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**Investigating the Impact of Learning English alongside Arabic and French on Primary School Students’ Language Development: A Case Study**

*Dissertation submitted to University of Ghardaia for obtaining the Master’s Degree in Didactics*

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## Dedication

First of all, all thanks and praise be to Allah.

To the little girl Hadjer, who dreamed in silence and walked with courage

the one who feared the journey might be too long, yet never let go of hope.

Today, she stands tall at the threshold of her dream.

To my hero father, **Nadir**

My hero, the silent strength whose presence spoke louder than words.

The kind heart that stood behind me, my constant support, my quiet protector, my unshakable foundation.

To my beloved mother, Asma

The kind-hearted soul whose forgiveness knows no bounds,

and the embodiment of patience and unconditional love.

To Aya, Abdelghafour, Hamza and Mouad

This graduation is yours, because you are my world.

To Amira and Imane

my sisters from another mother, your presence was a blessing,

your companionship one of the most beautiful gifts I’ve received on this path.

To my grandmother Hadiya

may Allah keep you safe. You are the light of our family and its gentle blessing.

To my late grandfathers, Othman and Kheider

whose souls rest in divine peace, and whose memory lives on in the kind words of others.

To my late grandmother, Dhaiba

whose soul rests in divine peace, you of the beautiful memory and the pure spirit.

To my Ben Abdelhadi, Madani families, and all my uncles and aunts from both sides of the family.

Also, to my cousins may love and gratitude surround you always. May Allah preserve us from all harm.

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**Abstract**

As multilingualism becomes increasingly relevant in today's interdependent world, the addition of English to early education systems has gained momentum in Algeria, where Arabic and French have traditionally been the dominant linguistic forces. This study considered the impact of learning English alongside Arabic and French on the language development of primary school children, using Hamou Belkacem El-Nefoussi Primary School in Ghardaïa as a case study for the 2024/2025 academic year. The primary objective was to investigate the intellectual, educational, and linguistic effects of early trilingual exposure on young learners. The study also examined the possibilities and challenges of introducing English into an already existing bilingual environment. A mixed-methods approach was adopted, combining both qualitative and quantitative tools. Data were collected through a guided questionnaire administered to 35 students in the 3rd, 4th, and 5th grades, and through semi-structured interviews with 12 English language teachers. The findings revealed high motivation among the students to study English, a noticeable impact on their linguistic awareness, and growing proficiency in code-switching. They also pointed to instances of language interference particularly between French and English and highlighted the need for enhanced pedagogical support. Overall, the results supported the proposed hypotheses and emphasized the importance of balanced multilingual educational strategies to foster learners' linguistic and cognitive development.

**Keywords:***Multilingualism, Trilingual Education, Language Acquisition (LA), Code-switching.*

## List of Abrivations

**CALP** Cognitive Academic Language Proficiency

**CLT**  Cognitive Load Theory

**CPH** Critical Period Hypothesis

**ELT** English language teaching

**EFL**  English as a Foreign Language

**FLA**  First Language Acquisition

**SLA** Second Language Acquisition

**LAD** Language Acquisition Device

**MSA** Modern Standard Arabic

**UG**  Universal Grammar

**ZPD** Zone of Proximal Development

## List of Figures

|  |  |
| --- | --- |
| Figure 1. Pupils’ Gender Distribution……………………………………….........………… | 36 |
| Figure 2. Language Spoken at Home……………………………………………….........…. | 37 |
| Figure 3. Excitement About Learning English………………………………..........……….. | 38 |
| Figure 4. Most Enjoyable Language to Study…………………………………..........……... | 39 |
| Figure 5. Preferred English Learning Skill………………………………….........………… | 40 |
| Figure 6. Confidence in Speaking English Compared to Arabic and French……….........… | 41 |
| Figure 7. Difficulty in Learning English Alongside Two Other Languages………..........…. | 42 |
| Figure 8. Reasons for Learning English…………………………………………..........…… | 43 |
| Figure 9. Effect of Learning English on Arabic and French Proficiency………..........…….. | 44 |
| Figure 10. English Usage Outside School…………………………………………..........…. | 45 |
| Figure 11. How Students Use English Outside School…………………………..........……. | 46 |

**List of Tables**

|  |  |
| --- | --- |
| Table 1. Pupils’ Gender Distribution …………………………………………….........…… | 36 |
| Table 2. Language Spoken at Home …………………………………………..........……… | 37 |
| Table 3. Excitement About Learning English ………………………………...........………. | 38 |
| Table 4. Most Enjoyable Language to Study ………………………………….........……… | 39 |
| Table 5. Preferred English Learning Skill ………………………………………..........…… | 39 |
| Table 6. Confidence in Speaking English Compared to Arabic and French ………..........… | 40 |
| Table 7. Difficulty in Learning English Alongside Two Other Languages ……….........….. | 41 |
| Table 8. Reasons for Learning English …………………………………………….........…. | 43 |
| Table 9. Effect of Learning English on Arabic and French Proficiency …….……..........…. | 43 |
| Table 10. English Usage Outside School ……………………………………….........…….. | 44 |
| Table 11. How Students Use English Outside School ……………………….........……….. | 45 |

|  |  |
| --- | --- |
| **Table of Contents** | |
| Dedication…................................................................................................................................................II | |
| Acknowledgement……...............................................................................................................................III | |
| Abstract.......................................................................................................................................................IV | |
| List of Abrivation ........................................................................................................................................V | |
| List of Figures.............................................................................................................................................VI | |
| List of Tables..............................................................................................................................................VII | |
| Table of Contents.....................................................................................................................................VIII | |
|  | |
| **General Introduction** | |
| Introduction…………………………………………………………………………………………... | 1 |
| Background of the Study…………………………………………………………………………….. | 1 |
| Statement of Purpose………………………………………………………………………………… | 1 |
| Statement of Problem………………………………………………………………………………... | 2 |
| Research Questions………………………………………………………………………………….. | 2 |
| Research Hypotheses…………..………………………………………………………………….... | 2 |
| Rational………………………………………………………………………………………………. | 3 |
| Structure of the Dissertation…………………………………………………………………………. | 3 |
| Limitations of the Study……………………………………………………………………………... | 4 |
| Definition of Key Words……………………………………………………………………………... | 4 |
| Methodology………………………………………………………………………………………….. | 5 |
| Conclusion…………………………………………………………………………………………..... | 5 |
| **Part One: Theoretical Part** | |
| **Chapter One: Understanding Multilingualism and Language Learning** | |
| Introduction………………………………………………………………………………………….... | 7 |
| 1. **Definitions**…………………………………………………………………………………….. | 7 |
| * + 1. Multilingualism………………………………………………………………………………. | 7 |
| * + - 1. The Importance of Multilingualism in Algeria………………………………………………... | 8 |
| * + 1. Language acquisition: learning a first or second language……………………………………. | 9 |
| * + - 1. Universal Grammar and Cross-Linguistic Transfer…………………………………………… | 10 |
| * + 1. Language interference and code-switching as common multilingual phenomena……………. | 11 |
| * + - 1. Types of code-switching………………………………………………..................................... | 12 |
| * 1. **Multilingual Learning Theories**…………………………………………................................ | 13 |
| 1.2.1 The Critical Period Hypothesis: The Significance of Early Language Exposure……………… | 13 |
| * + 1. Sociocultural Theory: How Interaction Affects Language Acquisition………………………. | 15 |
| 1.2.2.1 Sociocultural Theory in the Algerian Context………………………………………………... | 16 |
| * + 1. Cognitive Load Theory: The brain's ability to manage several languages……………………. | 17 |
| * 1. **Multilingualism in Primary School**………………………………………………................. | 19 |
| * + 1. Benefits of early exposure to many languages………………………………………………... | 19 |
| * + 1. Influence on academic and cognitive abilities………………………………………………… | 20 |
| * + 1. Young learners' difficulties in a trilingual setting……………………………………………... | 20 |
| **Conclusion**………………………………………………..................................................................... | 21 |
| **Chapter Two: Cognitive, Academic, and Social Aspects of Multilingual Education** | |
| **Introduction**………………………………………………................................................................... | 23 |
| **2.1 Cognitive Benefits of Multilingual Education**…………………………………………….......... | 23 |
| **2.2 Academic and Linguistic Implications of Multilingual Education**…………………………… | 24 |
| * + 1. Academic Advantages and Cross-Linguistic Transfer………………………………………… | 24 |
| * + 1. Linguistic Interference and Pedagogical Challenges………………………………………….. | 25 |
| * 1. **Social and Cultural Dimensions of Multilingual Education**………………………………. | 25 |
| * + 1. Algerian Cultural Dimensions of Multilingualism…………………………………………… | 26 |
| * + 1. Multilingualism and Social Integration……………………………………………………….. | 27 |
| * 1. **Challenges of Multilingual Education**………………………………………………………… | 28 |
| * + 1. Structural and Pedagogical Constraints……………………………………………………….. | 28 |
| * + 1. Sociopolitical Sensitivities……………………………………………………………………. | 29 |
| **Conclusion**………………………………………………..................................................................... | 29 |
| **Part Two: Practical Part** | |
| **Chapter Three: Research Methodology and Data Analysis** | |
| **Introduction**……………………………………………….................................................................... | 32 |
| * 1. Research Design………………………………………………...................................................... | 32 |
| * 1. Research Setting………………………………………………...................................................... | 32 |
| * 1. Population and Sample………………………………………………............................................ | 33 |
| * 1. Research Procedure………………………………………………................................................. | 33 |
| * 1. Data Collection………………………………………………........................................................ | 33 |
| 3.5.1 Data collection Instruments………………………………………………................................... | 34 |
| 3.5.1.2 Student’s Questionnaire………………………………………………...................................... | 34 |
| 3.5.1.2.1 Description and Administration of Students’ Questionnaire…………………………...…… | 34 |
| 3.5.1.3 The Pilot Study………………………………………………................................................... | 35 |
| 3.5.1.4 Teacher’s Interviews………………………………………………........................................... | 35 |
| 3.5.1.4.1 Description of the Teacher’s Semi-Structured Interviews…………………………………... | 35 |
| 3.6 Data Analysis………………………………………………............................................................ | 35 |
| 3.6.1 Pupils’ Questionnaire Analysis……………………………………………….............................. | 36 |
| 3.6.2 Teachers’ Interview Analysis………………………………………………................................. | 46 |
| 3.7 Discussion of the Results……………………………………………….......................................... | 49 |
| 3.8 Conclusion………………………………………………................................................................ | 51 |
| 3.9 Pedagogical Recommendations………………………………………………................................ | 51 |
| **General Conclusion**……………………………………………………..………................................. | **55** |
| **Bibiliography**……………………………………………………..………............................................ | **60** |
| **Appendix A**……………………………………………………..………............................................... | **65** |
| **Appendix B**……………………………………………………..………............................................. | **67** |
| **الملخص**………………………………………………………………………………………………….. | **69** |

**General Introduction**

**Introduction**

In an increasingly globalized world, multilingual education has become a vital aspect of academic development. Many primary school students are exposed to multiple languages, with English, Arabic, and French. This study aims to examine the impact of learning these three languages simultaneously on students’ linguistic development, cognitive abilities, and academic performance. By focusing on a specific case study, this research seeks to provide insights into how multilingual exposure shapes language acquisition and learning experiences in primary education.

**Background of the Study**

English language teaching (ELT) in primary schools has become a hot topic and one of the most important issues today in education in the new millennium. The growing interdependence of societies and their cultural heterogeneity emphasize the need for the recognition and promotion of diversity, and indeed multilingual education, though primary schools, making this a highly significant topic. The decision to introduce English as a subject taught alongside French and Arabic in primary schools three years ago in Algeria represented a bold and difficult move by the authorities***.***

**Statement of Purpose**

This study aims to analyze the effects of simultaneous learning of English, Arabic, and French on language acquisition and development. It aims also to investigate the cognitive and academic effects of trilingual education in primary schools, and to identify the aspects that students encounter in a trilingual learning environment. Moreover, it seeks to assess students’ proficiency in each language and their ability to switch between them, and to provide recommendations for improving trilingual education strategies.

**Statement of Problem**

Multilingual education presents both opportunities and challenges for young learners. While studies suggest that exposure to multiple languages can enhance cognitive abilities and linguistic flexibility, some researchers argue that it may lead to language interference and increased cognitive load. The central problem of this study is to determine whether learning English alongside Arabic and French positively or negatively influences language development in primary school students. Additionally, this research seeks to explore how students acquire and use three languages concurrently***.***

**Research Questions**

**The main research question**

1-How does learning English alongside Arabic and French impact primary school students' overall language development?

**The sub research questions**

2- What are the cognitive and linguistic benefits or challenges of simultaneous language acquisition in English, Arabic, and French at the primary school level?

3- How does multilingual exposure affect students' proficiency and ability to switch between languages?

**Research Hypotheses**

**H1:** Learning English, Arabic, and French simultaneously enhances primary school students' language development by improving their linguistic proficiency and flexibility.

**H2:** Trilingual education positively influences students' cognitive abilities, including problem-solving and memory retention.

**H3:** Exposure to multiple languages improves students' ability to switch between languages with ease, fostering greater linguistic adaptability.

**Rational**

As English is largely reputed to be the most significant language in the world, the learning of English in conjunction with Arabic and French has become a requisite for language acquisition among elementary school students globally. Understanding the impact of concurrent exposure to such languages on cognitive development, literacy, and general linguistic capacity is essential given the increasing relevance of multilingualism in today's globalised world. Multiple language learning has been shown to enhance cross-linguistic transfer, which is the process by which mastering one language aids in mastering another, leading to improved reading and writing abilities. Additionally, it provides teachers with crucial information to enhance language instruction and effectively promote multilingual elementary school education.

**Structure of the Dissertation**

This study is structured into two main sections: theoretical and practical. The theoretical section comprises two chapters. The first chapter investigates how learning English alongside Arabic and French influences the language development of primary school students, drawing on multilingualism and language acquisition theories. The second chapter discusses the cognitive, academic, and social impact of multilingual education in primary schools.

The practical part consists of a single chapter that details the research methodology, examines the collected data, interprets the results, and presents a comprehensive discussion. Additionally, it provides practical insights into language learning within multilingual settings.

**Limitations of the Study**

While this study achieved its objectives and contributed valuable insights into trilingual education in Algerian primary schools, certain limitations must be acknowledged.

First, the absence of classroom observations, initially planned to enrich the data, limited the study’s ability to capture real-time language use and teacher-learner interactions in context.

Second, the relatively small sample of pupils and teachers may affect the generalizability of the findings, given Algeria’s diverse linguistic and cultural landscape.

Third, the restricted academic time frame (2024–2025) hindered longitudinal follow-up and deeper data triangulation.

Lastly, although twelve teachers participated, scheduling and workload issues limited their full involvement, affecting the depth of qualitative insights.

Despite these constraints, the study offers a strong foundation for future research, which could benefit from larger samples, classroom access, and extended timelines.

**Definition of Key Words**

* Multilingualism: "The ability to speak, understand, and use more than two languages" (Grosjean, 2010, pp.3-5).
* Language Acquisition:" The process of learning a language, either as a first (native) language or as an additional (second or foreign) language"

(Lightbown & Spada, 2013, pp.4-6).

* Cognitive Flexibility: "The mental ability to switch between different concepts, tasks, or ways of thinking, which is often improved by learning multiple languages"

(Bialystok, 2009 p. 5).

* Interference: "When rules or structures from one language affect how another language is used, sometimes causing mistakes or confusion" (Weinreich, 1953 pp. 18–20).
* Code-Switching: "The practice of switching between two or more languages in a conversation, often depending on context, audience, or topic" (Poplack, 1980, pp. 583–585).

**Methodology**

This study adopts a mixed-methods approach, integrating quantitative data collection through student questionnaires with qualitative insights from teacher interviews. It explores language learning in a multilingual education setting, focusing on primary school students enrolled in a program where English, Arabic, and French are taught. Input from teachers provides a broader perspective on students' language development. The study primarily relies on questionnaires to capture students’ experiences and challenges, while structured and semi-structured interviews with teachers offer deeper insights. By examining the experiences of primary school students learning multiple languages, this research aims to enhance understanding of trilingual education's implications and inform best practices in multilingual teaching environments.

**Conclusion**

By exploring the experiences of primary school students learning English alongside Arabic and French, this study seeks to offer a deeper understanding of the implications of trilingual education and inform best practices in multilingual teaching environments.

**Part One: Theoretical part**

**Chapter One: Understanding Multilingualism and Language learning**

**Introduction**

Multilingualism is an increasingly prominent phenomenon in the context of rapid linguistic and cultural changes, with significant implications for language acquisition, particularly in the early stages of schooling. The impact of multilingualism on language development, especially when a child is exposed to three languages, warrants further exploration. Acquiring language in a trilingual environment offers valuable insights into the cognitive and linguistic processes involved, which can inform educational practices aimed at promoting linguistic ability in multilingual educational systems.

**1.1. Definitions:**

* + 1. **Multilingualism:**

Multilingualism did not start with us; Multilingual scholars from all parts of Europe participated in translating Arabic and Greek writings into Latin and the transmission of knowledge during the Middle Ages. Multilingualism also happened in the oldest written examples of the Spanish and Basque languages, the Glosas Emilianenses. They were Spanish and Basque annotations inscribed in a Latin book toward the end of the 11th century. At the societal level, a well-known example is multilingualism in England after the Norman Conquest in 1066. English was spoken by most of the population, but Norman French by the elite, and Latin by record-keeping and the Church. A more mature example of multilingualism is Sumerian-Akkadian in Southern Mesopotamia during the third millennium BCE.

Multiliteracy is a very prevalent phenomenon in the world today. This leads to the conclusion that are nearly 7,000 languages spoken worldwide and nearly 200 sovereign states (Lewis, 2019). Not only are there more languages than countries, but they are also unevenly distributed, requiring speakers of minority languages to use additional languages in daily life.

Education in most countries of the world is done in multilingual contexts. This means that parents in different societies in different countries of the world would also have different policies and measures to conduct their education system, such as the policy to determine the types of language of instruction used in the system.

Multilingualism has been an interesting subject in linguistics. Goh and Silver (2004) stated that multilingualism is a state in society in which there is more than one language. Members of the society are usually bi- or multilingual, though this is not always the case. It is also defined as the practice of using polyglotism, or using more than one language, either by and within a single speaker or by and within a speech community. A multilingual person, in a broad sense, is then one who can communicate in more than one language, either actively (by writing, speaking, or singing) or passively through (reading, listening, or perceiving) Kress and Van Leeuwen in Myer (2011) have asserted that Multilingualism is communication between interlocutors with different linguistic and cultural backgrounds and how languages which possess another social and historical status within a community are adopted. Also, it entails the mode, manner or medium of communicating meaning. Multilingualism also suggests the co-spatial existence of two or more languages in the same space at a specific point in time.

* + - 1. **The Importance of Multilingualism in Algeria**

Multilingualism in Algeria is both a legacy and a necessity. The country has a long history of navigating complex linguistic landscapes. After independence in 1962, Arabic became the official and national language (Hargreaves,2009). This language became a mechanism to express national and cultural identity. However French remained dominant in higher education, science, and administration as the country was colonized (1830–1962). In recent times, English has made inroads, marketed as a neutral, universal language, particularly in the fields of science, business and technology. In 2023, English is taught in primary schools from Grade 3, as part of the national drive for global integration.

This thin, polylingual reality in Algeria makes multilingualism one of the most deeply rooted and dynamic phenomena. It demands pedagogical answers about identity, equity and how instructional moments are distributed among languages.

* + 1. **Language acquisition: learning a first and second language**

Language is acquired through exposure, but one must be able to make sense of what they hear Usually, it is divided into First Language Acquisition (FLA) and Second Language Acquisition (SLA). The first of these represents the acquisition of the native language, which is gained naturally before it even becomes conscious knowledge, developed by the infant between 0 and 6 years of age, while the second refers to learning undertaken after the first has already been acquired as an act of will be based on knowledge and skill of that native language.

The early theories of language acquisition were based on the premises of behaviorism, in which “language is learned behavior shaped by reinforcement,” according to Skinner (1957, p. 31), focusing on imitation and repetition. This view would later be brought into question by Noam Chomsky, who famously posited that children have an inborn ability to learn languages (called the Language Acquisition Device or LAD). Chomsky (1965,p.33) proclaimed: “The mind of the child is already endowed with a universal grammar that makes the conquest of language much easier “.

In the 1980s, Stephen Krashen helped in an important way by separating between "language acquisition" and "language learning." He argued that "acquisition requires meaningful interaction in the target language natural communication in which speakers are not concerned with the form of their utterances but with the message they are creating and comprehending" (Krashen, 1982). His Input Hypothesis was dedicated to enhancing learners through receiving slightly better language than what they already know, named as "i + 1".

* + - 1. **Universal Grammar and Cross-Linguistic Transfer**

According to Chomsky's (1981) theory of Universal Grammar (UG), human beings are born with a universal grammar shared by all languages. The internal linguistic structure enables children to acquire any language they are exposed to in a sufficient way, regardless of the specific structure of the language. UG subsequently constitutes the cognitive foundation for multilingual language acquisition (Chomsky, 1981, p. 23).

This view is a complement to Cummins' (2000) Interdependence Hypothesis, which contends that "skills developed in one language can transfer to another, supporting overall academic development" (Cummins, 2000, p. 39). These two theories, in combination, predict that the innate cognitive structures promoted by UG not only facilitate first language acquisition but also underlie cross-linguistic transfer of linguistic competencies such as syntactic awareness, vocabulary development, and metalinguistic ability across languages.

Within the Algerian teaching environment, this theoretical model assumes additional relevance. The acquisition of languages in Algeria is also bound to be dynamic and multilayered, guided by diglossia, early multilingual contact, and evolving education policies. Most children acquire Darija (Algerian Arabic) or Tamazight as their first language at home. However, upon enrollment in school, they are taught Modern Standard Arabic (MSA), which is functionally and structurally distinct from the language spoken at home.

By Grade 3, they begin French as a second language, and as of 2023, English has been introduced at the primary level. This exposes students to three or four languages simultaneously during the formative cognitive years. This can either enhance linguistic and cognitive abilities or create a language overload, depending on the quality and adaptability of the teaching methodology. As Benrabah (2007) has noted, "the co-existence of a number of languages in the Algerian school system is not accompanied by clear pedagogical strategies, which tends to lead to confusion and low competence in all the target languages" (Benrabah, 2007, p. 230).

Moreover, the shortage of adequately qualified instructors particularly in English and even, in some cases, French implies that a large number of students are not in a position to attain Cognitive Academic Language Proficiency (CALP), as Cummins has emphasized in his work on bilingual education. This reality calls for pedagogical practices that are inclusive, equitable, and guided by a keen understanding of the manner in which languages intersect and transfer in multilingual learners. The Algerian case therefore highlights the need to include universal grammar and cross-linguistic transfer frameworks within both language policy and classroom practice.

* + 1. **Language interference and code-switching as common multilingual phenomena**

Language interference, or language transfer, occurs when grammatical structures, sounds, or rules of one language influence the production or comprehension of another language. Language interference can be positive (where similarity between languages makes it easy to learn) or negative (where similarity is absent and triggers errors). Interference, according to Uriel Weinreich (1953), is when "elements from one language intrude into the use of another language, affecting pronunciation, grammar, vocabulary, or syntax." This is particularly common among multilingual learners, especially where languages have different phonological or syntactic forms. For instance, Arabic learners of English are likely to transfer phonemes or sentence patterns from Arabic, e.g., failure to use the verb "to be" in simple present ("He happy" rather than "He is happy").

Closely related to interference is code-switching, the switching between two or more languages or varieties of languages within the same conversation, sentence, or even clause. Code-switching is a highly researched area of sociolinguistics. Myers-Scotton (1993) defines code-switching as "a strategic and socially meaningful choice made by bilinguals to navigate between cultural and communicative demands."

* + - 1. **Types of code-switching**
* **Inter-sentential:** switching occurs between sentences.
* **Intra-sentential:** alternating between the same sentence.
* **Tag-switching:** inserting discourse markers or filler words from the other language (e.g., "you know," "voilà").

Far from being a sign of confusion, research has shown that code-switching can be a cognitive strength, showing linguistic awareness and flexibility (Grosjean, 1982). But excessive reliance on code-switching without structured language use can lead to language mixing and lower proficiency in formal registers.

In Algeria, code-switching and language interference are common facts, because of the multilingual context of the country and its rich sociolinguistic history. Most Algerian children speak Darija or Tamazight at home and Modern Standard Arabic, French, and English at school. Constant switching between the different languages with their distinct grammar, pronunciation, and usage context results in interference most of the time. For example:

* French grammar with Arabic lexicon: "J'ai acheté khobz."
* Arabic grammar with English lexicon: "He go la plage."
* English lexicon with French phonology: "skoo-l" rather than "school."

Code-switching also occurs in the urban centers such as Algiers, Oran, and Tizi Ouzou, where students will code-switch among Arabic, French, Tamazight, and even English these days within a single dialogue. Not only is it a communicative strategy, but also an identity marker and one of belongingness. Within the classroom, there are some instructors who utilize code-switching in order to explain things, especially when explaining French or English in Arabic. However, if left uncontrolled, this can lead to unorganized use of language, and prevent learners from acquiring formal academic language.

As Benrabah notes, "Algerian classrooms are often a microcosm of the country's sociolinguistic tensions, where the boundary between languages is open, but the education policies keep them as strictly distinct systems." (2014, p. 38–59) Teachers therefore have to develop balanced strategies that take note of the role of code-switching, yet also strive towards clear proficiency in both languages.

* 1. **Multilingual Learning Theories**
     1. **The Critical Period Hypothesis:**The Significance of Early Language Exposure.

**The Critical Period Hypothesis (CPH)** is among the theories that form the pillars of language acquisition. It posits that there exists a biologically determined critical period during which language is learned most naturally and with ease usually early in life. After this hypothesized critical period, which runs up to the age of puberty, the malleability of the brain decreases and language becomes more difficult to learn with native-like competence. The theory was first advanced by **Eric Lenneberg (1967),** who argued that "language acquisition is biologically linked to age, and that children possess greater potential to acquire language before cerebral lateralization completion." Lenneberg's article gave rise to a wide variety of studies comparing children's and adults' language acquisition.

Perhaps the strongest empirical evidence that supported CPH was that of **Johnson** and **Newport (1989, p78**), who noted that "learners who had been exposed to a second language before the age of seven performed as well as native speakers, but performance declined consistently for those starting after that age." The results once more confirmed that early exposure was necessary to achieving high proficiency in a second or third language.

Further support for the theory came from studies of brain development, which showed that **young language learners process language in more diffuse areas of the brain**, whereas late learners rely more on explicit, analytical processes.

In Algeria, the CPH has a direct influence on the country's multilingual education system. Most children grow up speaking **Darija** (Algerian A rabic) or **Tamazight** at home and are formally introduced to **Modern Standard Arabic** (MSA) when they start school. French is introduced in **Grade 3,** and **English** as of **2023** has been introduced into the early curriculum.

These reforms reflect an awareness of the value of early language exposure in line with the CPH. However, the success of early instruction depends heavily upon **teacher training, curriculum quality**, and **supportive school environments** all of which remain unevenly distributed across Algerian schools.

Students in less-resourced or rural schools do not have adequate instructional support and consequently master all three languages less. Nonetheless, students at urban and private schools, as they typically are exposed to French or English earlier in the media or in the family, master pronunciation, learning vocabulary, and comprehension better.

Thus, while Algeria has made steps towards embracing **early multilingual education**, the effectiveness of this policy depends on its **application and equity among regions**. As noted by **Benrabah (2007, pp. 229–230)**, "Algeria's multilingual education policy lacks a unified pedagogical vision, resulting in fragmented outcomes across the system."

* + 1. **Sociocultural Theory*:* How Interaction Affects Language Acquisition**

The Sociocultural Theory of second language acquisition is based on the research of

**Lev Vygotsky (1978),** a Russian psychologist who emphasized that language acquisition is a socially and culturally rooted process. As an alternative to biological or information-processing-alone approaches, Vygotsky contended that children acquire language through social interaction with more experienced others (e.g., parents, teachers, peers).

At the core of this theory lies **the Zone of Proximal Development (ZPD),** which Vygotsky referred to as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). This means that language is best acquired when learners are challenged just beyond their current level.

This theory was expounded in second language acquisition by researchers like **James Lantolf** and **Steven Thorne (2006,** **p. 201),** who had the view that "language is not simply a means for communication but a mediating tool for thinking and learning deeply embedded within cultural and social contexts”.

Sociocultural theory also emphasizes the importance of meaningful interaction, scaffolding, and community in shaping language use. It downplays individual competence as an area of focus and introduces greater emphasis on collaboration in learning emphasizing discourse, feedback, and supported practice.

* + - 1. **Sociocultural Theory in the Algerian Context**

In Algeria's multilingual classrooms**, social and cultural interaction** is at the heart of how students learn Arabic, French, and English. For the majority of students**, home language practices** (e.g., Darija or Tamazight) differ from **school-based learning**, resulting in a gap in understanding and language confidence. Vygotsky's theory argues that this gap can be addressed by using **scaffolding** teacher and peer support for students to move from their everyday language to academic language.

However, a significant number of teachers have not been **trained in differentiated or interactive teaching,** particularly to address the needs of second and third language learners

“Many Algerian EFL teachers have not received sufficient training in differentiated instruction and consequently struggle to implement it effectively in their classrooms.” (Boudiaf & Kaouli, 2022, p. 110). As a result, classroom practices are still **teacher-directed** and **grammar-based rather** than communicative or collaborative.

However, some Algerian school’s Urban areas are beginning to adopt **interactive pedagogies** that reflect sociocultural tenets: group work, peer interaction, multilingual storytelling, and real-life role play. These pedagogies allow learners to build confidence in using multiple languages and permit them to tap into their **existing linguistic and cultural repertoires.**

As **Lantolf (2000)** pointed out: "Second language learning is not a matter of internalizing rules of grammar; instead, it is a matter of participating in culturally meaningful activities in which language is used." In Algeria, the creation of such meaningful contexts is of paramount importance to help learners deal with a multilingual environment.

* + 1. **Cognitive Load Theory**

The Brain’s Ability to Manage Several Languages:

**Cognitive Load Theory (CLT),** developed by **John Sweller (1988)**, is a cognitive psychology theory explaining the way learners process and store information in working memory. Sweller argues that the human mind has **finite capacity** to process new information at the same time. Therefore**, instructional design** must not overwhelm the learner's mental resources, especially when accomplishing complex tasks like learning a language.

* **CLT** distinguishes three categories of cognitive load:
* **Intrinsic load**: the built-in difficulty of the material.
* **Extraneous load**: unnecessary difficulty caused by inefficient instruction design.
* **Germane load**: the effort put into building and automating schemas (mental structures used to process language).

As Sweller (1988, p.77) noted, "Instructional methods that ignore the limitations of working memory are doomed to fail." In language learning environments, excessive juggling of grammatical rules, vocabulary, and sound systems in more than one language can rapidly slow down learners unless supported.

Second language acquisition literature supports the enactment of CLT. For instance, **Van Merriënboer & Sweller (2005, p.6)** explained that "managing cognitive load is essential for promoting schema construction in complex language tasks." **Kormos (2006)**, in turn, noted that multilingual students perform more **effective executive functionin**g as an outcome of accessing several language systems, even if this greatly depends on teaching proficiency.

In Algerian primary school students are theoretically required to toggle between at **least three languages**: Arabic, French, and English each possessing its own script, grammar, and phonology. Such a multilingual load can easily **overpower the cognitive resources** of child learners unless addressed through efficient pedagogical methods.

For instance, students may struggle with:

* Alternating between right-to-left (Arabic) and left-to-right (French/English) writing.
* Committing unrelated vocabulary sets to memory in three languages.
* Managing alternative verb conjugation systems and syntactic rules.

In schools where teachers **have not been trained in multilingual pedagogy,** Lessons tend to be **memorization-heavy** and **cognitively** **demanding**, resulting in **extraneous load**. Students may become disengaged or confused, leading to superficial understanding and poor retention.

However, with the appropriate strategies **visual aids, language bridging, code-mapping**, and **task chunking** teachers can reduce unnecessary overload and enable **germane processing**. For example, connecting a French word to its Arabic root, or conceptually mapping English words into categories, can help students make mental connections more easily.

As noted by **Kormos (2006),** "Multilingual speakers, if well-supported, are able to develop metacognitive strategies which enable them to cope successfully with complex linguistic input." To adopt CLT in the Algerian context means not just simplifying content, but designing instruction that meets **linguistic realities and cognitive abilities** of young learners.

**1.3 Multilingualism in Primary School**

**1.3.1 Benefits of Early Exposure to Many Languages**

Early bilingual exposure to a number of languages during childhood has been associated with numerous **cognitive, linguistic, and social advantages**. According to Bialystok (2001), "children raised in multilingual environments develop higher-level executive functions, including better control over attention, working memory, and problem-solving skill." This advantage is especially evident in measures of **mental flexibility**, where multilingual pupils consistently surpass monolingual peers. It has been suggested by research that multilingual children have more **metalinguistic awareness** the ability to think about and manipulate language as an abstract system (Cummins, 2000). They are better able to recognize language structures, correct errors, and learn other languages.

Many Algerian children as early as childhood started at home with **Darija or Tamazight** and then continued through **Modern Standard Arabic**, **French**, and more recently, **English** in schools. This linguistic environment provides fertile ground for multilingual development. For example, **Kabylies** or **Chaoui** children naturally alternate between **Tamazight, Arabic**, and **French**, giving children an earlier intellectual advantage. But the benefits are not **universally distributed**. Within school districts or well-educated city families, children will have greater exposure to good-quality multilingual input.

On the other hand, within underfinanced schools, early exposure may be **limited or confusing** due to poor instructional support or low teacher qualifications.

**1.3.2 Influence on Academic and Cognitive Abilities**

Multilingualism has also been linked to greater academic success, particularly in literacy, math, and analytical reasoning. According to Cummins, "skills developed in one language can transfer to another, supporting overall academic development” (Cummins, 2000, pp. 78–80). Through this **cross-linguistic transfer**, students can use prior knowledge from one language to another.

Multilingual students also demonstrate more **developed cognitive skills**, such as:

* Enhanced task-switching (Carlson & Meltzoff, 2008).
* Increased creativity and problem-solving.
* Enhanced abstract reasoning.

In Algeria, there are chances of cross-linguistic transfer, especially between French and Arabic, which overlap in many academic disciplines. Those students who have reading skills in Arabic can apply similar skills to French or English. However, the lack of integrated language education typically prevents learners from making similar connections effectively. Moreover, because French and English are studied relatively late in comparison with Arabic, the students may not reach academic-level proficiency (CALP) in French and English, especially if the teaching hours are limited or cyclical.

**1.3.3 Young Learners’ Difficulties in a Trilingual Setting**

Although multilingualism is beneficial in many ways, it also leads to **linguistic overload**, especially in school systems where languages are instructed separately. As García describes, "multilingual learners often experience fragmented curricula that do not connect their languages in meaningful ways." (García, 2009, p. 97).

Some of the most frequent problems are:

* **Language interference**: Mixing of grammar or vocabulary between languages.
* **Identity confusion**: Alternation between linguistic and cultural identities.
* **Unequal proficiency**: Obtaining a higher score in one language and lower scores in others.
* **Cognitive fatigue:** Having difficulty with material in three linguistic codes.

These challenges are most evident in Algerian primary schools under the following circumstances:

* Students are required to write in MSA, speak French proficiently, and read in English simultaneously.
* Lack of coordination between subjects studied in different languages.
* **Teacher over-reliance on translation** as an alternative to integrated instruction.

As Bouhania (2013) remarks, "Algerian classrooms often reflect the tensions of a trilingual reality, with students caught between linguistic expectations and practical limitations.".

**Conclusion**

This chapter offered the first glimpse of multilingualism and language acquisition in Algeria's primary school setting. It previewed relevant theory and pedagogy for studying Arabic, French, and English, as well as setting front and center multilingual exposure and its cognitive, educational implications. This discussion sets the stage for the subsequent chapters, where more will be explicated about Algeria's multilingual education system as it applies on the ground. These results aim to add to improving language teaching, curriculum adaptation, and better multilingual education policies in the schools of Algeria***.***

**Chapter Two: Cognitive, Academic, and Social Aspects of Multilingual Education**

**Introduction**

Within the distinctive language environment of Algeria, primary school children develop by growing up speaking Arabic as a mother tongue, French as a legacy colonial language in formal schooling, and more recently, English as a rising global language. The trilingual exposure has far-reaching cognitive, academic, and social consequences that need to be examined within the Algerian sociolinguistic and educational context. How multilingualism functions in Algerian schools will inform educators and policymakers in developing more responsive and inclusive strategies.

**2.1** **Cognitive Benefits of Multilingual Education**

Research consistently suggests that multilinguals have better cognitive abilities than monolinguals. Bialystok et al. (2012) reaffirm that "bilingual individuals have an improved executive control, which allows them to change focus and reject irrelevant information more effectively" (p. 241). Constant exposure to a number of languages on a day-to-day basis improves the brain's capability for flexible thinking and mental flexibility. Adesope et al. (2010) further comment that multilingual students are likely to succeed in abstract reasoning, metalinguistic awareness, and creative problem-solving tasks. Cummins (2000) suggests the concept of a "common underlying proficiency," which suggests that proficiency learned in one language will be transferable across linguistic systems, hence able to facilitate learning of a new language (p. 39).

In the Algerian school environment, particularly in urban cities such as Algiers and Oran, learners are exposed to Arabic at home and in school, and French dominates scientific classes. The addition of English to primary education recently provides an additional intellectual

stimulus. Mami (2013) found that pupils in trilingual programs "demonstrated greater cognitive flexibility and better management of attention tasks" (p. 122), a cluster of abilities that is useful in multiform learning environments.

However, in rural Algeria, where the use of multiple languages is often limited due to shortages of qualified educators and resources, the students may not achieve the full mental benefit of being multilingual.

**2.2** **Academic and Linguistic Implications of Multilingual Education**

**2.2.1** **Academic Advantages and Cross-Linguistic Transfer**

Multilingualism is reported to have a beneficial impact on academic performance in that it enables enhanced literacy, critical thinking, and problem-solving capacity. Cummins (2008) argues that "skills learned in a learner's first language provide a good basis for learning other languages when teachers promote interlinguistic connections" (p. 71). In other words, literacy skills like reading comprehension and awareness of grammar can be carried over from one language to another.

In Algeria, primary students usually begin formal schooling in Modern Standard Arabic, study French from an early grade, and are now gradually exposed to English. In adequately equipped urban schools, the students have a tendency to recognize cognates between English and French, such as "information," "communication," and "education," which accelerates vocabulary acquisition in English.

Students who are incentivised to see connections between Arabic, French, and English are more flexible and confident academics. Where instruction, however, does not draw out these

connections explicitly especially in under-resourced rural schools the payoff of transfer is weaker.

**2.2.2** **Linguistic Interference and Pedagogical Challenges**

Even though multilingualism has clear strengths in terms of performance in academic settings, it also comes with the potential dangers of cross-linguistic interference. Odlin (1989) determines the reality that "interference occurs when learners apply rules or structures from one language to another incorrectly" (p. 27). Algerian learners tend to say such things as "I have ten years" instead of "I am ten years old," a direct translation from French ("J'ai 10 ans").

These structural errors indicate the necessity for certain pedagogical interventions that teach students to differentiate linguistic systems. Grosjean (2010) emphasizes that "multilingual proficiency is heavily context-dependent, relying on the quality and frequency of language use in specific environments" (p. 125). In Algeria, students at urban schools with greater exposure to French and English education show fewer interference errors than students at rural schools.

Teachers' ability to guide students through intentional comparison of languages is a major determinant of academic achievement. Unfortunately, many Algerian primary school teachers have not received training in multilingual pedagogies, and management of interference therefore remains a constant issue.

**2.3** **Social and Cultural Dimensions of Multilingual Education**

In Algeria, language is deeply embedded in identity and social membership. National language Arabic is infused with national identity and Islamic heritage. Colonial legacy French dominates administrative, business, and university contexts. English, however, is increasingly seen as a marker of modernity, globalization, and global connection.

Kramsch (1998) explains how "language is not merely a medium of communication but a carrier of culture" (p. 65). This is particularly relevant in Algeria, as multilingualism opens up students to multiple cultures ranging from Arab-Islamic values through Arabic literature, to Francophone intellectual heritage, and to Anglophone media and global trends. The ongoing interaction between these languages enriches students' cultural diversity and consolidates students' understanding of their place within a globalizing world.

Baker (2011) states that "multilingual people tend to construct multifaceted identities" (p. 56). In Algeria, a child might use Darija (Algerian Arabic) at home, Modern Standard Arabic at school, French when interacting with officials or doctors, and English on the internet. The effortless ability to switch between these varieties of language makes social flexibility and cross-cultural awareness easier, giving Algerians a unique advantage in switching between various social and professional environments.

* + 1. **Algerian Cultural Dimensions of Multilingualism**

**Language as a Marker of Identity and Heritage:** Language use in Algeria is often reflective of deeper cultural and political orientations. Arabic is seen as a marker of national identity and Islamic heritage, while French is associated with colonial relations and academic prestige. English, on the other hand, is increasingly synonymous with modernity and globalization, influencing youth culture through technology and mass media.

**Bridging the Generational Gap:** Multilingualism also bridges the generational gap in Algeria. While the older generations solely speak Arabic and French, the younger generations are progressively using English, particularly via music, video games, and social media.

This generational shift demonstrates wider worldwide trends whereby the youth are more exposed to globalized media-influenced communication and entertainment.

**Prevalence of Code-Switching:** Code-switching between French and Arabic is common in everyday life, especially in large cities like Algiers and Constantine. People freely alternate between the two languages in informal communication, which reflects the linguistic flexibility of Algerian society on the grounds of cultural as well as social diversity. It illustrates the dynamism of Algerian society and its ability to adapt to evolving cultural and social influences.

**English as a Future Investment**: Some Algerian parents view English as a valuable investment in their children's future. As a result, there is a growing demand for private English tuition even at the primary school level. The demand is driven by the realization that English is a global language that opens doors for education, business, and international relations. Parents regard English proficiency as an investment in their children's social and professional achievement in an increasingly globalized world.

**2.3.2** **Multilingualism and Social Integration**

**Multilingualism as Social Integration Device:** Multilingualism in Algeria facilitates social integration because individuals can communicate across linguistic and cultural boundaries. At work, school, or in public life, being multilingual provides an individual with social mobility. It renders society inclusive because different linguistic groups interact and coexist harmoniously.

**Language and Social Inequality:** Even if multilingualism is characterized by huge social and economic benefits, it equally touches on social inequality. Language control in English and French has tended to widen chances for most individuals, especially those in towns and private

schools. The poorly endowed are equally expected to experience feelings of being in the margins or outcasts, particularly in the rural areas where quality education has limited accessibility.

**Multilingual Education and National Unity:** Multilingual education in Algeria, particularly in the context of Arabic, French, and English, can be a means to national unity. By offering multilingual skills to students, the education system unites society as linguistic diversity is appreciated and not considered a constraint. By this means, the multilingual system can help preserve Algeria's rich cultural legacy while preparing its students for a globalized world.

**2.4 Challenges of Multilingual Education**

**2.4.1 Structural and Pedagogical Constraints**

Despite the recognized cognitive and educational benefits of multilingual education, Algeria has long been faced with challenges in successful trilingual education programs.

One of the main challenges is the lack of instructor training. The majority of teachers in the primary schools have not been adequately trained in multilingual teaching. They find three languages in one classroom environment challenging, especially being required to include Arabic, French, and now English at multiple proficiency levels.

Moreover, there is a wide difference in resource provision for urban and rural schools. Urban schools in cities like Algiers and Oran have better access to newer textbooks, language labs, and foreign language teachers, whereas rural schools face outdated books and a dearth of well-trained teachers.

An additional difficulty is incoherence of the curriculum. The language emphasis in Algerian education policy has frequently shifted direction over the decades, changing as a response to social and political pressures rather than consistent pedagogic planning. Benrabah (2007) states that "frequent policy reversals have led to confusion and instability within Algerian language education" (p. 228), i.e., long-term development becomes difficult.

Unless these structural barriers are addressed, the benefits of multilingualism will accrue to prosperous groups, not translated into a national educational asset.

**2.4.2 Sociopolitical Sensitivities**

Language in Algeria is deeply politicized and historically burdened. Arabic is widely legitimized as a sign of post-independence autonomy. French, though officially suppressed, remains very entrenched in higher education and professional environments. English, as an international opportunity, has been warmly welcomed by many but also faces resistance from groups who fear more linguistic fragmentation.

The addition of English to primary schools has thus triggered mixed responses. While there are parents and teachers who see it as the key to competing globally, others feel that it will further marginalize Arabic or water down national identity.

Guiding these processes of cosmopolitics’ requires careful management of education that promotes additive multilingualism picking up additional languages without replacing the ones that one possesses.

**Conclusion**

Multilingual education has great potential to improve Algerian students' intellectual capacity, academic performance, and higher sociocultural integration. To obtain the full potential, however, Algeria must invest in stable multilingual education policy, provide mass-scale teacher training, and ensure equal access to language learning opportunities across all regions.

Embracing and honoring the multilingual Algerian reality where Arabic, French, and English intersect in multifaceted ways can empower future generations. In the future, a balanced trilingual model will be crucial to Algeria's education, economic development, and cultural advancement on national and international levels.

**Chapter Three: Research Methodology and Data Analysis**

**Part Two: Practical part**

**Introduction**

While the previous chapters have reviewed the literature on multilingual education, with Chapter One focusing on understanding multilingualism and language learning, and Chapter Two addressing the cognitive, academic, and social aspects of multilingual education, the present chapter delves into the practical phase of this research. It aims to test the research hypotheses and unveils the research design that outlines the approaches and methods undertaken. Furthermore, it describes the sample population that contributed to the study and highlights the research tools implemented. Lastly, the chapter presents an analysis and discussion of the findings obtained through the investigation, followed by practical implications.

**3.1 Research Design**

Study design applied in the research was a mixed-method design, in which quantitative and qualitative methods were combined to understand the research topic comprehensively. This facilitated carrying out an in-depth and authentic analysis of the influence of learning English besides Arabic and French in Algerian primary schools.

A descriptive analytical strategy was employed to describe and explain the current situation of multilingual language acquisition. The use of both interview data and questionnaire data resulted in triangulation, thus enhancing the validity and credibility of the results.

**3.2 Research Setting**

This research was conducted during the 2024/2025 academic year at Hamou Belkacem El-Nefoussi Primary School in Ghardaïa, Algeria. The school was chosen as it uses English as a foreign language alongside Arabic and French, offering an enriched setting for the study of

the truth of trilingual education at the primary school level. All the data were collected within the school setting to offer contextual validity***.***

**3.3 Population and Sample**

The study included two main groups of participants. The first was thirty-five (35) third, fourth, and fifth-grade students in primary school. The students were selected on an availability and grade level basis.

The second group consisted of twelve (12) English language teachers working in primary education. They were interviewed to provide data on their teaching practices, perceptions, and experiences regarding English instruction within a trilingual setting.

**3.4 Research Procedure**

After obtaining permission from the school administration, the research was carried out in two phases. First, a questionnaire was completed by the students in their English classes under the guidance of the researcher. In the second phase, interviews with English language teachers were taken in peaceful rooms of the school. All research activities were carried out ethically and systematically.

**3.5 Data Collection**

Two main instruments were utilized in this research for data collection:

A questionnaire administered to pupils and semi-structured interviews conducted with teachers. Each tool served to complement the other and to provide a clearer understanding of trilingual language education from both learners’ and teachers’ perspectives.

**3.5.1 Data collection Instruments**

Two main instruments have been used to fulfill the objectives of this study; they are as follows:

**3.5.1.2 Student’s Questionnaire**

The students' questionnaire was designed to gather data on the attitudes, interests, and issues of students in learning English and Arabic and French. The questionnaire had closed-ended and open-ended questions and was written in Arabic to facilitate understanding. It was conducted in May 2025, during regular class times, and all the answers were later analyzed using descriptive statistical methods.

**3.5.1.2.1. Description and Administration of Students’ Questionnaire**

The questionnaire is a commonly used tool in educational research since it allows researchers to collect. A vast amount of information within a limited time and enable statistical analysis. In this research, the questionnaire was administered to thirty-five (35) primary school pupils with the aim of investigating their perceptions and experiences regarding the learning of English alongside Arabic and French.

The questionnaire mostly consisted of closed questions (yes/no and multiple choice) and included some open-ended elements to allow pupils to say their preferences or describe their answers in a short way. The questions were all written in Arabic to cater for the level of language among the pupils and to allow them to comprehend fully. The questionnaires were filled in and distributed within regular class time in May 2025 with the researcher's supervision, where explanations were provided where necessary.

**3.5.1.3 The Pilot Study**

The pilot study was set before the first data collection in a bid to assess the appropriateness and understanding of the research tools. Revisions were done based on the feedback to ensure that both the interview guide and the questionnaire were suitable for use in the actual study.

**3.5.1.4 Teacher’s Interviews**

In order to complement information obtained through the use of the questionnaire, the researcher conducted semi-structured interviews with twelve (12) English language teachers instructing in primary schools. The interview was set with open-ended questions that leave space for open expression of their opinions regarding trilingual education at the primary level. The interview was conducted in English, from the participants' academic and work background.

**3.5.1.4.1 Description of the Teacher’s Semi-Structured Interviews**

The interview questions highlighted various themes pertaining to teaching methodologies, classroom matters, and perspectives in relation to language growth amidst a multilingual setting. The interviews were conducted in April 2025 in teachers' respective schools, amidst noise-free respective environments. Each interview lasted between 20 and 40 minutes, either audio-recording responses after attaining participants' consent or taken in detailed extended written notes.

**3.6 Data Analysis**

The data that were collected were both quantitatively and qualitatively analyzed. The pupils' questionnaire closed-ended questions were analyzed in terms of descriptive statistics, while open-ended questions and interview data were analyzed in terms of thematic analysis. This two-way analysis provided a well-rounded view regarding the participants' experiences of trilingual education.

**3.6.1 Pupils’ Questionnaire Analysis**

35 students filled in the questionnaire. Their responses are summarized in the tables and charts below.

***Question 1***

What is your gender? Male / Female

**Table 1.** Pupils’ Gender Distribution.

|  |  |  |
| --- | --- | --- |
| Gender | Number of students | Percentage |
| Male | 15 | 50% |
| Female | 15 | 50% |
| Total | | 35 | 100% |

**Figure 1.** Pupils’ Gender Distribution.

The data reveals that (50%) of the respondents are male, while (50%) are female. This indicates a perfectly balanced gender distribution among the surveyed students.

**Question 2**

What language do you speak at home?

a) Tamazight. b) Arabic.      c)English.      d) French.

**Table 2.** Language Spoken at Home.

|  |  |  |
| --- | --- | --- |
| Language | Number of students | Percentage |
| Tamazight | 0 | 0 |
| Arabic | 35 | 100% |
| English | 0 | 0 |
| French | 0 | 0 |
| Total | 35 | 100% |

**Figure 2**. Language Spoken at Home.

As shown in the data, (100%) of students speak Arabic at home, with no reported usage of Tamazight, English, or French. These findings suggest that Arabic is the dominant language in household communication, indicating a strong linguistic homogeneity.

**Question 3**:

3) Are you excited to learn English? a) Yes b) No.

**Table 3.** Excitement About Learning English

|  |  |  |
| --- | --- | --- |
| Option | ***Frequency*** | ***Percentage*** |
| Yes | 32 | 91.4% |
| No | 3 | 8.6% |
| Total | 35 | 100% |

**Figure 3**. Excitement About Learning English.

The data reveals that (91.4%) of students expressed excitement about learning English, while (8.6%) indicated a lack of enthusiasm. These findings suggest that the majority of students exhibit strong motivation to learn English, with only a small fraction showing limited interest.

**Question 4:**

4) Which language do you enjoy studying the most?

a) Arabic.      b) English.      C) French.

**Table 4.** Most Enjoyable Language to Study.

|  |  |  |
| --- | --- | --- |
| Language | Frequency | Percentage |
| Arabic | 15 | 42.86% |
| English | 10 | 28.57% |
| French | 10 | 28.57% |
| Total | 35 | 100% |

**Figure 4.** Most Enjoyable Language to Study.

The revised calculations confirm that (42.86%) of students prefer studying Arabic, while (28.57%) enjoy English, and another (28.57%) favor French. These findings indicate a strong inclination toward Arabic, with considerable interest in English and French as well.

**Question 5:**

**5)** Which English learning skill do you prefer?

a) Writing.     b) Reading.      c)Listening.    d)Speaking.

**Table 5**. Preferred English Learning Skill.

|  |  |  |  |
| --- | --- | --- | --- |
| Skill | | Frequency | Percentage |
| Writing | | 6 | 17.14% |
| Reading | | 10 | 28.57% |
| Listening | | 5 | 14.29% |
| Speaking | | 14 | 40.00% |
| Total | 35 | | 100% |

**Figure 5.** Preferred English Learning Skill.

As t shown in the table, (40%) of students prefer speaking, followed by (28.57%) who enjoy reading, (17.14%) who choose writing, and (14.29%) who favor listening. These findings suggest that verbal communication remains the most valued skill among respondents

**Question 6**:

6) Do you feel confident speaking English compared to Arabic and French? Yes\ No

***Table 6***. Confidence in Speaking English Compared to Arabic and French

|  |  |  |
| --- | --- | --- |
| Option | Frequency | Percentage |
| Yes | 23 | 65.7% |
| No | 12 | 34.3% |
| Total | 35 | 100% |

**Figure 6.** Confidence in Speaking English Compared to Arabic and French

The results show that (65.7%) of students feel confident speaking English, while (34.3%) lack confidence. These findings indicate that a majority of students perceive their English-speaking abilities positively, though a notable proportion still struggles with fluency.

**Question 7**: Do you find learning English along with two other languages easy or difficult?

1. Easy.
2. Difficult.

**Table 7.**Difficulty in Learning English Alongside Two Other Languages.

|  |  |  |
| --- | --- | --- |
| Option | Frequency | Percentage |
| Easy | 24 | 68.6% |
| Difficult | 11 | 31.4% |
| Total | 35 | 100% |

**Figure 7.** Difficulty in Learning English Alongside Two Other Languages.

Survey results reveal that (68.6%) of students find learning English alongside Arabic and French easy, while (31.4%) consider it difficult. These results suggest that multilingual students generally adapt well, though a third of them face challenges in balancing language acquisition.

**Question 8:** Why do you like learning English?

a) To talk to others.

b) For fun.

c) For school.

**Table 8.** Reasons for Learning English.

|  |  |  |
| --- | --- | --- |
| Option | Frequency | Percentage |
| 1. To talk to others. | 7 | 20% |
| 1. For fun. | 4 | 11.4% |
| 1. For studying. | 24 | 68.6% |
| Total. | 35 | 100% |

**Figure 8.** Reasons for Learning English.

The majority of students (68.6%) study English for academic purposes, while (20%) learn it for communication and (11.4%) for enjoyment. These findings highlight English as a key educational tool rather than just a casual interest.

**Question 9:** Do you think learning English affects your proficiency in Arabic or French?

Yes \ No

**Table 9.** Effect of Learning English on Arabic and French Proficiency.

|  |  |  |
| --- | --- | --- |
| Option | Frequency | Percentage |
| Yes | 16 | 45.7% |
| No | 19 | 54.3% |
| Total | 35 | 100% |

**Figure 9.** Effect of Learning English on Arabic and French Proficiency.

The data shows that (45.7%) of students believe learning English affects their proficiency in Arabic or French, while (54.3%) think it does not. These results suggest mixed opinions on whether English acquisition impacts native language fluency.

**Question 10:** Do you use English outside school? Yes \ No

**Table 10.** English Usage Outside School.

|  |  |  |
| --- | --- | --- |
| Option | Frequency | Percentage |
| Yes | 27 | 77.1% |
| No | 8 | 22.9% |
| Total | 35 | 100% |

**Figure 10.** English Usage Outside School.

The data reveals that (77.1%) of students use English outside school, while (22.9%) do not. These findings suggest that English plays a significant role beyond academic settings.

**Question 11:** If yes, how do you use English outside school?

a) Playing games.

b) Watching TV or YouTube.

c) Singing.

**Table 11**. How Students Use English Outside School.

|  |  |  |
| --- | --- | --- |
| Option | Frequency | Percentage |
| 1. Playing games | 13 | 37.14% |
| 1. Watching TV or YouTube | 12 | 34.29% |
| 1. Singing | 10 | 28.57% |
| Total | 35 | 100% |

**Figure 11.** How Students Use English Outside School.

According to the data (37.14%) of students use English while playing games, (34.29%) engage in English while watching TV/YouTube, and (28.57%) use it for singing. These findings highlight that media and entertainment are key areas where students practice English outside formal education.

**3.4.2 Teachers’ Interview Analysis**

Semi-structured interview was conducted on twelve (12) teachers of English language in Algerian primary schools to seek their opinion on trilingual education and the impact of French on teaching English. Here is their response to the seven initial questions used by the researcher.

**Question 1:**  How many years of experience do you have teaching English?

The twelve teachers interviewed had varying lengths of experience in teaching English to primary schools. Six teachers had taught for just a year or less, illustrating that they had most recently entered the education sector. Three teachers had one to two years' worth of English teaching. Two teachers logged between two to three years, while one teacher had two to three years of teaching experience. This sequence of rise provides a more accurate indication of the distribution and corresponds to the relatively recent introduction of English teaching in Algerian primary schools, which should probably have an effect on the opinions and issues exposed in future responses to the remaining questions.

**Question 2:** Do you believe teaching experience contributes to better teaching practices?

All of the participants unanimously agreed that teaching experience significantly impacts instructional practice. They added that teachers become increasingly proficient in classroom management, lesson planning, managing students' needs, and adapting pedagogy to incorporate diverse learning styles with time. Veteran teachers also showed increased confidence and better sense of how to successfully manage multilingual learners.

**Question 3:** What were your thoughts when you first learned that English would be taught at the same level as Arabic and French?

The response was divided. Some teachers were in favor of the move, seeing it as a forward-thinking measure to bring education up to date and respond to international needs. Others were worried about the preparedness of teachers and students alike, pointing out the minimal training given and the possible confusion for children already coping with two languages. In spite of these reservations, most regarded it as a good challenge with long-term advantages.

**Question 4:** How do you think learning English alongside two other languages affects a child’s language development?

Most of the teachers believed that learning three languages simultaneously enhances children's cognitive flexibility, memory, and linguistic awareness. They indicated that trilingual stimulation raises metalinguistic awareness and allows children to compare systems. However, some of the teachers stated that without support, students could temporarily mix languages or become confused, particularly at young ages.

**Question 5:** Have you noticed any unique challenges or advantages for students learning in a trilingual environment?

A majority of the teachers identified both benefits and challenges. Some of the main challenges included French-English confusion, uneven levels of proficiency, and limited exposure to English outside of class. Nevertheless, a number of benefits were identified by teachers, such as increased flexibility, cognitive development, and openness to culture. Teachers asserted that carefully planned teaching and teacher support can preempt most challenges.

**Question 6:** Which skills do you think are most important in facilitating trilingual learning, and why?

Teachers most frequently nominated listening as the building block and defined it as the gateway to the study of all language. Others spoke about speaking, because this compels students to apply vocabulary and get confident. Others also nominated reading to solidify vocabulary and form, especially where writing is still in its initial stages. Teachers mostly had an agreement that one should teach skills as a whole and balance them.

**Question 7:** What advice would you give, in your opinion, to teachers working with students learning multiple languages, especially for the primary level?

Teachers motivated their colleagues to be patient, adaptable, and innovative. They proposed the employment of visual aids, participative activities, and contextual examples. Reinforcement, gradual exposure, and not comparing too much between languages were emphasized. Several teachers highlighted adjusting instruction to the pace of learners and creating a classroom environment that promotes risk-taking and communication.

**3.7 Discussion of the Results**

The analysis of teacher and student reactions reveals that trilingual instruction in Algerian elementary schools has latent potential for cognitive and linguistic development, but with pedagogical and structural issues. These empirical findings are closely complemented by significant theoretical constructs introduced in previous chapters, especially for motivation, cognitive flexibility, cross-linguistic transfer, and language interference.

One of the most robust findings is the exceptionally strong level of motivation that students possess to learn English. This internal motivation, as a number of SLA theorists have posited, is often a predictor of a learner's ability to learn and sustain a new language, particularly if introduced at a young age. Evidence confirms that children at an initial stage of mental growth at the stage when it is referred to as the "critical period" are neurologically more receptive to language acquisition than adult learners.

Students also voiced strong preferences for oral competence, especially speaking and listening, which stresses the communicative approach to language learning. The approach places emphasis on authentic use, interaction, and functional context rather than memorization through repetition or isolated grammar practice. Teachers validated this trend, noting that students were more participatory and confident when encouraged to articulate themselves verbally in the form of simple statements, narratives, or songs.

From a cognitive point of view, trilingual students exhibited signs of greater flexibility and adaptation, notably in the recognition of patterns and distinction between linguistic patterns in Arabic, French, and English. Multilingualism theories consistently attribute this exposure to metalinguistic sensitivity and executive function advantage, such as more efficient task switching and regulation of attention. These skills are very useful beyond language learning and are responsible for general academic performance.

However, with all these benefits, some challenges continue to exist firstly, and above all, is linguistic interference. Students were frequently referred to interfere with vocabulary and syntax from the three languages. This form of negative transfer was widely documented in SLA research where interference from a first or second language hinders third language acquisition. For instance, French sentence structures or phonological rules are found to influence the learning of English, resulting in syntactic or pronunciation errors.

A second major problem is cognitive overload. Students reported confusion and fatigue generated by constant switching between three linguistic codes. According to Cognitive Load Theory, when students are subjected to a lot of new and complicated input without sufficient scaffolding, their cognitive resources are quickly overloaded. In multilingual environments, this is exacerbated by insufficient differentiated instruction in under-resourced schools.

These are compounded by an evident void in teacher training. Introducing English at the primary school level has followed behind institutional readiness. Few teachers have received proper training in multilingual instruction, and it is therefore difficult for them to balance between languages or employ best use of combined strategies.

While there are instructors who employ code-switching in order to enhance comprehension, research warns that this should be systematic and intentional. Excessive or inappropriate code-switching may hinder the learners' ability to internalize formal academic language.

Despite these limitations, there are strong indications that the student is benefited by being exposed to more than one language specifically if instruction is interactive, visual, and cognitively challenging. This validates sociocultural theory, which explains that second language acquisition is best achieved through social interaction, peer collaboration, and scaffolded practice in the learner's Zone of Proximal Development.

Finally, the results of this study confirm the majority of the theoretical advantages of trilingual education greater cognitive abilities, motivation, and cross-linguistic sensitivity but also bring to light the need for systemic reforms. These include extended teacher training, increased policy enforcement, and the widening of exposure to English outside of the classroom. With coherent pedagogical vision, Algeria's trilingual model is capable of endowing students who are not only well-versed in languages but also cognitively resilient and world-ready.

**3.8 Conclusion**

This chapter presents and analyzes the results from questionnaires and interviews, highlighting key patterns related to the impact of learning English alongside Arabic and French. The findings are interpreted in light of the research objectives, offering insights into how trilingual education influences students' language development.

**3.9 Recommendations**

***1.* Emphasize the Acquisition of Oral Proficiency:**

The research results revealed that the students demonstrated a keen interest in English speaking and listening skills. Therefore, school practice should shift towards communicative intention procedures. The teachers are suggested to use storytelling, interactive conversation, role-playing, and singing to facilitate students to communicate normally and gain self-confidence.

***2.* Introduce English Progressively and Extend its Duration During the Primary Cycle:**

Limiting the English teaching to one year was not sufficient for substantial language development. It is recommended that English is introduced progressively from earlier years (i.e., Year 2 or 3) and spread across the entire primary stage. This will allow for language continuity, step-by-step achievement, and improved linguistic retention.

**3. Train Teachers for Multilingual Classroom Contexts:**

With the generalization of English in primary education, there is a pressing need for continuous professional development. Teachers should receive specific training on how to manage trilingual classrooms, address language interference, and implement pedagogical strategies that respond to linguistic diversity effectively.

**4. Use Visual and Interactive Teaching Aids to Enhance Understanding:**

Given the age and intellectual needs of primary learners, the application of stimulating materials such as images, videos, flashcards, and learning games becomes indispensable. These tools, in addition to facilitating understanding and memorization, also offer a motivational and interesting boost to learners' participation.

**5. Control Language Interference through Contrastive Strategies and Interaction Activities:**

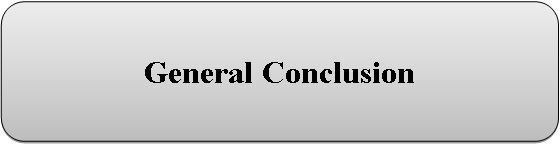
There were frequent incidences of language interference, particularly between English and French. In order to counter this, teachers need to incorporate pedagogical activities that heighten students' metalinguistic awareness. Proposed activities are the following:

* Language contrastive activities, i.e., contrasting the word "table" in English, French (table), and Arabic (طاولة).
* Structured speaking activities through simple question-and-answer formats.
* Picture-word matching exercises to reinforce vocabulary.
* Collaborative completion of the story to enhance creativity and expression.
* Vocabulary songs to improve the accuracy of pronunciation and vocabulary in an enjoyable way.

These activities allow students to distinguish between the three languages, strengthen correct forms, grow their interest, and reduce errors due to negative language transfer.

**6. Offer Increased Pedagogical Support to Trilingual Learning Environments:**

In order to enable effective learning of Arabic, French, and English languages, instructional support is suggested through teaching materials that are appropriate to the students' needs and systematic mentoring of teachers. This involves preparing age-specific multilingual material and providing training to equip instructors with the ability to scaffold instruction and address individual learners' needs more effectively.



**General Conclusion**

It is important to understand how younger students acquire and handle multiple languages simultaneously to create optimal multilingual education. The present dissertation investigates the impact of learning English alongside Arabic and French on primary school children's overall language development. Through the investigation of this language contact, the study attempts to contribute to our understanding of how early trilingualism affects language acquisition, cognitive abilities, and linguistic flexibility.

Based on a questionnaire administered to 35 primary school students and semi-structured interviews with 12 English language teachers, the study revealed several facets of learners' experiences and challenges in a trilingual setting. Findings pointed to the impact of exposure to languages, preference for languages, skill learning, and code-switching ability on the learners' language development.

The main concern of the study was to discover how learning English, Arabic, and French together influences the language development and the ability of learners to switch between different language systems. The study was conducted with a sample consisting of third-, fourth-, and fifth-year students at Hamou Belkacem El-Nefoussi Primary School in Ghardaïa, who represent Algeria's evolving trilingual context.

This dissertation comprised three core chapters that addressed three separate fields of research. Chapter one addressed the theory of multilingualism and second language acquisition, along with multilingual phenomena such as code-switching and language interference. The second chapter addressed the cognitive, academic, and sociocultural effects of multilingual education, with special emphasis on the benefits and structural constraints of teaching three languages at the primary level. The third chapter was dedicated to analyzing and interpreting collected data, by linking students' responses and teachers' remarks to the study's key research questions. The following research questions were addressed:

- How does learning English alongside Arabic and French impact primary school students' overall language development?

- What are the cognitive and linguistic benefits or challenges of simultaneous language acquisition in English, Arabic, and French at the primary school level?

- How does multilingual exposure affect students' proficiency and ability to switch between languages?

To answer these questions, the study depended on the following hypotheses:

**The first hypothesis** that " learning English, Arabic, and French simultaneously enhances primary school students' language development by improving their linguistic proficiency and flexibility ". holds true to a point. The questionnaire responses from the students indicated high learning motivation in English and usage of English out of class, notably electronic media such as games and videos. Such exposure enhanced confidence and language flexibility.

Nevertheless, there were some cases of cross-linguistic confusion between English and French, namely, in pronunciation and vocabulary use. This language interference, especially between the recently acquired French and English, demonstrated that while simultaneous exposure increases attention and motivation, it may occasionally lead to spillover among language systems among language systems. Therefore, this hypothesis holds true for the majority of learners except for those instances mentioned pointing out the need for more organized language input and stronger differentiation between taught languages.

**The second hypothesis**, which posits that " trilingual education positively influences students' cognitive abilities, including problem-solving and memory retention," was strongly supported by the data gained from teacher interviews.

Teachers said students who learn three languages tend to have higher levels of cognitive flexibility, higher attention levels, and improved memory in comparison with counterparts in monolingual or bilingual environments. Besides, metalinguistic sensitivity and pattern recognition were also said to be improved by some of the teachers, which allowed the students to compare and also analyze the similarities and differences among the three languages. These traits are in line with multilingual education theories suggesting that learning several language systems maximizes brain functions in acquisition. The second hypothesis is thus valid and well supported with both pedagogical observation and relevant literature.

**The third hypothesis**, which "exposure to multiple languages improves students' ability to switch between languages with ease, fostering greater linguistic adaptability," is also supported. Results from both pupils and teachers indicated that students were able to shift among Arabic, French, and English in appropriate situations, particularly when it came to speech interaction.

While there was some code-mixing initially, especially during early phases, students demonstrated an increasing ability to compartmentalize and manage each language separately over time. Instructors emphasized the point that through consistent direction and frequent input, students gain competence to manage multilingual environments in a proficient way. Therefore, this hypothesis is supported by the day-to-day linguistic practice observed in both class interaction and student answers. While trilingual education facilitates linguistic and cognitive development, its pragmatics must be considered. Its application must be adaptive and flexible with regard to students' varying levels of exposure, language backgrounds, and classroom capacity. The research also shows that raising learners' awareness of their own language use results in autonomy and a more active role in their learning process. Teachers should strive to create learning environments in which all three languages are developed. This is possible with a well-balanced curriculum, specialized teacher education, and rigorous language practice outside the classroom. By acknowledging and operating within the reality of Algeria's trilingual situation, schools can offer students a more successful, richer multilingual learning experience.

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**Appendices**

**Appendix A**

-Pupils’ Questionnaire-

**Dear pupil,**

We would like to know about your experience in learning English alongside Arabic and French. This questionnaire is designed to help us understand how you feel and what you think about learning these three languages at school. Please read each question carefully and tick (✔) the answer that best matches your opinion

**عزيزي التلميذ / عزيزتي التلميذة,**

نود أن نعرف رأيك وتجربتك في تعلم اللغة الإنجليزية إلى جانب اللغتين العربية والفرنسية. تم إعداد هذا الاستبيان لمساعدتنا على فهم آرائك ومشاعرك حول تعلم هذه اللغات الثلاث في المدرسة. يرجى قراءة كل سؤال بعناية، ثم ضع علامة (✔) على الجواب الذي يناسب رأيك.

* **Questions:**

**الأسئلة: -**

1. What is your gender?

ما هو جنسك؟1.

☐ Male / ذكر ☐ Female / أنثى

02. What language do you speak at home?

ما هي اللغة التي تتحدث بها في المنزل؟2.

☐ Tamazight / اللغة الأمازيغية ☐ Arabic / اللغة العربية ☐ English / اللغة الإنجليزية

☐ French / اللغة الفرنسية

03. Are you excited to learn English?

هل أنت متحمس لدراسة اللغة الإنجليزية؟3.

☐ No / لا ☐ Yes / نعم

04. Which language do you enjoy studying the most?

ما هي اللغة التي تستمتع بدراستها أكثر؟4.

☐ Arabic / اللغة العربية ☐ English / اللغة الإنجليزية ☐ French / اللغة الفرنسية

05. What skill do you prefer in learning English?

ما هي المهارة التي تفضلها في تعلم اللغة الإنجليزية؟5.

☐ Writing / الكتابة ☐ Reading / القراءة ☐ Listening / الاستماع ☐ Speaking / التحدث

06. Do you feel confident speaking English compared to Arabic and French?

هل تشعر بالثقة عند التحدث باللغة الإنجليزية مقارنة بالعربية والفرنسية؟6.

☐ Yes / نعم ☐ No / لا

07. Do you find learning English with two other languages easy or difficult?

هل تجد أن تعلم الإنجليزية مع لغتين أُخريين سهل أم صعب؟7.

☐ Easy / سهلة ☐ Difficult / صعبة

08. Why do you like learning English?

لماذا تحب تعلم اللغة الإنجليزية؟8.

☐ To talk with others / للتحدث مع الآخرين ☐ For fun / للمتعة

☐ For studying / من أجل الدراسة

09. Do you think learning English affects how well you master Arabic or French?

هل تعتقد أن تعلم اللغة الإنجليزية يؤثر على مدى إتقانك للعربية أو الفرنسية؟9.

☐ Yes / نعم ☐ No / لا

10. Do you use English outside school?

هل تستخدم اللغة الإنجليزية خارج المدرسة؟10.

☐ Yes / نعم ☐ No / لا

**- If yes**, how?

**اذا كانت الإجابة نعم, كيف؟-**

☐ Playing games / لعب الألعاب ☐ Singing / الغناء

☐ Watching TV or YouTube

/ مشاهدة التلفاز أو يوتيوب

**Appendix B**

*Investigating the Impact of Learning English Alongside Arabic and French on Primary School Students’ Language Development: A Case Study.*

***English Teachers’ Interview***

*Dear Teachers,*

*This survey aims to gather insights into the impact of teaching English, French, and Arabic simultaneously on primary students' language skills.*

* *Gender: Male / Female*

1. *How many years of experience do you have teaching English?*

*-Less than 1 year - 1–2 years -3–4 years -More than 4 years*

1. *Do you believe teaching experience contributes to better teaching practices?*

*-Yes -No*

*-If so, what classroom strategies improve with more experience?*

1. *What were your thoughts when you first learned that English would be taught at the same level as Arabic and French?*

*-Good idea -Worth trying - Challenging and requires careful*

*implementation.*

1. *How do you think learning English alongside two other languages affects a child’s language development?*
2. *Have you noticed any unique* ***challenges*** *or* ***advantages*** *for students learning in a trilingual environment?*
3. *Which skills do you think are most important in facilitating trilingual learning, and why?*

*\*Listening \*Reading \*Writing \*speaking*

1. *What advice would you give, in your opinion, to teachers working with students learning multiple languages, especially for the primary level:*

* *Encourage consistent practice in all languages.*
* *Use engaging, interactive activities to keep students interested.*
* *Provide a balanced approach, integrating listening, speaking, reading, and writing.*
* *Be patient and offer supportive feedback to build confidence.*

*-What additional advice would you give to teachers working with multilingual students?*

-Thank you-

**الملخص**

**مع تزايد أهمية التعدد اللغوي في عالمنا المتشابك اليوم، أصبحت إضافة اللغة الإنجليزية إلى أنظمة التعليم المبكر تكتسب زخماً متنامياً في الجزائر، حيث كانت اللغة العربية والفرنسية تقليدياً هما القوتان اللغويتان السائدتان. تناولت هذه الدراسة أثر تعلم اللغة الإنجليزية إلى جانب العربية والفرنسية على تطور اللغة لدى تلاميذ المرحلة الابتدائية، وذلك من خلال دراسة حالة بمدرسة حمّو بلقاسم النفوسي الابتدائية بولاية غرداية خلال السنة الدراسية 2024/2025. تمثّل الهدف الرئيسي للدراسة في التحقيق في الآثار الفكرية والتعليمية واللغوية للتعرض المبكر لثلاث لغات على المتعلمين الصغار. كما بحثت الدراسة في الإمكانيات والتحديات المتعلقة بإدراج اللغة الإنجليزية في بيئة ثنائية اللغة قائمة مسبقاً.**

**اعتمدت الدراسة منهجاً مختلطاً جمع بين الأدوات الكمية والنوعية. وقد تم جمع البيانات من خلال استبيان موجّه وُزّع على 35 تلميذاً من السنوات الثالثة والرابعة والخامسة، بالإضافة إلى مقابلات شبه موجهة مع 12 أستاذاً في اللغة الإنجليزية.**

**أظهرت النتائج وجود دافع كبير لدى التلاميذ لتعلم اللغة الإنجليزية، وتأثيراً ملحوظاً على وعيهم اللغوي، وتطوراً متزايداً في قدرتهم على التناوب بين اللغات. كما أشارت النتائج إلى حالات من التداخل اللغوي، خاصة بين اللغتين الفرنسية والإنجليزية، وأبرزت الحاجة إلى دعم بيداغوجي معزز. وبوجه عام، دعمت النتائج الفرضيات المطروحة وأكدت على أهمية اعتماد استراتيجيات تعليمية متعددة اللغات ومتوازنة لتعزيز التطور اللغوي والمعرفي لدى المتعلمين.**

**الكلمات المفتاحية: *التعدد اللغوي, التعليم الثلاثي للغة, اكتساب اللغة, التنقل بين اللغات***