

PEOPLES DEMOCRATIC REPUBLIC OF ALGERIA
Ministry of Higher Education and Scientific Research
University of Tlemcen



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Exploring Pedagogical Challenges in English Language Classrooms for Deaf Pupils: A Case Study in the Tlemcen Region primary schools and associations

Dissertation submitted to the department of English as a partial fulfilment of the requirements for Master's degree in Didactics of Foreign Languages

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Academic Year: 2024-2025

Dedication

I dedicate this work to my parents, whose unwavering love and sacrifices have been my foundation throughout this Master's journey. To my family, whose support has been a constant source of strength. To my friends, whose encouragement and belief in me have been invaluable. And to my professors and mentors, whose wisdom and guidance have made this achievement possible

Acknowledgements

In the name of Allah, the Most Gracious, the Most Merciful.

*I would like to express my deepest gratitude and sincere appreciation to **Prof. Lamri Chamseddine**, my supervisor, for his invaluable guidance, unwavering support, and insightful feedback throughout the process of this research. His expertise, patience, and encouragement were instrumental in shaping the direction of this work and bringing it to completion.*

I am also grateful to the board of examiners for their time, efforts, and constructive evaluation of this dissertation. Their remarks and suggestions will remain a valuable source of improvement in my academic journey.

My heartfelt thanks go to all the teachers who participated in this study and shared their experiences so openly and generously. Without their cooperation, this research would not have been possible.

I would also like to extend my sincere appreciation to my family and friends for their moral support, patience, and belief in me throughout this academic endeavor. To all who contributed, directly or indirectly, to the completion of this work thank you.

ABSTRACT

This study investigates some of the challenges and issues in teaching English to deaf pupils in Tlemcen Region's Primary Schools and Associations, with a specific focus on pedagogical, institutional, and learner-related factors. In a system where inclusive practices are still developing, it becomes essential to recognize the specific linguistic and cognitive needs of learners with hearing impairments. Helping deaf pupils goes beyond classroom instruction it reflects a broader commitment to educational equity, social integration, and the human right to access knowledge. By identifying the obstacles that hinder English language acquisition for this group, the present study seeks not only to highlight gaps but also to contribute meaningful insights toward building more inclusive and responsive pedagogical environments. Therefore, this research emphasizes the importance of supporting deaf pupils within the Algerian educational context. Using a qualitative descriptive approach, data were gathered through semi-structured interviews with 15 English language teachers and 10 classroom observations conducted in the Tlemcen region. The analysis, guided by thematic coding, revealed several recurrent issues including inadequate teacher training, lack of institutional support, insufficient visual teaching resources, and communication barriers stemming from inconsistent use of sign language and pupils' weak first language foundations. Despite these challenges, teachers demonstrated strong adaptability, often relying on multimodal strategies and self-developed materials to engage learners. This research contributes to the limited body of literature on deaf education in Algeria and offers actionable recommendations for curriculum reform, teacher training, and policy improvement to enhance English language learning outcomes for deaf pupils. This dissertation aims to investigate some of the challenges faced by English language teachers working with deaf pupils in Algerian inclusive schools. The study uses a triangulated methodology that combines semi-structured interviews with teachers and classroom observations. Interviews provide insight into teachers' experiences, beliefs, and instructional approaches, while observations offer an authentic view of how English is actually taught and received in real-time learning environments. Together, these tools offer a comprehensive picture of the gaps, difficulties, and promising practices in deaf education within EFL classrooms

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List of Acronyms

Acronyms	Full Form
Bi-Bi	Bilingual-Bicultural
EFL	English as a Foreign Language
ESP	English for Specific Purposes
ESL	English as a Second Language
ICT	Information and Communication Technology
LSA	Langue des Signes Algérienne (Algerian Sign Language)
NGO	Non-Governmental Organization

General Introduction

Inclusive education has become a growing priority in global educational discourse, especially with the recognition that all learners, regardless of their physical, cognitive, or linguistic abilities, deserve equitable access to quality instruction. Among the most overlooked groups in foreign language education are deaf and hard-of-hearing pupils. In the Algerian context, efforts to support these learners remain limited, and English language teaching (ELT) practices are often poorly adapted to their needs. Despite national policies promoting inclusive education, there is a lack of training, materials, and strategies specifically tailored for deaf pupils in English classrooms.

In the Algerian EFL setting, the classroom remains the primary context in which pupils are exposed to English. For deaf pupils, however, traditional EFL approaches which rely heavily on oral instruction and audio-visual cues can be insufficient or even exclusionary. Teachers often find themselves unprepared to adapt their methods, while pupils struggle with delayed language exposure, limited input, and inaccessible classroom environments. These barriers can significantly hinder deaf pupils' ability to develop English literacy and communication skills, ultimately affecting their academic performance and future opportunities.

Evaluating the effectiveness of English instruction for deaf pupils requires not only a look at teaching methods, but also at the broader institutional, pedagogical, and learner-based challenges. It is essential to explore how teachers approach inclusive classrooms, what strategies they use, how they perceive their own preparedness, and what resources are available to them. Moreover, it is equally important to observe real classroom practices to assess whether these strategies truly meet the learning needs of deaf pupils. As inclusive education expands, so must our understanding of how it functions in practice particularly for foreign language instruction.

General introduction

Hence, the study seeks to answer the following research questions:

Q1: How do institutional policies and the physical learning environment impact the effectiveness of English language teaching for deaf pupils?

Q2: What are the primary pedagogical challenges faced by teachers in teaching English to deaf pupils, and how do these challenges affect learning outcomes?

Q3: How do cognitive and linguistic factors influence the ability of deaf pupils to learn English as a foreign language, and what strategies can be employed to overcome these challenges?

To address these questions, the study proposes the following hypotheses:

H1: Inadequate institutional policies and non-inclusive classroom environments negatively affect the effectiveness of English language teaching for deaf pupils.

H2: Teachers face pedagogical challenges including lack of training and adapted materials that directly hinder learning outcomes for deaf pupils.

H3: Cognitive and linguistic delays among deaf pupils influence their ability to acquire English, but the use of visual, multimodal, and L1-based strategies can help mitigate these challenges.

The main aim of this descriptive study is to evaluate the effectiveness of current English teaching practices for deaf learners and to identify both systemic and classroom-level solutions that can enhance inclusivity and learning outcomes.

Accordingly, the study pursues the following objectives:

- To analyze teachers' perceptions of their preparedness, strategies, and institutional support in teaching English to deaf pupils.
- To evaluate classroom practices and determine their alignment with the needs of deaf learners.
- To propose pedagogical and structural recommendations for improving English instruction in inclusive educational settings.

General introduction

This dissertation is divided into two main chapters. The first chapter, entitled “English Education for Deaf Pupils”, presents the theoretical background, discussing key issues such as language acquisition in deaf learners, inclusive pedagogy, and the role of L1 and visual strategies. The second chapter, “Fieldwork and Analysis”, provides the practical framework, including the research design, data collection instruments, and analysis of interviews and classroom observations. This chapter concludes with a discussion of the main findings, followed by recommendations and pedagogical implications, limitations of the study, and the final conclusion.

Chapter One

English Education for Deaf Pupils

Introduction

The teaching of English to deaf pupils has garnered growing attention worldwide, yet remains fraught with unique challenges particularly in under-researched contexts like Algeria (Abdelouafi, 2019; Bettayeb, 2020). Deaf learners often face delayed language exposure, resulting in gaps in syntax, vocabulary, and communicative competence compared to hearing peers (Berent, 2001; Prasetya et al., 2023). Moreover, traditional EFL methods usually rely on auditory input and fail to address deaf students' visual-gestural language needs. This literature review examines how deafness shapes language acquisition, surveys educational models from oralist to Total Communication and Bilingual-Bicultural approaches and evaluates their effectiveness in fostering English proficiency. It also considers emerging multimodal and technological supports that leverage visual aids, sign language, and digital tools to create more inclusive classrooms (Ristiani, 2018; Hasyim & Suyanto, 2023). Finally, the review explores debates around the role of first language (L1) in English learning, weighing evidence that sign language can both scaffold literacy and, if misapplied, impede phonological development (Bettayeb, 2020; Berent, 2001). By synthesizing these perspectives, this chapter establishes a conceptual foundation and highlights gaps especially within the Algerian setting that will inform the study's methodology and analysis of real-world pedagogical practices.

1.1 Deafness and Education

Understanding deafness in education requires more than recognizing a sensory difference; it calls for a comprehensive view of how pupils with hearing impairments experience language and learning. In classrooms, deaf pupils face not only communication barriers but also systemic limitations in curriculum design, teacher training, and visual adaptation of instruction (Berent, 2001; Prasetya et al.,

2023). These factors affect their ability to participate fully and equally in language learning environments.

In Algeria, efforts toward inclusion are ongoing but remain limited by outdated approaches and insufficient resources (Bettayeb, 2020). While special education institutions exist, mainstream schools often lack the tools and pedagogical flexibility to support deaf pupils effectively. According to Ristiani (2018), inclusive education may fail to support all learners if it does not incorporate specific adjustments that address their linguistic and cognitive needs.

An inclusive framework must center on access: visual strategies, sign language, teacher awareness, and curricular flexibility. These are not extrasthey are necessities for equitable education. To support deaf pupils in English classrooms, teachers must move beyond traditional methods and adopt practices that respect diverse modes of communication and learning.

1.1.1 Degrees of Hearing Loss

Deafness is commonly defined as a partial or complete inability to hear, which can affect an individual's capacity to acquire and use spoken language. In the educational context, it is essential to differentiate between levels of hearing impairment, as these distinctions influence both communication strategies and pedagogical approaches. The World Health Organization (as cited in Khasawneh, 2017) classifies hearing loss into four main degrees: mild, moderate, severe, and profound. Each category reflects a specific range of auditory threshold loss, which determines the degree of access a pupil may have to oral language without amplification.

Mild hearing loss (26–40 dB) typically allows for conversational speech to be heard in quiet settings, though some high-frequency sounds may be missed. Moderate hearing loss (41–60 dB) makes it difficult to follow normal conversations without hearing aids. Severe hearing loss (61–80 dB) and profound hearing loss (81+ dB) significantly reduce or eliminate the perception of speech, even with

assistive devices. In many educational systems, pupils with severe or profound hearing loss are categorized as "deaf" and often require specialized instruction (Abdelouafi, 2019).

However, definitions of deafness vary depending on the lens through which it is viewed. The medical model focuses on the auditory deficiency and aims to "correct" hearing through devices or medical intervention. In contrast, the cultural-linguistic model recognizes deafness as part of a distinct identity, where sign language serves as the primary mode of communication (Berent, 2001). From this perspective, being deaf is not a disability but a way of being, associated with the values and norms of the Deaf community.

This distinction is not merely academic; it shapes how deaf pupils are perceived and taught in the classroom. Educators who adopt a medical view may prioritize oralism and speech training, while those aligned with the cultural model tend to emphasize bilingual education that includes sign language (Ristiani, 2018). Both perspectives coexist in policy and practice, often leading to tensions in curriculum design and teacher training.

In Algeria, definitions of deafness within educational policy remain inconsistent. While the Ministry of Higher Education and Scientific Research (2024) has taken steps to recognize sign language in specialized schools, mainstream institutions often default to the medical model, thereby neglecting the cultural-linguistic needs of deaf learners. This inconsistency hinders the development of unified strategies and may leave pupils and teachers without adequate support (Bettayeb, 2020). Understanding the various definitions and degrees of deafness is foundational to developing responsive and inclusive teaching practices. Teachers must not only recognize where a pupil falls on the audiological spectrum but also consider the cultural identity and preferred communication methods of the learner to offer effective English language instruction.

1.1.2 Language Acquisition in Deaf Pupils

Language acquisition in deaf individuals is a complex and often delayed process, shaped by factors such as the age of exposure to language, the modality of communication (spoken or signed), and the social and educational environment. Unlike hearing children, who typically acquire spoken language effortlessly through auditory input from birth, deaf children—particularly those born to hearing parents—often experience limited early exposure to accessible language. This lack of input during critical developmental windows can result in language delays or deficits that extend into academic life (Berent, 2001; Hasyim & Suyanto, 2023).

Research consistently shows that early and consistent access to a natural language, whether spoken or signed, is essential for normal cognitive and linguistic development. For deaf children, sign language serves as a fully accessible first language, providing the structural and expressive foundation for later literacy skills (Ristiani, 2018). In fact, deaf individuals who acquire sign language from birth or early infancy tend to develop language at rates comparable to hearing children learning spoken language (Prasetya et al., 2023). This highlights the importance of early intervention and the use of sign language in early education.

However, the majority of deaf children are born to hearing parents who may lack proficiency in sign language. As a result, many deaf pupils grow up without full access to any language during their formative years a phenomenon referred to as “language deprivation” (Bettayeb, 2020). This deprivation can have long-term effects on syntax, morphology, and literacy development, particularly when pupils are introduced to a second language like English later in life.

The modality of the first language also influences how a second language is acquired. Berent (2001) points out that sign languages, being visual-manual, differ significantly from spoken languages in grammar, word order, and use of space. These differences mean that deaf learners must not only acquire English vocabulary and syntax, but also shift between two fundamentally different language systems. This process is cognitively demanding and requires targeted instructional support.

In Algeria, deaf pupils often encounter additional barriers to acquiring either sign language or spoken language fluently. The lack of trained teachers proficient in Algerian Sign Language (Abdelouafi, 2019), combined with insufficient early diagnosis and limited language input at home, places many pupils at a linguistic disadvantage before they even enter formal schooling. Consequently, when these pupils begin learning English, they may do so with an underdeveloped first language, making the task of second language acquisition even more challenging. The process of language acquisition for deaf individuals is deeply tied to the timing and quality of language exposure. Providing early, rich, and accessible input especially through sign language is not optional but essential. Without it, deaf

pupils risk falling behind not only in language development but in all areas of academic achievement. For educators, this means that understanding each pupil's linguistic background is key to designing effective English language instruction.

1.1.3 Educational Models for Deaf Pupils

Educational models for deaf pupils have evolved significantly over the past century, shifting from a deficit-focused approach to more inclusive and linguistically responsive frameworks. The three most prominent models include the oralist approach, the manual (sign language-based) approach, and the bilingual-bicultural (Bi-Bi) model, each reflecting different views on deafness and language acquisition (Berent, 2001; Ristiani, 2018).

The oralist model, once the dominant paradigm, emphasizes speech reading, spoken language, and auditory training, often excluding sign language entirely. It is grounded in the belief that deaf children should be assimilated into the hearing world by learning to speak and lip-read, despite their limited access to sound. Historically, this model was associated with strict rules against using sign language in classrooms, as seen in the Milan Conference of 1880 which banned the use of sign language in education. Although this method promotes integration, it often fails to accommodate the linguistic needs of pupils with profound hearing loss, resulting in language deprivation and poor academic outcomes (Khasawneh, 2017).

In contrast, the manual approach centers around the use of sign language as the primary mode of instruction. This model recognizes sign languages as fully developed, natural languages capable of supporting cognitive and academic development. In contexts where it is properly implemented, such as certain schools in the United States or Sweden, it has led to improved literacy rates and stronger pupil engagement (Ristiani, 2018). However, critics argue that it can isolate deaf pupils from mainstream society if not paired with oral or written language instruction.

The most progressive model is the bilingual-bicultural (Bi-Bi) approach, which treats sign language as the first language (L1) and the spoken/written national language (e.g., English) as the second language (L2). It also emphasizes cultural identity, promoting awareness and pride in Deaf culture while facilitating communication in the majority language. Studies such as those by Hasyim and Suyanto (2023) and Prasetya et al. (2023) support this approach, showing that Bi-Bi models result in higher achievement levels in reading and writing among deaf pupils when implemented effectively.

In Algeria, educational practices remain inconsistent. According to Abdelouafi (2019), while some specialized institutions acknowledge Algerian Sign Language (LSA), the majority still operate under an oralist or mixed-approach system with limited teacher training and resources. Bettayeb (2020) also notes that teachers often rely on improvised methods, lacking a unified pedagogical framework, which contributes to uneven educational outcomes across regions. The recent efforts by the Ministry of Higher Education and Scientific Research (2024) to professionalize teaching for deaf pupils show promise, but implementation remains uneven.

Each educational model carries implications for English language instruction. Oralist settings may stress speech and pronunciation at the expense of comprehension, while sign-based or Bi-Bi models offer more linguistically sound foundations for acquiring a second language, choosing the right educational framework is not merely a policy decision but a pedagogical necessity. Effective English instruction must align with the learner's linguistic and cultural background to avoid perpetuating systemic barriers in their academic journey.

1.2 Challenges in Teaching English to Deaf Pupils

Teaching English to deaf pupils presents a unique set of challenges that go beyond traditional second language instruction. Unlike hearing learners, deaf pupils encounter structural, cognitive, and communicative barriers that directly impact

their ability to access and internalize the English language. These challenges are especially pronounced in contexts where resources are limited, teachers lack training, and inclusive policies are inconsistently applied as is often the case in Algeria (Bettayeb, 2020; Abdelouafi, 2019).

One of the primary difficulties lies in the linguistic mismatch between sign languages and English. Sign languages such as Algerian Sign Language (LSA) have their own grammar, syntax, and visual modality, which differ significantly from the auditory-oral structure of English. As Berent (2001) explains, this can lead to confusion in areas such as verb tense, word order, and prepositions when deaf pupils begin learning English, especially if they have not developed strong literacy skills in their first language.

Another major challenge is the delayed or limited exposure to language during early childhood, a situation often referred to as “language deprivation.” Many deaf pupils, particularly those born to hearing families unfamiliar with sign language, miss the critical period of language acquisition. This affects not only their L1 but also their later capacity to learn L2 (Ristiani, 2018). In such cases, teaching English is not just a matter of building vocabulary or grammar; it involves bridging fundamental gaps in linguistic and cognitive development.

From an instructional standpoint, many teachers lack formal training in deaf education or in using strategies suited for visual learners. This often results in a heavy reliance on speech-based methods that are not adapted for deaf pupils, leading to disengagement and reduced comprehension. Prasetya et al. (2023) found that even dedicated teachers frequently fall back on auditory teaching techniques without offering adequate visual or sign-based alternatives. Similarly, Hasyim and Suyanto (2023) and Yasin and Mohamad (2024) emphasized that deaf students benefit most from multimodal strategies such as visual aids, gestures, captioned content, and written texts tools that are still rarely available in typical Algerian classrooms.

In the Algerian context, these instructional gaps are compounded by structural and institutional shortcomings. Abdelouafi (2019) pointed out that most inclusive schools lack essential support services, including interpreters, visual materials, or digital accessibility tools. Bettayeb (2020) further stressed the absence of a dedicated national curriculum for deaf learners, which leaves teachers to rely on mainstream content not suited to the linguistic profiles of deaf pupils. As a result, many deaf students experience marginalization in English classrooms, where they are taught using methods originally designed for hearing learners, despite their distinct cognitive and communicative needs (Souza Rodrigues et al., 2022; Lukitasari, 2022).

Moreover, classroom communication dynamics create further obstacles. Group discussions, spontaneous questions, and oral explanations can exclude deaf learners unless a well-coordinated communication system is in place. Teachers may not know how to check comprehension effectively or may underestimate the depth of misunderstanding occurring when pupils nod out of politeness rather than comprehension (Ristiani, 2018). The challenges of teaching English to deaf pupils are multifaceted and deeply rooted in linguistic, pedagogical, and systemic gaps. Addressing them requires a shift in mindset from viewing deafness as a barrier to seeing it as a different way of learning that demands adapted strategies, early intervention, and supportive policies. Only then can deaf learners be given a fair and meaningful opportunity to acquire English and participate fully in the academic and social life of their schools.

1.2.1 Linguistic Barriers and Communication Challenges

Linguistic barriers and communication challenges represent some of the most persistent obstacles in teaching English to deaf pupils. Unlike hearing learners, deaf pupils often enter the classroom with a distinct language profile shaped by visual-gestural languages, such as Algerian Sign Language (LSA), rather than spoken or written forms of language. This results in a mismatch between the language of instruction and the pupils' accessible language, which creates a constant

struggle in comprehension, production, and classroom interaction (Berent, 2001; Prasetya et al., 2023).

One of the main linguistic challenges stems from the structural differences between sign languages and English. Sign languages are not universal, and their syntax, morphology, and semantics operate differently from those of English. For instance, sign languages often use spatial grammar and non-linear structures, while English relies on linear word order and phonological cues. As a result, deaf learners may have difficulty grasping function words, verb tenses, or subject-verb agreement in English, especially when their instruction does not explicitly address these differences (Ristiani, 2018).

Another key issue is limited English exposure and vocabulary acquisition. Many deaf pupils do not encounter English until later in their academic journey, and even then, the input is often fragmented or inaccessible. According to Hasyim and Suyanto (2023), the lack of incidental learning which hearing pupils gain through constant exposure to spoken language further restricts vocabulary development among deaf learners. This limitation becomes evident in their reading comprehension and writing fluency, where their understanding of abstract or idiomatic expressions is minimal.

Communication challenges in the classroom also contribute to this linguistic struggle. Teachers who are not proficient in sign language or who rely heavily on speech-based instruction may inadvertently exclude deaf pupils from active participation. Prasetya et al. (2023) observed that communication breakdowns are frequent when teachers lack visual aids or fail to provide multiple modes of explanation. In such settings, deaf pupils may rely on guesswork, copying from peers, or rote memorization strategies that do not promote meaningful language acquisition.

In Algeria, the situation is further complicated by the absence of consistent bilingual programs. As Abdelouafi (2019) points out, many educational institutions either do not recognize LSA officially or fail to provide qualified interpreters and

resources. This results in an uneven learning environment where deaf pupils are expected to acquire English through oralism or written drills without adequate linguistic scaffolding. Bettayeb (2020) also notes that communication is often one-way from teacher to pupil leaving little room for deaf learners to express themselves, ask questions, or clarify misunderstandings.

What is even more concerning is the lack of teacher awareness about the depth of these linguistic challenges. Some educators assume that if a pupil can mimic English words or follow written instructions, they have understood the material. However, comprehension and reproduction are not the same. Without checking for real understanding, teachers may overlook the cognitive overload that deaf pupils experience when switching between visual and written modalities (Berent, 2001).

linguistic barriers and communication gaps are deeply interconnected. They stem from systemic neglect, lack of teacher training, and the absence of adapted instructional methods. To overcome them, education must move toward inclusive, multimodal, and bilingual approaches that validate and integrate the linguistic identities of deaf learners. Only by doing so can we ensure that communication becomes a bridge not a barrier to English language acquisition.

1.2.2 The Impact of Delayed Language Exposure

Delayed language exposure is one of the most significant factors affecting the academic and linguistic development of deaf pupils, particularly in the context of learning English as a foreign language. When deaf children are not exposed to a fully accessible language whether spoken or signed within the critical early years of development, they often experience long-term deficits in both first language (L1) and second language (L2) acquisition (Hasyim & Suyanto, 2023). This lack of early input leads to gaps in syntax, vocabulary, and abstract reasoning, all of which are essential for acquiring a language like English.

Research shows that the human brain is most receptive to language acquisition in the first five years of life. If children deaf or hearing are not provided with rich linguistic input during this time, their ability to fully acquire language later is significantly compromised (Berent, 2001). For deaf children, this situation is especially common when they are born into hearing families who are not familiar with sign language. In such cases, the child may go years without consistent access to any structured language, a condition known as “language deprivation” (Bettayeb, 2020).

This deprivation does not only delay the development of L1, but it also weakens the foundation upon which a second language like English can be built. According to Ristiani (2018), pupils with delayed L1 exposure often struggle to understand the structure and logic of any new language, making it harder for them to grasp grammatical rules, word order, or phonemic distinctions. These pupils may appear to memorize vocabulary or repeat phrases, but their comprehension tends to remain shallow, limiting both their expressive and receptive language abilities.

In classrooms where English is taught to deaf pupils, the consequences of delayed exposure manifest in multiple ways. Pupils may avoid participation, rely heavily on copying without understanding, or develop coping mechanisms that mask their lack of comprehension (Prasetya et al., 2023). Teachers, particularly those without training in deaf education, may misinterpret these behaviors as lack of motivation or ability, when in fact they are symptoms of earlier linguistic deprivation. Hasyim and Suyanto (2023) argue that such misunderstandings can reinforce a cycle of low expectations and reduced academic support.

In Algeria, where early identification of hearing loss is still inconsistent and sign language support is limited in mainstream education, many deaf pupils begin formal schooling without a strong language base. Abdelouafi (2019) emphasizes that specialized institutions exist, but their quality varies, and many do not prioritize early sign language instruction. As a result, by the time English is introduced usually in middle school these learners are already several steps behind their hearing peers,

not due to cognitive limitations but because they were never given the tools to develop linguistically in the first place.

Overall, the impact of delayed language exposure is profound and lasting. It affects not only how deaf pupils learn English but how they think, communicate, and participate in education. To mitigate these effects, early intervention programs, parental sign language education, and bilingual teaching models must be prioritized. Without this foundation, English instruction risks becoming an exercise in surface-level memorization rather than meaningful language learning.

1.2.3 Cognitive Differences in Learning a Second Language

Deaf learners process language in ways that are often cognitively distinct from their hearing peers, especially when acquiring a second language like English. These cognitive differences are not indicative of limitations but are instead shaped by variations in sensory input, language exposure, and the use of alternative communication modes. Understanding these distinctions is crucial for developing effective teaching strategies tailored to deaf pupils (Berent, 2001; Hasyim & Suyanto, 2023).

One of the most notable cognitive features in deaf learners is their visual orientation to information processing. Due to the lack of auditory input, deaf individuals rely more heavily on visual stimuli for learning and communication. This reliance leads to strengths in visual memory, spatial reasoning, and image-based processing, which can be advantageous when learning through written texts, images, or signed languages (Ristiani, 2018). However, this same reliance can present challenges when English instruction is predominantly auditory or when key components of the languagelike intonation or stress are inaccessible.

Another cognitive consideration is the influence of first language development on second language acquisition. As Prasetya et al. (2023) emphasize, many deaf pupils begin learning English without a fully developed first language due to delayed exposure to sign language or other forms of communication. This

underdevelopment weakens metalinguistic awareness—the ability to reflect on and manipulate language structures—which is vital for grasping grammar and syntax in a second language. Without strong L1 foundations, learners may struggle to apply linguistic rules or transfer knowledge effectively to English.

Additionally, deaf pupils may approach language learning more analytically, often relying on conscious rule-based learning rather than implicit language acquisition strategies common among hearing learners. This cognitive shift occurs because deaf learners typically do not absorb language through natural auditory immersion. Instead, they must often decode and memorize patterns explicitly, which can slow the learning process and increase cognitive load, particularly when instruction is not adapted to their learning style (Berent, 2001).

Cognitive fatigue is another factor. When lessons are not visually engaging or appropriately scaffolded, deaf pupils expend more mental effort trying to follow along, which may lead to reduced focus and retention over time. This challenge is heightened in mainstream classrooms where teachers may overlook the need for pacing, repetition, or visual reinforcement (Hasyim & Suyanto, 2023).

In Algeria, the failure to recognize and accommodate these cognitive differences often results in ineffective English instruction. Abdelouafi (2019) highlights that many teachers lack training in visual learning strategies, and there is limited availability of adapted materials. Bettayeb (2020) further notes that classroom practices rarely reflect an understanding of how deaf pupils process and internalize language differently from hearing learners.

It is important to clarify that cognitive differences in deaf pupils are not deficits but adaptations to their sensory and linguistic environments. With the right pedagogical support—such as visual aids, bilingual instruction, and metacognitive training—these learners can excel in second language acquisition. Teachers must shift from standardized approaches to differentiated instruction that respects and leverages the cognitive strengths of deaf pupils.

1.3 The Role of L1 in English Learning for Deaf Pupils

The first language (L1) of deaf pupils plays a critical role in shaping how they learn a second language (L2) such as English. For many deaf individuals, especially those educated in bilingual environments, L1 is a sign language like Algerian Sign Language (LSA), which serves not only as a medium of communication but also as a cognitive foundation for acquiring additional languages (Ristiani, 2018). However, the role of L1 in English language learning remains a topic of debate, as it depends heavily on the learner's linguistic background, the educational model applied, and the degree of exposure to both L1 and L2 (Berent, 2001).

Numerous studies support the idea that a strong L1 facilitates second language acquisition. According to Hasyim and Suyanto (2023), deaf learners with a solid foundation in sign language demonstrate better performance in reading, writing, and understanding English grammar. This is because language skills regardless of modality are transferable; the metalinguistic awareness developed in one language can support learning in another. For example, the concept of sentence structure or word categories can be understood in sign language first and then applied in English, even if the grammar systems differ (Prasetya et al., 2023).

However, this transfer is not always seamless. The visual-manual modality of sign languages and the auditory-oral nature of English present cognitive and structural differences that can create challenges. Berent (2001) points out that deaf pupils may struggle with aspects of English that have no equivalent in sign language, such as articles, tense markers, or word stress. Moreover, pupils who are introduced to English before mastering L1 may experience confusion and shallow understanding in both languages—a phenomenon linked to incomplete linguistic input and cognitive overload.

In Algeria, the importance of L1 is often overlooked in educational planning. Abdelouafi (2019) notes that many deaf pupils do not receive formal instruction in LSA, and their families are rarely trained to use it. As a result, these learners may

arrive at school with minimal fluency in any language, making English acquisition particularly difficult. Bettayeb (2020) highlights that in such cases, teaching English without reinforcing L1 is like building a house on a weak foundation: it may stand, but it is likely to collapse under pressure.

Moreover, the lack of official recognition of sign language in mainstream curricula further undermines the role of L1. Without LSA being integrated into classroom instruction, deaf pupils are often forced to learn English through written drills or oral repetition, approaches that do not align with their natural language processing strengths. This can lead to surface-level learning and limit their long-term linguistic growth (Ristiani, 2018).

On the other hand, when L1 is supported and validated in the classroom, pupils feel more confident, engaged, and capable of connecting new knowledge to prior linguistic experiences. In such cases, English learning becomes not just possible, but meaningful. Teachers who use bilingual strategies, including LSA and written English, are more likely to foster deeper understanding and critical thinking among deaf pupils (Prasetya et al., 2023). The role of L1 in English learning for deaf pupils is foundational, not optional. Whether it supports or hinders learning depends on how it is treated in the educational environment. When given proper space and respect, L1 can serve as a powerful bridge to mastering English and achieving broader academic success.

1.3.1 Bilingual-Bicultural (Bi-Bi) Model in Deaf Education

The Bilingual-Bicultural (Bi-Bi) model has emerged as one of the most inclusive and linguistically appropriate educational approaches for deaf pupils. It emphasizes the use of a natural sign language as the first language (L1) and the majority spoken/written languages such as English as the second language (L2), while also promoting Deaf culture as a core part of the learner's identity. This model not only affirms the legitimacy of sign language but also addresses the cognitive and emotional needs of deaf learners by rooting education in their natural linguistic and cultural experience (Hasyim & Suyanto, 2023; Berent, 2001).

In the Bi-Bi model, sign language is used as the primary medium of instruction, ensuring that pupils receive content in a language that is fully accessible to them. This sets a strong linguistic foundation, which then supports the acquisition of the second language usually in its written form. According to Prasetya et al. (2023), pupils educated in Bi-Bi settings tend to outperform those in oral-only or total communication environments in literacy tasks and academic achievement, largely because their learning begins in a language they fully understand.

Another strength of the Bi-Bi model is its emphasis on cultural recognition. It treats Deaf culture not as a deficit or deviation from the norm but as a valid identity with its own history, values, and community. This cultural validation promotes self-esteem, social belonging, and motivation key factors in educational success. Ristiani (2018) argues that pupils who feel understood and respected in their identity are more likely to engage with the learning process and persist through challenges, including those presented by second language acquisition.

Despite its advantages, the Bi-Bi model is not without challenges. One recurring issue is the lack of qualified teachers who are fluent in both sign language and written English. In many contexts, including Algeria, such bilingual educators are scarce, making consistent implementation difficult. Abdelouafi (2019) highlights that while some Algerian schools for the deaf adopt elements of the Bi-Bi model, the absence of formal training and institutional support limits its effectiveness. Furthermore, as Bettayeb (2020) notes, there is still resistance from educational authorities who prefer oralist approaches, believing they offer better integration into hearing society.

Another issue is the availability of materials. Many textbooks and resources are designed with hearing pupils in mind and are not adapted to visual or bilingual learning styles. This places additional burdens on teachers, who must modify or create their own content to align with Bi-Bi principles (Prasetya et al., 2023).

Still, the growing body of research supports the Bi-Bi model as one of the most promising for deaf education. Its emphasis on linguistic integrity and cultural

affirmation offers a powerful framework for enabling deaf pupils to thrive academically while maintaining their identity. In the context of English language learning, this model provides the essential L1 foundation and metalinguistic awareness needed for meaningful L2 acquisition. The Bi-Bi model is more than a method; it is a philosophy that recognizes and respects the unique linguistic and cultural position of deaf pupils. Where it is applied with consistency, training, and appropriate resources, it has the potential to transform the educational experiences of deaf learners and promote equitable outcomes in English language education.

1.3.2 Transfer of Sign Language Skills to English

The transfer of sign language skills to English is a complex yet critical aspect of second language learning for deaf pupils. While sign languages like Algerian Sign Language (LSA) and English operate in entirely different modalities—visual-manual versus auditory-oral—they share fundamental linguistic properties that can support cross-linguistic transfer. Understanding how this transfer works is key to designing effective instructional strategies that build on the strengths of deaf learners rather than treating sign language as unrelated or inferior (Berent, 2001; Ristiani, 2018).

Sign languages, despite their visual nature, are fully developed languages with syntax, morphology, and grammatical rules. These linguistic competencies, once developed in L1, can aid in developing metalinguistic awareness, which in turn supports English literacy. According to Hasyim and Suyanto (2023), deaf pupils who are fluent in sign language tend to demonstrate stronger reading and writing skills in English than those with limited L1 proficiency. This is because they already understand abstract language structures like subject-verb-object order, categorization, and the function of grammatical markers—even if those markers differ between languages.

However, transfer is not always direct. Some structures in sign language have no equivalent in English, which can lead to interference. For instance, sign

languages use spatial grammar and classifiers, which are absent in English. Similarly, English articles and auxiliary verbs may seem redundant or confusing to sign language users because such features are typically not marked in LSA (Prasetya et al., 2023). Teachers need to address these differences explicitly to help pupils transfer concepts rather than forms.

Another point of transfer is discourse strategies. Deaf pupils often excel at storytelling and visual expression, skills that can enrich their English writing when properly guided. If educators leverage this strength by connecting sign language narratives to written English, pupils may develop stronger expressive writing abilities (Ristiani, 2018). This shows that the transfer is not just about grammar or vocabulary it also includes cognitive and narrative structures.

In the Algerian context, however, this potential for transfer is rarely optimized. Abdelouafi (2019) observes that most deaf pupils are not given systematic instruction in LSA, and English is often taught without consideration of their L1 background. As a result, learners are expected to navigate a second language without a firm base in their first, a situation that contradicts well-established second language acquisition principles. Bettayeb (2020) adds that this lack of L1 reinforcement can cause pupils to rely on memorization and pattern mimicry, rather than genuine comprehension and linguistic transfer.

To improve outcomes, educators must adopt bilingual teaching methods that explicitly connect LSA and English. For example, teaching English syntax through contrastive analysis with LSA grammar, or using sign-supported English in the classroom, can help pupils internalize English structures while drawing on their existing linguistic knowledge. Such practices not only facilitate transfer but also validate the pupils' L1, promoting confidence and deeper engagement.

sign language skills can be a powerful asset in learning English, but their transfer must be intentional and supported by pedagogical awareness. Ignoring L1 is not only ineffective but unfair. When respected and integrated, sign language becomes a bridge rather than a barrier to second language mastery.

1.3.3 Pedagogical Debates: L1 as a Bridge or a Barrier?

The role of the first language (L1), particularly sign language, in second language acquisition remains a debated issue in deaf education. Some educators argue that L1 acts as a bridge, providing a strong cognitive and linguistic foundation for learning English. Others view it as a barrier, especially when its structure contrasts sharply with that of the target language (Berent, 2001; Hasyim & Suyanto, 2023).

Supporters of the “bridge” perspective emphasize that L1 fosters metalinguistic awareness and critical thinking. Pupils fluent in L1 are more likely to understand complex grammar and transfer knowledge to English reading and writing (Prasetya et al., 2023). In bilingual settings, L1 promotes confidence and engagement, enhancing overall academic success.

In contrast, critics argue that relying too much on sign language may hinder English development. Structural differences such as visual-spatial grammar in sign language versus linear syntax in English can lead to confusion or fossilization of errors (Ristiani, 2018). This view often leads to oralist teaching, where sign language is minimized in favor of speech-focused methods.

In Algeria, this debate is reflected in inconsistent classroom practices. Abdelouafi (2019) notes that some schools encourage LSA, while others restrict its use, fearing it will impede English acquisition. However, Bettayeb (2020) stresses that pupils with strong L1 skills perform better in literacy than those without language support.

1.4 Pedagogical Approaches to Teaching English to Deaf Pupils

Effective pedagogy for deaf pupils must account for their unique linguistic and cognitive profiles. Traditional methods designed for hearing learners often fail in deaf classrooms, especially when they rely heavily on auditory instruction. As discussed in previous sections (1.2.1 and 1.2.2), deaf learners benefit more from visual and structured input than oral repetition or audio-based learning.

According to Ristiani (2018), deaf pupils acquire language more successfully through visual and tactile teaching strategies, which offer direct, accessible input. These include using realia, visual aids, signed explanations, and gesture-based communication. In this way, instruction becomes a shared visual experience, helping pupils link concepts to forms more effectively. In my view, this strategy respects the learner's natural mode of understanding and should be prioritized in every deaf classroom.

Moreover, as seen in the Bi-Bi model (1.3.1), when sign language is used alongside written English, pupils develop stronger reading and writing skills. According to Prasetya et al. (2023), integrating both languages creates a supportive linguistic environment that scaffolds English learning without excluding the learner's identity. This approach not only aids comprehension but also motivates learners by validating their L1.

However, Bettayeb (2020) reports that in Algerian classrooms, many teachers rely on rigid methods with little adaptation. Compared to the more flexible, bilingual approaches found elsewhere, this reflects a lack of teacher training and awareness.

Thus, pedagogical success lies in applying inclusive, bilingual, and visually rich methods that build on prior knowledge, cognitive strengths, and the linguistic reality of deaf pupils.

1.4.1 Visual and Multimodal Learning Strategies

Visual and multimodal strategies are among the most effective tools in teaching English to deaf pupils. These learners rely primarily on visual input to access meaning, making it essential that teaching methods go beyond spoken explanations. As previously discussed in sections 1.2.1 and 1.2.3, deaf pupils process information differently, often through images, written text, movement, and sign, rather than sound. This demands a shift in teaching practices from auditory to visually rich instruction.

According to Hasyim and Suyanto (2023), multimodal strategies such as using videos with captions, gestures, sign language, visual organizers, and real-life objects can enhance comprehension and retention. In my opinion, these methods make learning more inclusive and interactive, particularly for pupils with limited exposure to spoken or written English. By allowing multiple ways to access content, teachers reduce frustration and increase engagement.

Linking to 1.3.2, where we explored how sign language can support English learning, it becomes clear that visual methods not only help in understanding L2 but also strengthen L1–L2 transfer. For example, using signed storytelling alongside English subtitles enables pupils to connect ideas between the two languages.

However, in Algeria, these strategies are rarely used. Bettayeb (2020) observed that many classrooms still rely on outdated oral or text-only approaches. Compared to inclusive systems in other countries, this creates a clear pedagogical gap.

According to Prasetya et al. (2023), even simple visual aids can significantly improve performance. That when used correctly, visual and multimodal strategies can turn language barriers into bridges for deeper, more meaningful learning.

1.4.2 Total Communication Approach vs. Oral Methods

The debate between Total Communication (TC) and oral methods reflects deeper disagreements about how best to educate deaf pupils. TC combines multiple modes of communication—sign language, speech, lip reading, gestures, and written text—to support understanding. In contrast, oral methods focus exclusively on spoken language and lip reading, aiming to integrate deaf pupils into hearing society through speech alone.

According to Ristiani (2018), the Total Communication approach recognizes the diversity of deaf learners and allows for flexibility based on individual needs. In my view, this makes it more inclusive and realistic, especially in multilingual environments like Algeria, where not all pupils have equal exposure to speech or sign language. TC adapts to the learner, not the other way around.

By linking this to 1.3.3, where the importance of recognizing L1 was emphasized, TC appears more supportive of using L1 as a bridge. Oralism, on the other hand, often ignores L1 completely, reinforcing the outdated view that speech equals success. As Berent (2001) points out, relying only on oral methods can lead to frustration and poor literacy outcomes, especially for pupils with profound hearing loss.

In the Algerian context, Abdelouafi (2019) observed that oralism remains dominant in many institutions, even though pupils struggle with comprehension and expression. Compared to TC, this limits accessibility and creates communication gaps in the classroom.

According to Bettayeb (2020), combining sign and speech allows for richer learning experiences. Personally, that TC, when applied consistently, offers a more balanced and empowering model for teaching English to deaf pupils.

1.5 Conclusion

This chapter has provided a detailed review of the literature surrounding the teaching of English to deaf pupils, with a focus on linguistic, cognitive, and pedagogical factors. The discussion began by defining deafness and highlighting how delayed language exposure impacts the development of both first and second languages. According to Hasyim and Suyanto (2023), early and accessible language input is key to success in second language learning a view that was supported by insights on the role of sign language and the Bi-Bi model. The chapter also explored challenges faced in Algerian classrooms, such as limited teacher training and lack of adapted materials (Abdelouafi, 2019; Bettayeb, 2020).

In my opinion, these issues demonstrate the urgent need for more inclusive and bilingual teaching practices. The value of visual, multimodal, and technology-enhanced strategies was emphasized as a necessary shift from traditional oral methods that often fail to meet deaf learners' needs. Compared to rigid approaches,

these strategies offer more flexibility and engagement, helping pupils overcome barriers discussed in sections 1.2 and 1.3.

According to Prasetya et al. (2023), when instruction respects the learner's linguistic profile, outcomes improve significantly. Overall, this literature review highlights the need to rethink how English is taught to deaf pupils by centering pedagogy on their strengths and realities. These insights will directly inform the next chapter, which will present the methodology of the present study, including data collection and analysis related to the Algerian context.

Chapter Two Fieldwork and Analysis

2.1 Introduction

This chapter presents the methodology and data analysis used to explore the challenges of teaching English to deaf pupils in Algerian schools, focusing on selected institutions in Tlemcen and Algiers. Employing both qualitative and quantitative approaches, the research relied on classroom observation and structured teacher interviews to gather a comprehensive view of instructional practices and obstacles. While observations revealed real-time teaching dynamics, interviews provided reflective insights into teachers' experiences. The chapter introduces the research setting, sample population, and data collection tools, and outlines the analytical framework used to interpret both observed behaviors and teacher perspectives, ensuring alignment with the study's core objectives.

2.2 Research Design and Procedures

This study employs a qualitative descriptive research design, aiming to provide a comprehensive summary of the experiences and challenges faced by English language teachers instructing deaf pupils in Tlemcen Region primary schools and associations. Qualitative descriptive research is particularly suited for studies that seek to understand phenomena through participants' perspectives without the imposition of pre-existing theoretical frameworks (Lambert & Lambert, 2012).

Data collection was conducted using two primary qualitative methods: classroom observations and semi-structured interviews. A total of 10 classroom observations were carried out in various schools within the Tlemcen region. These observations allowed for the examination of teaching strategies, classroom interactions, and the specific challenges encountered in real-time instructional settings.

Complementing the observations, 15 English language teachers participated in semi-structured interviews. These interviews were designed to delve deeper into the teachers' personal experiences, pedagogical approaches, and perceptions

regarding the instruction of deaf pupils. The combination of observational and interview data provided a rich, nuanced understanding of the instructional landscape.

The procedures adhered to ethical research standards, ensuring informed consent, confidentiality, and the voluntary participation of all subjects. The collected data were analyzed thematically, identifying patterns and themes that emerged from the participants' narratives and observed practices.

2.2.1 Sample population

The sample for this study consists of English language teachers from Algerian schools, particularly from the region of Tlemcen. The goal was to gather a comprehensive understanding of the challenges involved in teaching English to deaf pupils. A total of 15 teachers participated in the study. These participants were selected from Tlemcen Region primary schools and associations settings. To support the investigation, 10 classroom observations were also conducted in various schools. These observations allowed the researcher to collect first-hand data on teaching strategies, classroom interactions, and the specific difficulties encountered when instructing deaf learners in English. Observing real-time lessons provided context to the teachers' interview responses and offered deeper insight into how theoretical methods are implemented or overlooked in practice.

From a methodological perspective, this study adopted purposive sampling, a non-probability sampling technique used to identify and select individuals who are especially knowledgeable about or experienced with the phenomenon of interest (Etikan, Musa, & Alkassim, 2016). This approach is well-suited for qualitative research where in-depth insights are prioritized over generalizability. Participants were chosen based on their active involvement in inclusive education and direct experience with teaching deaf pupils, ensuring that the data collected was both relevant and grounded in practice.

By combining classroom observation and teacher interviews across a targeted sample, the study ensures that the findings reflect a realistic and multi-layered view of English language instruction for deaf pupils in Algerian schools.

2.2.2 Instrumentation

To achieve the objectives of this qualitative descriptive study, two primary instruments were employed: classroom observation and semi-structured teacher interviews. These tools were selected for their effectiveness in capturing both the observable teaching practices and the personal experiences of educators instructing deaf pupils in English.

Classroom observations were conducted to gather firsthand data on the instructional methods, teacher-pupil interactions, and the overall classroom environment. This method allows researchers to witness the natural setting of the classroom, providing insights that might not emerge through other data collection techniques (Marshall & Rossman, 2016). Observations were structured using a checklist focusing on specific teaching strategies, use of visual aids, and communication methods tailored for deaf pupils.

Complementing the observations, semi-structured interviews were conducted with 15 English language teachers. This approach provides a balance between guided questions and the flexibility to explore emerging topics during the conversation (Kallio et al., 2016). The interviews aimed to delve into the teachers' perspectives on the challenges and strategies involved in teaching English to deaf pupils, their training and preparedness, and their suggestions for improving instructional practices.

The combination of these two instruments facilitated a comprehensive understanding of the instructional dynamics and the educators' viewpoints, aligning with the study's aim to explore the multifaceted aspects of teaching English to deaf pupils.

To collect meaningful and triangulated data, the study employed two primary tools: semi-structured interviews and classroom observation. The interviews were conducted with 15 English language teachers from inclusive schools and were designed to explore their instructional practices, the challenges they face, and the strategies they use when teaching deaf pupils. These interviews offered a reflective, experience-based understanding of real classroom conditions and teacher perceptions.

In addition to interviews, 10 classroom observations were carried out to gather real-time data on how English is taught to deaf pupils. These sessions focused on teaching methods, classroom interaction, and the presence (or absence) of visual or inclusive strategies. The observations were conducted using a structured checklist to ensure consistency and focus. This checklist was adapted from the Total Communication approach and visual-multimodal learning frameworks, emphasizing key domains such as teacher-pupil interaction, use of visual aids, classroom accessibility, and responsiveness to learners' needs. Such tools provide systematic insight into both explicit behaviors and implicit pedagogical patterns (Stiggins & Bridgeford, 1985).

2.3 Findings and Analysis

The data collected in this study were analyzed using a thematic analysis approach, which is widely used in qualitative research to identify and interpret patterns or recurring themes across data sources. As Braun and Clarke (2006) explain, thematic analysis involves a six-phase process: familiarization with the data, coding, theme generation, theme review, theme definition, and final write-up. This method was selected because it offers both structure and flexibility, making it suitable for interpreting interviews and classroom observations.

The study relied on two main qualitative tools: semi-structured teacher interviews and classroom observation checklists. Interview transcripts were reviewed and coded to extract teachers' perspectives on instructional challenges,

communication strategies, classroom practices, and institutional barriers. Observation notes were analyzed similarly, focusing on real-time teacher-pupil interactions, instructional methods, and the learning environment.

The themes generated from both tools were then grouped into clearly defined rubrics for presentation. This rubric-based structure commonly used in qualitative educational studies allowed for the systematic organization of findings by topic, such as teacher experience, use of visual aids, or perceptions of pupil engagement. By combining thematic analysis with structured rubrics, the study presents a coherent and layered understanding of English language instruction for deaf pupils.

The teacher interview served as a core instrument in this study, aiming to gather in-depth insights from English language teachers working with deaf pupils. A total of 15 teachers from various Algerian schools participated in the interviews. The questions focused on their teaching background, instructional challenges, classroom strategies, and perceptions of institutional support. The interviews were conducted in a semi-structured format to allow participants the freedom to elaborate while staying within the main research themes. The results are presented below in thematic rubrics to highlight the key patterns that emerged from the data.

This section explores the professional profiles of the 15 participating teachers, focusing on their years of experience, academic qualifications, and exposure to deaf education. Understanding these factors helps contextualize their classroom practices and identify potential gaps in teacher preparation.

The teachers interviewed had teaching careers ranging from 3 to 28 years. Most held degrees in English language or applied linguistics, while a few also had experience teaching in both mainstream and specialized settings for the deaf. Some had worked with deaf pupils for over a decade, while others had only recently entered the field. One teacher from Tlemcen noted, "I was not trained for this, but I had to adapt quickly. I used what I learned in general pedagogy and modified it for visual learners." Another, with over 20 years of experience, said, "I've worked with deaf pupils for years, but I still face new challenges every class."

Only four out of the fifteen teachers reported receiving formal training related to deaf education, often through external cooperation programs. The majority admitted learning “on the job” through experience or informal self-study. One teacher remarked, “Everything I know about deaf pupils, I learned inside the classroom not in university.”

Teachers’ confidence in teaching English to deaf learners varied. Those with more years in the field or informal training expressed greater ease, while newer teachers described feeling unprepared. According to Hlibchuk (2012), teacher self-efficacy is closely linked to prior experience with special needs learners. This inconsistency in training reflects a systemic issue that directly impacts the quality of instruction deaf pupils receive.

This rubric examines the strategies teachers use to communicate with deaf pupils during English instruction, as well as the barriers they commonly face. Because English is primarily an auditory language, ensuring effective communication in deaf education requires a shift toward visual and multimodal strategies.

Most teachers reported using a combination of written English, gestures, visual aids, and Algerian Sign Language (LSA) to communicate. However, their fluency in LSA varied significantly. While some were confident using basic signs, others admitted relying mostly on writing and facial expressions. One teacher shared, “I’ve picked up some signs from the pupils themselves. They actually teach me, which helps build trust.” Another explained, “I use flashcards, drawings, and the board. But sometimes I feel I’m just guessing if they understand.”

Communication barriers were a recurring issue. Teachers frequently cited their own limited sign language skills, lack of interpreter support, and inconsistent L1 proficiency among pupils as core challenges. According to Marschark and Hauser (2012), a mismatch between instructional delivery and the pupil’s language access can severely limit learning outcomes. That this misalignment reinforces educational inequalities that deaf learners routinely face.

Teachers also expressed mixed feelings about the effectiveness of their strategies. Those with more practice or informal sign language knowledge felt they could manage, while others felt uncertain. Many depended on pupils' reactions or repeated explanations to assess comprehension. One participant said, "I explain and repeat, but sometimes I only know they didn't understand when I see their test results."

In short, while teachers strive to communicate as effectively as possible, the lack of formal training and structured support often leaves them improvising in high-stakes classroom settings.

Rubric Three: Teaching Methods and Classroom Approaches

This rubric explores the pedagogical approaches teachers apply when instructing deaf pupils in English. It considers the frameworks they follow, how they adapt their strategies, and the extent to which visual support is integrated into their lessons.

Most teachers reported relying on multimodal and visual strategies, including realia, flashcards, board drawings, and facial expressions. While only a few followed a formal framework like Total Communication or the Bilingual-Bicultural (Bi-Bi) model, most described combining elements from both. One teacher shared, "I don't use a fixed method, but I mix signs, writing, gestures, and pictures it's like teaching with my hands and face." Another teacher admitted, "I wasn't taught a method, but I try to repeat things in writing and use symbols pupils already know."

Teachers frequently adapted their teaching depending on the severity of the pupils' hearing loss and their level of English. Some created simplified visual worksheets, while others incorporated drawing activities to check understanding. According to Hasyim and Suyanto (2023), visual and interactive methods significantly enhance deaf learners' engagement in second language classrooms. I agree that the flexibility shown by these teachers reflects a practical, experience-driven approach, even in the absence of formal guidance.

All participants agreed that visual support is crucial. “If you remove visuals,” one teacher said, “you remove the lesson.” However, many also pointed out that they often create these materials themselves, due to a lack of official resources or support from the administration.

This rubric illustrates that although teachers do not follow a unified pedagogical model, their practice is rooted in a shared recognition: visual strategies are essential for making English comprehensible to deaf pupils.

Rubric Four: Use of L1 in the English Classroom

Table 2.1

Learning Support Strategies

Support Strategy	Teachers Using	%
Use of visual aids	15	100%
L1 explanations (Arabic)	13	86.7%
Color coding / drawing	10	66.7%
Gesture or acting	12	80%

This rubric examines how teachers incorporate pupils’ first language (L1) whether Algerian Sign Language (LSA), Arabic, or French into English instruction. It focuses on how L1 is used to explain concepts, the pupils' reactions to its use, and the challenges teachers face in balancing languages.

Most teachers acknowledged that using L1 plays a crucial role in supporting English learning. Several reported using LSA or spoken Arabic to explain difficult vocabulary or grammar points, especially when introducing new concepts. One teacher explained, “When I use Arabic or signs first, pupils are more relaxed. Then I show them the English word, and they understand better.” Another teacher noted, “L1 helps break the fear. It makes English feel less foreign.”

Teachers also observed that pupils responded positively when L1 was used as a scaffold. “Some pupils feel lost without it,” one said, “especially those with limited literacy in any language.” According to Hlibchuk (2012), L1 can support the development of L2 by strengthening metalinguistic awareness helping learners understand language as a system. This makes a strong case for validating pupils’ linguistic backgrounds in second language classrooms.

However, balancing L1 and English was not always easy. A few teachers expressed concern that over-reliance on L1 might reduce pupils’ exposure to English. “If I explain everything in Arabic,” one teacher said, “then English becomes just a decoration.” Another admitted, “It’s a constant struggle supporting without translating too much.”

Overall, teachers recognized L1 as a valuable bridge, but also highlighted the importance of gradually building learners’ independence in English.

Rubric Five: Classroom Challenges and Pupil Engagement

This rubric explores the main obstacles teachers face when teaching English to deaf pupils, including issues related to communication, resources, motivation, and pupil participation. It also considers the strategies teachers use to foster engagement and maintain active learning environments.

Across the board, teachers identified communication breakdowns as the most persistent challenge. Many admitted struggling with pupils who lacked strong L1 foundations, making even simple English explanations difficult. One teacher explained, “Some pupils don’t even have basic sign language, so it’s hard to build anything on that.” Another added, “Sometimes it feels like I’m teaching in the dark I speak, I sign, I write, but I’m never sure what gets through.”

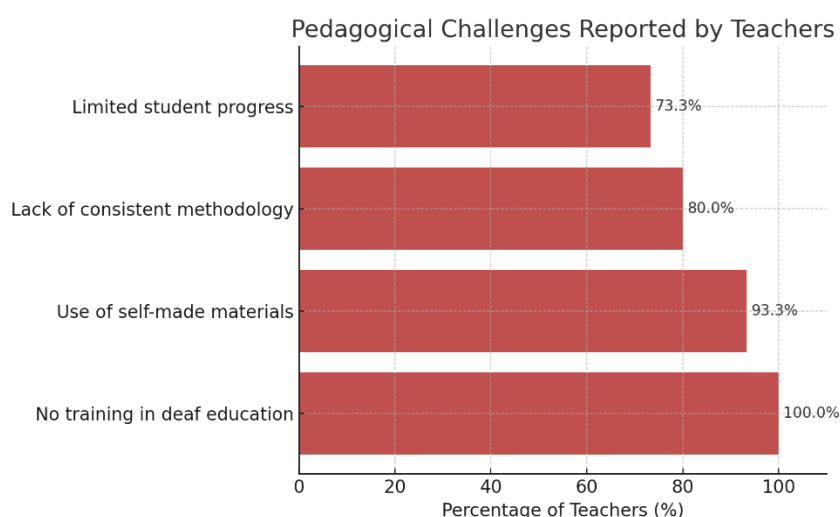
Teachers also cited the lack of training and resources as major barriers. Several pointed out that they received no formal preparation for teaching deaf pupils, and most of their teaching materials were self-made. “I create my own

flashcards and worksheets,” one teacher said, “because there’s nothing adapted for deaf learners.”

When it came to pupil engagement, responses varied. Some teachers reported high levels of participation when they used visual, interactive activities, such as drawing, role play, or realia. Others noted that some pupils were easily discouraged, especially when lessons relied heavily on writing or textbooks. One participant shared, “When I bring videos with subtitles or use group work, they light up. But if it’s just grammar on the board, they shut down.”

Figure 2.1

Pedagogical challenges reported by teachers



Motivation was described as uneven across pupils. While some were highly interested in English often due to dreams of travel or social media others saw it as irrelevant or too difficult. According to Swanwick and Marschark (2010), deaf learners' engagement depends heavily on accessibility and emotional connection to the content. This reflects the urgent need to design English lessons that are both linguistically appropriate and emotionally motivating.

Table 2.2

Pedagogical Challenges

Pedagogical Challenge	Teachers	%
No training in deaf education	15	100%
Use of self-made materials	14	93.3%
Lack of consistent methodology	12	80%
Limited pupil progress in English	11	73.3%

Rubric Six: Institutional Support and Teacher Recommendations

This rubric addresses the level of institutional and administrative support available to teachers of deaf pupils, as well as their suggestions for improving English instruction in this specialized context. It reveals how broader structural factors influence classroom effectiveness and teacher morale.

A majority of teachers expressed frustration with the lack of institutional support. Several reported that no specialized training had been offered by their schools or local education departments. One teacher explained, “I’ve been teaching deaf pupils for five years, but no one ever asked if I was prepared or offered to help.” Another added, “There is no adapted curriculum. I have to take the regular syllabus and simplify it the best I can.”

Teachers also mentioned the absence of inclusive teaching materials. Most teachers had to rely on standard textbooks designed for hearing pupils, which they found unsuitable. “The textbooks are full of audio-based activities,” said one teacher. “They don’t make sense in my class. I skip half the content.”

Table 2.3*Institutional and Environmental Challenges*

Institutional Challenge	Teachers	%
No adapted curriculum	13	86.7%
No training in deaf education	15	100%

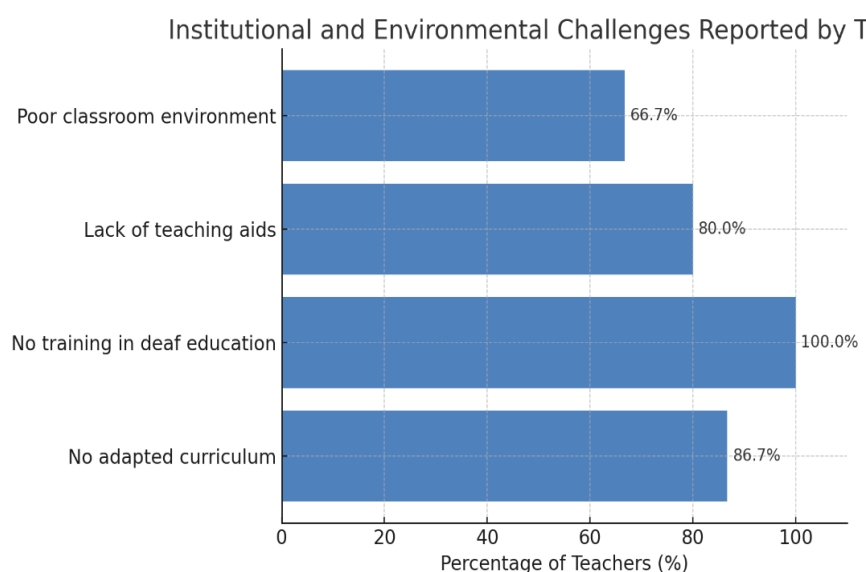
Lack of teaching aids	12	80%
Poor classroom environment	10	66.7%

Regarding policy, teachers noted a lack of formal guidelines for deaf education in Algeria. While some schools attempted to adapt based on their own judgment, there was no national framework to support consistent, effective instruction. According to Knoors and Marschark (2015), successful deaf education systems typically rely on clear policy structures, ongoing teacher training, and specialized resources all of which were reported as missing here.

As for recommendations, teachers strongly advocated improving the quality of English language instruction for deaf pupils, several structural changes should be considered within the teacher preparation and curriculum design frameworks. First, both pre-service and in-service training programs must include specialized modules on deaf education, equipping teachers with the knowledge and skills necessary to address the unique needs of hearing-impaired learners. Integrating sign language instruction into these training programs is also essential, as it enables educators to communicate more effectively and inclusively. Furthermore, the development of a visual-based English curriculum tailored specifically for deaf learners would provide a more accessible and engaging learning experience. Finally, fostering stronger collaboration between special education experts and language teachers would promote the exchange of effective strategies, encourage interdisciplinary understanding, and support the implementation of inclusive classroom practices. One teacher summarized: “We want to help, but we need training, materials, and a system that supports us not just leaves us to figure it out alone.”

Figure 2.2

Institutional and Environmental Challenges Reported by Teachers



To complement the data gathered from teacher interviews, classroom observations were conducted to gain direct insight into the instructional practices used when teaching English to deaf pupils. A total of ten observation sessions took place in schools across the Tlemcen region, covering a variety of classroom settings and teacher profiles. The goal of these observations was to capture real-time teaching behaviors, classroom interaction patterns, and the practical application of strategies previously described by the teachers.

This rubric examines how the physical layout and visual accessibility of the classroom supported or hindered English instruction for deaf pupils. The layout, visibility, and use of assistive materials all played an essential role in learner engagement and comprehension.

In the majority of the ten observed sessions, classrooms were arranged to ensure that all pupils had a clear view of the teacher and the board. In seven classrooms, the teacher maintained front-facing posture while presenting, allowing pupils who relied on lip-reading or facial expressions to follow instructions. However, only three classrooms showed consistent use of visual tools such as posters, realia, or projector slides. Most teachers wrote instructions on the board and supplemented them with gestures, but few incorporated pre-prepared visual aids.

Noise levels were generally low, creating a manageable auditory environment for pupils with partial hearing. However, no classroom included specialized sound amplification devices or real-time captioning tools. None of the sessions included the presence of an interpreter, and only one school had a dedicated visual board consistently used for all lessons.

These findings suggest that while teachers made practical efforts to adapt the classroom environment, the lack of assistive technology and visual learning infrastructure remains a significant barrier. According to Swanwick and Marschark (2010), visual accessibility in deaf education is not a luxury it is foundational. that while teachers are improvising well, institutional investment in classroom design is urgently needed.

This rubric explores how teachers conveyed meaning to deaf pupils during English instruction, focusing on their use of spoken language, visual support, gestures, and sign language. Effective communication is central to deaf education, and these observations provide insight into how strategies were adapted or limited in real classroom settings.

In 9 out of 10 sessions, teachers used a combination of writing on the board, gestures, and facial expressions as their primary communication tools. Spoken English was used in almost all sessions, often accompanied by repetition or simplified phrasing. However, only three teachers attempted to use Algerian Sign Language (LSA) regularly during instruction. In most cases, sign use was limited to basic classroom commands or occasional clarification. One notable case showed a teacher who had clearly developed their own mixed visual system using homemade signs, writing, and images, which appeared effective in maintaining pupil attention.

In half of the sessions, teachers paused frequently to check for pupil comprehension often by making eye contact or requesting pupils to repeat or demonstrate the instruction. In the other half, instruction moved forward with minimal checking, even when pupils appeared hesitant or disengaged. This inconsistency raises concerns about how effectively messages were received.

According to Knoors and Marschark (2015), teachers of deaf pupils must be fluent in visual and signed communication to ensure linguistic access. Based on our observations, while most teachers showed strong effort, their limited formal training in LSA often made communication dependent on improvisation, which may compromise learning outcomes.

This rubric examines how deaf pupils responded during English lessons, focusing on their level of attention, interaction with the teacher, collaboration with peers, and participation in tasks. Engagement is critical in language learning, particularly when instruction must bridge both linguistic and sensory gaps.

Across the ten observed sessions, pupil engagement varied significantly, often depending on the teaching method used. In sessions where teachers incorporated visual tasks such as image-matching, object labeling, or role-plays, pupils showed noticeably higher levels of participation. In contrast, when lessons relied heavily on writing or translation on the board, pupils were more passive and less interactive.

In six classrooms, pupils frequently sought clarification using gestures or peer assistance, suggesting that while they were trying to remain engaged, the communication gap occasionally forced them to rely on each other. In three of these cases, pupils appeared hesitant to participate in oral tasks, even when encouraged, possibly due to lack of confidence or limited exposure to accessible language input.

Teachers who moved around the classroom, made consistent eye contact, and encouraged non-verbal forms of response (like pointing, showing flashcards, or using yes/no hand signals) seemed to foster a more active atmosphere. According to Hasyim and Suyanto (2023), deaf learners are more engaged when tasks are multimodal and when they feel emotionally supported by the teacher's interaction style. Based on these findings, pupil participation is strongly influenced by the degree to which lessons are visually structured and socially inclusive

Rubric Four: Use of Visual and Technological Tools

This rubric explores the extent to which teachers incorporated visual aids and technology to support English instruction for deaf pupils. In deaf education, visual resources are not supplementary they are central to comprehension and engagement.

In 8 out of the 10 sessions, teachers relied on basic visual materials such as board drawings, printed worksheets, and flashcards. These aids were often teacher-made, with a clear effort to simplify vocabulary through images. However, the quality and frequency of visual resource use varied. In several sessions, the visual aids were limited to single-word cards or illustrations, used briefly and not consistently reinforced throughout the lesson.

Only two observed classrooms integrated any digital tools, such as a projector or pre-prepared slides. None of the sessions employed speech-to-text software, captioned videos, or interactive whiteboards despite their known value in deaf education. One teacher used a short animated video with written captions, which visibly improved pupil focus and comprehension, but this remained an exception rather than the norm.

The absence of institutional support was noticeable. Teachers noted that they lacked access to functioning projectors, adapted software, or time to create digital content. As Marschark et al. (2014) argue, technology in deaf education bridges communication gaps and supports differentiated instruction. the limited use of technological tools observed here reflects a structural barrier, not a lack of teacher willingness most were clearly improvising with what little they had.

This rubric highlights the recurring difficulties that emerged during English lessons with deaf pupils, as observed across ten classroom sessions. It includes challenges related to communication breakdowns, classroom management, instructional clarity, and resource limitations.

One of the most consistent challenges was teacher-pupil communication mismatch. In many sessions, teachers provided instructions that were not fully understood by pupils, as evidenced by delayed reactions, off-task behavior, or

visible confusion. In five classrooms, pupils frequently turned to peers for help, signaling that the teacher's message had not been fully received. While this showed a form of peer support, it also pointed to gaps in instructional clarity.

Another prominent issue was instructional pacing. In several cases, lessons moved too quickly without confirming pupil understanding, especially when new vocabulary or grammatical structures were introduced. Teachers did not always pause to allow for processing time, which is especially critical for deaf learners relying on visual input.

Resource scarcity was also evident. Most teachers lacked ready-made materials tailored to deaf pupils' needs. Several reused outdated worksheets or improvised on the spot. None of the classrooms had access to trained interpreters, hearing-assistive devices, or standardized visual curriculum materials.

According to Stinson and Antia (1999), effective deaf education requires a balance between adapted communication, accessible content, and consistent teacher support. The observed challenges suggest that while teachers are committed, their efforts are hindered by the absence of structured pedagogical and institutional support. These limitations make classroom success highly dependent on individual teacher creativity and resilience.

2.4 Data Analysis and Interpretation

This section presents a combined interpretation of the qualitative data obtained through teacher interviews and classroom observations. The aim is to reveal the current realities of English instruction for deaf pupils in Algerian schools, highlighting patterns, contradictions, and practical implications for teaching practices.

Across the interviews, teachers consistently recognized the importance of English for deaf pupils, especially in terms of academic access and future opportunities. Many expressed a strong personal commitment to supporting their learners, despite the lack of institutional training or adapted materials. Observations

supported these claims, showing teachers using visual strategies, gestures, and simplified instruction to reach their pupils. However, the actual classroom conditions often reflected a gap between teachers' intentions and effective implementation.

One major finding is the limited use of sign language and technology. While teachers acknowledged the value of visual communication, observations showed that few were fluent in Algerian Sign Language (LSA), and most relied on improvisation rather than structured methods. Likewise, although some teachers mentioned using videos or images, classroom observation revealed very minimal use of assistive tools like captioned media or digital platforms.

Another key theme is the inconsistency in pupil engagement. Teachers often blamed low motivation, yet observational data suggested that engagement increased significantly when lessons were visual, interactive, or task-based. This suggests that the issue may lie less in pupil disinterest and more in instructional design.

The data point to a motivated but unsupported teaching workforce, and a pupil population that responds well to inclusive, visual instruction when properly implemented. The disconnect between teacher awareness and classroom practice emphasizes the need for structured training, resource development, and institutional support tailored to the needs of deaf learners.

2.5 Discussion of the Main Results

This section discusses the major findings of the study in light of the research objectives and hypotheses. The study explored the challenges of teaching English to deaf pupils in Algerian schools by examining institutional factors, teaching practices, and pupil learning difficulties. The findings were based on interviews with 15 teachers and 10 classroom observations, and they are now discussed in relation to the following hypotheses.

Inadequate institutional policies and non-inclusive physical classroom environments negatively affect the effectiveness of English language teaching for

deaf pupils. The data clearly supports this hypothesis. Nearly all teachers expressed dissatisfaction with the lack of institutional support, pointing out that there is no adapted curriculum for deaf learners, no official training in deaf education, and no clear governmental policy to guide inclusive English teaching. Many also reported the absence of necessary classroom tools such as projectors, subtitles, or even printed visual aids. Classroom observations confirmed these claims, showing that most teachers used improvised materials and received no administrative assistance. Therefore, the findings confirm that poor institutional infrastructure and environmental neglect significantly reduce the effectiveness of English teaching for deaf pupils.

Teachers face significant pedagogical challenges including lack of training and adapted materials which directly hinder the learning outcomes of deaf pupils in English classrooms. This hypothesis is also confirmed. The teachers interviewed reported that they lacked both formal training in deaf education and access to adapted instructional resources. Despite their willingness and creativity, many expressed uncertainty about whether their methods were effective. Several teachers admitted to using trial-and-error approaches, and others mentioned relying heavily on self-made materials. The absence of a unified pedagogical framework was evident, and classroom observations supported these claims by showing inconsistent teaching strategies, limited use of visuals, and uneven pupil engagement. The learning outcomes of the pupils often measured through matching, labeling, and drawing tasks remained basic and were rarely extended to sentence construction or oral interaction. This highlights how these pedagogical challenges directly impact learners' progress.

Cognitive and linguistic delays among deaf pupils significantly influence their ability to acquire English as a second language; however, the use of visual, multimodal, and L1-based strategies can partially overcome these challenges. This hypothesis is partially confirmed. The teachers consistently noted that many deaf pupils struggle with grammar, vocabulary retention, and abstract language concepts,

which they attributed to early cognitive and linguistic delays. These difficulties were evident in classroom behavior and assessments, as observed. However, the data also showed that when teachers used visual materials, gestures, drawings, and L1 explanations, pupil participation and understanding improved noticeably. For instance, pupils responded well to picture labeling, group tasks, and teacher modeling. While these strategies did not eliminate all learning barriers, they provided meaningful support and boosted learner confidence and engagement. Thus, while cognitive and linguistic limitations do present real challenges, the findings suggest that tailored strategies especially visual and bilingual methods are helpful in mitigating their effects.

The discussion reveals that the three hypotheses are well supported by the collected data. The institutional and pedagogical systems are underdeveloped for inclusive English education, leaving teachers with the burden of adaptation. Despite this, some strategies especially visual aids, Arabic support, and Total Communication methods show promising results when consistently applied. The data suggests that meaningful reform should target both the structural level (curriculum and policy) and the classroom level (teacher training and resources) to improve English learning outcomes for deaf pupils in Algeria.

2.6 Suggestions Based on the Main Results

Based on the discussion of findings, several recommendations can be made to improve the effectiveness of English language instruction for deaf pupils in Algerian schools. First, there is a need to introduce formal training programs for teachers that specialize in deaf education, particularly in areas such as sign language, visual pedagogy, and inclusive EFL practices. Alongside this, adapted teaching materials should be developed and distributed these may include visual aids, captioned video content, and sign-supported English tools that better reflect the linguistic needs of deaf learners. Establishing national curricular guidelines specific to deaf education would also ensure consistent and equitable instruction across Algerian institutions. Furthermore, the integration of educational

technologies such as speech-to-text applications, captioned media, and accessible digital platforms could help bridge the gap between auditory content and visual learners. To support pupil engagement, classroom practices should incorporate task-based learning, visual storytelling techniques, and non-verbal strategies that accommodate various communication preferences. Finally, fostering collaboration between general EFL teachers and special education specialists would allow for the sharing of successful strategies and contribute to continuous professional development. These recommendations aim to shift deaf education in Algeria from improvised efforts toward a more structured, inclusive, and pedagogically sound model one that reflects the realities and needs observed by the teachers themselves.

2.7 Conclusion

This chapter aimed to explore and interpret the realities of teaching English to deaf pupils in Algerian schools, based on qualitative data collected through teacher interviews and classroom observations. The findings revealed a motivated group of teachers working under difficult conditions, with minimal institutional training or access to adapted materials. While most educators recognized the importance of English for their pupils' future, their efforts were often limited by a lack of visual tools, professional development, and curriculum guidance.

The classroom observations confirmed many of the challenges mentioned in the interviews. Communication was frequently improvised, visual aids were underused, and pupil engagement was inconsistent improving only when lessons were made more interactive or visually accessible. Teachers were committed, but without systemic support, their ability to provide effective, inclusive instruction remained constrained.

Overall, the results point to an urgent need for structural reforms in how English is taught to deaf learners. These include teacher training in sign-supported communication, development of visual-based teaching materials, and the integration of inclusive teaching strategies into national educational policy. English instruction

for deaf pupils must move beyond individual teacher effort and become a coordinated, well-supported pedagogical practice if it is to meet the needs of all learner

General Conclusion

General Conclusion

This study set out to investigate the challenges faced in teaching English to deaf pupils in Algerian inclusive schools, with a focus on institutional, pedagogical, and learner-related dimensions. As English gains importance in both national and international contexts, understanding how it is delivered to pupils with hearing impairments becomes essential. The purpose of the research was to explore how current educational practices address the needs of deaf learners, identify the obstacles that limit their access to quality English instruction, and examine the strategies employed by teachers to overcome these barriers. By doing so, the study aimed to contribute meaningful insights to the field of inclusive education and support future improvements in English language teaching for deaf pupils in Algeria.

To achieve the objectives of this study, a qualitative research approach was employed. The data collection relied on two key instruments: semi-structured interviews with 15 English language teachers experienced in working with deaf pupils, and 10 classroom observations conducted across various inclusive schools in the Tlemcen region. This combination allowed for a multi-layered understanding of both the subjective experiences of teachers and the actual classroom practices in real-time. The interview data provided detailed insights into pedagogical methods, institutional support, and the role of L1, while the observations offered direct evidence of how these strategies were implemented or sometimes limited within the classroom environment. This methodological design ensured that the study captured both reflection and reality, making the findings more grounded and contextually relevant.

The findings of the study revealed several interconnected challenges in the teaching of English to deaf pupils. First, teachers consistently reported a lack of institutional support, including the absence of adapted curricula, training in deaf education, and access to appropriate teaching materials. Second, from a pedagogical perspective, teachers struggled to implement effective methods due to limited resources and minimal exposure to inclusive teaching frameworks. Many relied on self-developed materials and improvised strategies. Third, the learners themselves faced significant

General Conclusion

cognitive and linguistic challenges, such as delayed language acquisition and difficulty understanding abstract English concepts. Despite these barriers, the study found that when teachers used visual aids, multimodal strategies, and first-language (L1) support, pupil engagement and comprehension improved noticeably. These strategies, although inconsistent, showed promise in creating a more accessible English learning environment for deaf pupils.

The study's findings allowed for the examination of three hypotheses derived from the research questions. Hypothesis 1, which suggested that inadequate institutional policies and non-inclusive classroom environments negatively affect English language teaching for deaf pupils, was confirmed. Teachers cited a lack of adapted curricula, materials, and administrative support as major obstacles. Hypothesis 2, which proposed that pedagogical challenges particularly the absence of training and resources directly hinder learning outcomes, was also confirmed. All participants expressed concern about their preparedness and access to appropriate teaching tools. Finally, Hypothesis 3, which stated that cognitive and linguistic delays influence English acquisition but can be partially overcome through visual, multimodal, and L1-based strategies, was partially confirmed. The data showed that while such strategies were effective in increasing engagement and understanding, they did not fully resolve the deeper learning difficulties caused by limited institutional and educational support.

The results of this study carry important implications for both classroom practice and educational policy in Algeria. First and foremost, there is an urgent need for the development of a national curriculum tailored specifically to the needs of deaf learners, especially in foreign language instruction. Without such adaptation, deaf pupils remain excluded from meaningful access to English education. Additionally, teacher training programs must include components focused on inclusive pedagogy, sign language basics, and the use of visual and multimodal strategies. The study also highlights the importance of institutional responsibility: teachers alone cannot carry the burden of inclusion. Administrative support, classroom equipment, and regular professional development are essential if inclusive English education is to succeed. By addressing these gaps, Algeria

General Conclusion

can take meaningful steps toward ensuring that deaf pupils are not left behind in an increasingly globalized and English-driven world.

This study has shown that the inclusion of deaf pupils in English language education is both a challenge and a possibility. Despite the many obstacles such as lack of training, institutional support, and adapted resources teachers in Algerian inclusive schools demonstrate resilience and creativity. Their efforts, though limited by systemic constraints, reveal a deep commitment to their pupils. However, inclusion cannot rely on individual effort alone, but must be supported by policy, resources, and a shift in educational priorities. Teaching English to deaf learners is not only a matter of adapting content; it is a matter of recognizing the right of every learner to access meaningful and empowering education. With proper reform, support, and investment, inclusive English teaching can move from improvisation to innovation, offering deaf pupils the linguistic tools they need to participate fully in academic, social, and professional life.

Bibliography

Bibliography

- ✓ Antia, S. D., & Kreimeyer, K. H. (2003). Peer interactions of deaf and hard-of-hearing children. *Language, Speech, and Hearing Services in Schools*, 34(3), 302–313. [https://doi.org/10.1044/0161-1461\(2003/025\)](https://doi.org/10.1044/0161-1461(2003/025))
- ✓ Berent, G. P. (2001). English for deaf pupils: Assessing and addressing learners' grammar development. *TESOL Quarterly*, 35(1), 141–164. <https://doi.org/10.2307/3587868>
- ✓ Cummins, J. (2000). Language, power and pedagogy: Bilingual children in the crossfire. *Multilingual Matters*.
- ✓ Kelly, L. (1996). *Language and Deafness*. Singular Publishing Group.
- ✓ Marschark, M., & Spencer, P. E. (2003). *Oxford handbook of deaf studies, language, and education*. Oxford University Press.
- ✓ Mayer, C., & Leigh, G. (2010). The changing context for sign bilingual education programs: Issues in language and the development of literacy. *International Journal of Bilingual Education and Bilingualism*, 13(2), 175–186. <https://doi.org/10.1080/13670050903474085>
- ✓ Moores, D. F. (2001). *Educating the Deaf: Psychology, Principles, and Practices* (5th ed.). Houghton Mifflin.
- ✓ Musselman, C. (2000). How do children who can't hear learn to read an alphabetic script? A review of the literature on reading and deafness. *Journal of Deaf Studies and Deaf Education*, 5(1), 9–31. <https://doi.org/10.1093/deafed/5.1.9>

Bibliography

- ✓ Paul, P. V., & Wang, Y. (2012). *Literacy and Deafness: Listening and Spoken Language* (3rd ed.). Plural Publishing.
- ✓ Swanwick, R., & Tsakalaki, A. (2021). Inclusion in English language teaching for deaf pupils: Teaching strategies and teacher beliefs. *Deafness & Education International*, 23(1), 45–58. <https://doi.org/10.1080/14643154.2020.1854433>
- ✓ UNESCO. (2009). *Policy Guidelines on Inclusion in Education*.
<https://unesdoc.unesco.org/ark:/48223/pf0000177849>
- ✓ **Etikan, I., Musa, S. A., & Alkassim, R. S. (2016).**
Comparison of convenience sampling and purposive sampling.
American Journal of Theoretical and Applied Statistics, 5(1), 1–4.
<https://doi.org/10.11648/j.ajtas.20160501.11>
- ✓ **Stiggins, R. J., & Bridgeford, N. J. (1985).**
The use of classroom observation in the evaluation of teaching.
Educational Evaluation and Policy Analysis, 7(1), 85–96.
<https://doi.org/10.3102/01623737007001085>
- ✓ Knoors, H., & Marschark, M. (2012). *Teaching deaf learners: Psychological and developmental foundations*. Oxford University Press.
- ✓ Luckner, J. L., & Cooke, C. (2010). A summary of the vocabulary research with pupils who are deaf or hard of hearing. *American Annals of the Deaf*, 155(1), 38–67.
<https://doi.org/10.1353/aad.0.0129>
- ✓ Schick, B., de Villiers, P., de Villiers, J., & Hoffmeister, R. (2007). Language and theory of mind: A study of deaf children. *Child Development*, 78(2), 376–396.
<https://doi.org/10.1111/j.1467-8624.2007.01004.x>

Bibliography

- ✓ Padden, C., & Humphries, T. (2005). *Inside Deaf Culture*. Harvard University Press.
- ✓ Nikolarazi, M., & Hadjikakou, K. (2006). The role of educational experiences in the development of deaf identity. *Journal of Deaf Studies and Deaf Education*, 11(4), 477–492. <https://doi.org/10.1093/deafed/enl003>

Appendices

Appendix A Semi-Structured Interview for English Teachers of Deaf Pupils

Interviewer: _____

Date: _____

Teacher's Name: _____

School/Institution: _____

Section 1: Background Information

1. How long have you been teaching English to deaf pupils?
2. What qualifications or training do you have in deaf education or special needs teaching?
3. What communication methods do you use in your classroom (e.g., sign language, lip-reading, written instructions)?

Section 2: Teaching Methods & Approaches

4. What teaching methods and approaches do you use when teaching English to deaf pupils?
 - Can you describe the specific strategies you implement in your classroom?
 - Do you follow a particular teaching model or framework (e.g Total Communication, Bilingual-Bicultural, or Oral Approach)?
 - How do you adapt your teaching methods to suit pupils with different levels of hearing impairment?
 - What role does visual support (e.g., sign language, lip-reading, written materials) play in your teaching approach?

Appendices

- How do you assess the effectiveness of your teaching methods?
5. How do you incorporate the use of L1 (pupils' first language) in teaching English?
- Do you find L1 beneficial in explaining grammar or vocabulary?
 - How do pupils respond when L1 is used as a bridge to learning English?
 - Are there any challenges in balancing L1 and English in the classroom?

Section 3: Classroom Challenges & Pupil Engagement

6. What are the biggest challenges you face when teaching English to deaf pupils?
- Communication barriers
 - Lack of resources or training
 - Pupil motivation and engagement
7. How do you keep pupils engaged and actively participating in English lessons?
- What strategies do you use to encourage interaction?
 - Do you use technology (e.g., subtitles, speech-to-text, interactive tools)?
8. How do you assess pupils progress in English learning?
- What types of assessments do you use? (e.g written tests, visual tasks, projects)
 - Do you adapt assessments for pupils with different levels of hearing loss?

Section 4: Institutional Support & Recommendations

9. What kind of institutional or administrative support is available for teaching deaf pupils?
- Are there any policies or curriculum adaptations for deaf pupils?
 - Do you receive specialized training or resources?
10. In your opinion, what improvements are needed in teaching English to deaf pupils?

Appendices

Additional Comments:

Appendices

Appendices B classroom observation

Observer Details

Observer: _____

Date: _____

Time: _____

Teacher: _____

Class/Level: _____

Topic: _____

I. Teaching Methods & Strategies

• Lesson Planning & Delivery:

- Clear learning objectives stated and shared with pupils.
- Lesson structure (warm-up, presentation, practice, production, wrap-up) is logical and effective.
- Teacher incorporates visual aids, realia, and sign language to support learning.
- Teacher uses written instructions and visual cues instead of/verbal explanations.
- The lesson accommodates different levels of hearing ability (e.g., partial hearing loss vs. full deafness).
- The pace of the lesson allows pupils to process visual/written information.

• Communication Strategies:

- Teacher uses sign language, gestures, or captions to support instruction.
- Teacher faces pupils while speaking for lip-reading purposes.
- Teacher encourages peer collaboration for better understanding.
- Instructions are given in multiple formats (e.g., written, signed, demonstrated).

• Language Skills Focus:

- Emphasis on visual learning techniques (e.g., pictures, videos, written examples).
- Strategies used to develop reading and writing skills.
- Use of speech-to-text or captioning tools to aid comprehension.
- Error correction techniques used (e.g., modeling, written feedback).

II. Classroom Challenges

• Communication Barriers:

- Difficulties in understanding spoken English.
- Pupils rely only on written text due to lack of sign language support.

Appendices

- Misunderstandings due to lack of clear visual/written instructions.
- Teacher struggles to communicate effectively with deaf pupils.
- Pupil Engagement & Participation:
 - Pupils actively participate using sign language, writing, or other methods.
 - Some pupils appear disengaged due to lack of accessible materials.
 - The teacher encourages active participation despite communication barriers.
- Classroom Environment & Resources:
 - Classroom layout allows clear visibility of the teacher and materials.
 - Presence of assistive tools (e.g., visual boards, captions, sign language interpreter).
 - Noise levels in the classroom do not distract pupils with hearing aids.
- Use of L1 (First Language) in the Classroom
 - L1 is used to clarify complex concepts and bridge understanding gaps.
 - Balanced use of L1 and English to support learning without over reliance on the first language.
 - L1 is used strategically for instructions, explanations, pupil engagement.
 - Teacher facilitates a gradual transition from L1 to English, encouraging English exposure while supporting comprehension.

III. Pupil Learning Strategies

- Pupils use visual learning techniques (e.g., lip reading, watching videos, reading captions).
- Pupils collaborate with peers to clarify instructions.
- Pupils ask for clarification in written form or through gestures.

IV. Institutional & Environmental Factors

- Curriculum & Policy Adaptation:
 - The curriculum is adapted for deaf pupils' needs.
 - The syllabus includes visual and interactive learning techniques.
- School Support & Resources:
 - Availability of trained teachers in deaf education.
 - Access to technology (e.g., projectors, subtitles, speech-to-text tools).

Additional Notes:

Appendices

- _____
- _____

Recommendations:

- _____
- _____

Summary

Résumé en français

Ce mémoire explore les défis pédagogiques rencontrés dans l'enseignement de l'anglais aux élèves sourds dans les écoles primaires et les associations de la région de Tlemcen. À travers une étude de cas qualitative, la recherche s'appuie sur deux outils principaux : des entretiens semi-directifs avec quinze enseignants et dix observations de classes inclusives. L'objectif est d'identifier les obstacles institutionnels, pédagogiques et cognitifs qui freinent l'apprentissage de l'anglais chez les apprenants sourds, ainsi que les stratégies utilisées pour y remédier. Les résultats révèlent un manque de formation spécialisée, une absence de matériel adapté et des méthodes centrées sur l'oral peu efficaces. Toutefois, certains enseignants font preuve de créativité en utilisant des supports visuels, la langue des signes et la L1 pour faciliter la compréhension. L'étude conclut que l'enseignement inclusif en Algérie nécessite des réformes profondes : adaptation des programmes, formation continue des enseignants et meilleures ressources. Elle souligne également l'importance d'un soutien institutionnel accru pour garantir une éducation équitable aux élèves sourds.

الملخص بالعربية

يتناول هذا البحث التحديات البيداغوجية التي تواجه تعليم اللغة الإنجليزية للتلاميذ الصم في المدارس الابتدائية والجمعيات بولاية تلمسان. اعتمدت الدراسة على منهج وصفي نوعي من خلال مقابلات شبه موجهة مع خمسة عشر أستاذًا، بالإضافة إلى عشر ملاحظات صافية. تهدف الدراسة إلى فهم العراقيل المؤسسية والتعليمية والمعرفية التي تؤثر على تعلم اللغة الإنجليزية لدى التلاميذ الصم، واستكشاف الأساليب المعتمدة لتجاوز هذه الصعوبات. أظهرت النتائج غياب تكوين متخصص للأساتذة، ونقص الوسائل التعليمية المناسبة، مع اعتماد أساليب تقليدية تعتمد على السمع. ومع ذلك، أظهر بعض المعلمين مبادرات فعالة باستخدام وسائل بصرية، واللغة الأم، ولغة الإشارة لتسهيل الفهم. توصلت الدراسة إلى ضرورة إدخال إصلاحات شاملة في مجال التعليم الشامل في الجزائر، تشمل تطوير المناهج، وتكوين الأساتذة، وتوفير الوسائل الداعمة. كما تؤكد أهمية دعم مؤسسي لضمان تكافؤ الفرص التعليمية لذوي الإعاقة السمعية.