother - Thirty

Task Two : Read the following sentences (5pts) .

1. I am a pupil
2. My school is big
3. I like my English class .
4. I love my teacher and family
5. Everyday , I go to school .

Task Three : Answer the following questions aloud (5pts) .

1. Can you introduce yourself ?
2. Can you introduce your family?
3. What do you do in your daily activities?
4. Where is your classroom ?
5. Can you describe your school ? .

Appendix 05 :

أولاد دراج في 10\01\2025

بن صوشة حسينة

أستاذة مادة اللغة الإنجليزية بمتوسطة قنفود محمد.

إلى السيد مدير : متوسطة قنفود محمد

بأولاد دراج

الموضوع : طلب إذن بإجراء تجربة ميدانية في إطار إعداد مذكرة التخرج

يشرفني أن أتقدم إلى سيادتكم المحترمة بطلب إذن لإجراء تجربة علمية لفائدة تلاميذ المؤسسة وذلك في إطار إعداد مذكرة تخرج لنيل شهادة الماستر ، تحت عنوان " دور الوسائل الرقمية في تحسين مهارة النطق لدى المتعلمين" ، بمشاركة مجموعة من تلاميذ المتوسطة ام1 و ام2 وذلك بين الفترة الممتدة من 10\01\2025 إلى 18\03\2025 .

وتهدف هذه التجربة إلى إختبار مهارات النطق لدى التلاميذ باستخدام وسائل رقمية حديثة كما أنها ستجرى تحت إشرافي المباشر ، مع احترام كافة القوانين والضوابط المعمول بها داخل المؤسسة وضمن عدم التأثير على السير العادي للدروس والحرص التام على سلامة التلاميذ . كما أتعهد بالحفاظ التام على سرية المعطيات وعدم استخدامها إلا لأغراض البحث العلمي فقط .
في انتظار موافقتكم تقبلوا مني، سيدي المدير، فائق الاحترام والتقدير .

الإمضاء



المخلص:

شهد التقدم السريع في التكنولوجيا الرقمية تأثيرًا كبيرًا على الممارسات التعليمية في جميع أنحاء العالم، لا سيما في مجال تعليم اللغة الإنجليزية كلغة أجنبية (EFL). واستجابة لذلك، دمج المعلمون في هذا المجال بشكل متزايد الأدوات الرقمية ضمن منهجياتهم التعليمية لدعم تنمية مهارات الاستماع والتحدث لدى المتعلمين. تستقصى هذه الدراسة فعالية أدوات النطق الرقمية في تحسين كفاءة التحدث لدى تلاميذ السنة الأولى من التعليم المتوسط في متوسطي "قفود محمد" و"عيسو الصالح" بولاية المسيلة، الجزائر. وتركز

على أدوات مثل ELSA Speak وYouGlish، حيث تفحص تأثيرها على دقة النطق، والطلاقة، وثقة المتعلمين بأنفسهم. تعتمد الدراسة على تصميم شبه تجريبي بمنهج مختلط، يجمع بين التقييمات الكمية (اختبارات قبلية وبعديّة) والبيانات النوعية التي تم جمعها من خلال الملاحظات الصفية واستبيانات المعلمين. وقد أظهرت النتائج تحسناً ملحوظاً في الأداء الشفهي للمتعلمين، إلى جانب زيادة في التفاعل والدافعية. وعبر المعلمون عمومًا عن مواقف إيجابية تجاه استخدام الأدوات الرقمية، وقد تأثرت آراؤهم بعوامل مثل الجاهزية التكنولوجية، والتدريب، والإحساس بفائدة هذه الأدوات. ورغم هذه المكاسب، كشفت الدراسة أيضًا عن تحديات مستمرة مثل محدودية الثقافة الرقمية، ونقص تدفق الإنترنت، وعدم وجود التكوين الكافي. وتؤكد هذه النتائج على إمكانات الأدوات الرقمية في إحداث تحول في تعليم اللغة الإنجليزية كلغة أجنبية، خاصة عند تنفيذها بشكل استراتيجي ومدعوم بأطر مؤسسية. وتختتم الدراسة بتوصيات عملية تهدف إلى تعزيز دمج التكنولوجيا في البيئات التعليمية ذات الموارد المحدودة، من أجل خلق بيئات تعلم لغوي أكثر شمولاً وتفاعلية.

Résumé

Le développement rapide des technologies numériques a profondément influencé les pratiques éducatives à l'échelle mondiale, en particulier dans le domaine de l'enseignement de l'anglais langue étrangère (ALE). En réponse à cette évolution, les enseignants d'ALE ont de plus en plus intégré des outils numériques dans leurs méthodologies pédagogiques afin de soutenir le développement des compétences orales et auditives des apprenants. Cette étude examine l'efficacité des outils numériques de prononciation dans l'amélioration de la compétence orale des élèves de première année moyenne aux écoles Guanfoud Mohamed et Aïssou El Salleh à M'Sila, en Algérie. En se concentrant sur des outils tels que **ELSA Speak** et **YouGlish**, la recherche évalue leur impact sur la précision de la prononciation, la fluidité et la confiance des apprenants. L'étude adopte une méthode mixte quasi-expérimentale, combinant des évaluations quantitatives (pré-tests et post-tests) avec des données qualitatives recueillies par des observations en classe et des questionnaires destinés aux enseignants. Les résultats ont révélé des améliorations mesurables dans la performance orale des élèves, ainsi qu'une motivation et un engagement accrus. Les enseignants ont généralement exprimé des attitudes positives à l'égard de l'utilisation des outils numériques, influencées par des facteurs tels que la préparation technologique, la formation et l'utilité perçue. Malgré ces avancées, l'étude a également mis en évidence des défis persistants, notamment une faible culture numérique, des infrastructures inadéquates et un manque de développement professionnel. Ces résultats soulignent le potentiel des outils numériques à transformer l'enseignement de l'anglais langue étrangère, en particulier lorsqu'ils sont mis en œuvre de manière stratégique et soutenus par des cadres institutionnels. L'étude se conclut par des recommandations pratiques visant à encourager une intégration plus efficace de la technologie dans les établissements éducatifs à ressources limitées, afin de créer des environnements d'apprentissage des langues plus interactifs et inclusifs.

Mots clés : Outils numériques, enseignement de l'anglais langue étrangère, ELSA Speak, enseignement moyen, compétence orale, YouGlish.