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**Bridging Cultures Through Artificial Intelligence: Teachers' and Students'  
Perceptions of AI Integration in EFL Classrooms**

**Case Study: Master One Students of English at the Department  
of Letters and English Language, at the University of *Abbes  
Laghrour Khenchela***

**A Dissertation Submitted to the Department of Letters and English Language in Partial  
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## Dedication

### *To Allah,*

The Most Merciful, the source of my strength, patience, and light.

For every silent prayer that carried me, for every moment I thought I could not continue yet somehow did, all praise belongs to You. Without Your guidance and mercy, none of this would have been possible.

### *To myself,*

To the girl who walked through exhaustion, pressure, uncertainty, disappointment, and sleepless nights without ever truly surrendering.

These five years were not easy. There were days filled with doubt, heavy silence, and invisible battles that no one could fully see. Yet, even when everything fell against her, she continued moving forward. Step by step. Word by word. Dream after dream.

Like a diamond formed under unbearable pressure, she learned how to shine through hardship.

Like a phoenix, she rose every single time life tried to reduce her to ashes.

This dissertation is not only an academic achievement; it is proof of resilience, endurance, faith, and survival.

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Thank you for every sacrifice, every prayer, every moment of support, and every effort made of love. Thank you for believing in me even during the moments when I struggled to believe in myself. Your presence has always been my greatest source of comfort and strength.

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Thank you for being my safe place in this world. Your support, energy, and presence gave me more strength than words can describe.

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## Abstract

The rapid development of generative AI has transformed EFL education by offering learners immediate feedback, authentic communication opportunities, and exposure to diverse cultural perspectives. Despite its increasing use, limited research has explored how EFL teachers and students perceive the role of generative AI in fostering intercultural communication, particularly within the Algerian university context. Therefore, this study investigates teachers' and students' perceptions of integrating generative AI tools into EFL education to enhance intercultural communicative competence. The study aims to examine teachers' perceptions of AI as a didactic resource, explore how AI tools are integrated into instructional practices, and identify the opportunities and challenges associated with their pedagogical use. Adopting a mixed-methods design, quantitative data were collected through a questionnaire administered to 40 Master One EFL students, while qualitative data were gathered through semi-structured interviews with six EFL teachers at Abbas Laghrour University of Khenchela. The findings reveal generally positive attitudes toward the integration of generative AI in EFL learning. Both teachers and students acknowledged its role in enhancing language learning, promoting intercultural awareness, and supporting communication practice. However, several challenges were also identified, including technological dependency, bias, ethical concerns, and limited human interaction. The study concludes that generative AI can effectively foster intercultural communication when implemented critically and pedagogically, serving as a complementary educational resource rather than a replacement for teachers and authentic human interaction.

**Keywords:** Generative AI, intercultural communication, EFL education, intercultural competence, AI integration, language learning.

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## **General Introduction**

### **1. Background of the study:**

In recent years, the integration of artificial intelligence (AI) technologies into education has transformed traditional learning environments, particularly in the field of English as a Foreign Language (EFL) instruction. AI-driven tools such as intelligent tutoring systems, automated writing evaluators, speech recognition software, and adaptive learning platforms have created new opportunities for language learners to engage with authentic, interactive, and personalized content. These technological advances align with the increasing need for pedagogical approaches that respond to the linguistic and cultural complexities of globalized communication (Namat et al., 2025).

Within the context of EFL didactics, AI tools are not recognized only for their ability to enhance language proficiency but also for their potential to foster intercultural communicative competence (ICC). Intercultural communication is a core component of contemporary language education, emphasizing learners' capacity to navigate cultural differences, interpret diverse communicative cues, and construct meaning across cultural boundaries (Byram, 1997, Deardorff, 2008). Integrating AI in this context offers unique possibilities: it allows for the simulation of intercultural scenarios, provides real-time feedback on pragmatic language use, and exposes learners to varied sociolinguistic norms that reflect authentic global interactions (Fountoulakis, 2024).

However, the pedagogical implications of employing AI in intercultural EFL classrooms continue to be overlooked. While some studies have examined AI-assisted language learning from the perspective of efficiency and accuracy by providing personalized, interactive experiences (Rusmiyanto et al., 2023), fewer have addressed how these

technologies can mediate cultural understanding and critical reflection. The challenge lies in ensuring that AI-driven instruction does not merely automate language practice but instead supports learners in developing empathy, tolerance, and awareness of cultural diversity key attributes of intercultural competence (Zhang et al., 2023).

Given these considerations, investigating the integration of AI tools into EFL didactics with a focus on intercultural communication is both timely and necessary. Such inquiry can contribute to a deeper understanding of how technology can be aligned with humanistic educational values, bridging linguistic skill development and intercultural sensitivity in global learning environments.

## **2. Statement of the problem:**

While the potential of AI in language education has gained the attention of the entire world, its pedagogical integration by EFL teachers precisely for intercultural aims remains limited and there are several points that remain undiscovered. Many learners use AI tools primarily for linguistics tasks such as grammar correction, writing feedback or vocabulary generation. The intercultural dimension, which focuses on dialogue across cultural perspectives and empathy building, often receives less emphasis in AI-based instruction.

Moreover, teachers are facing challenges in selecting the appropriate AI tools, designing culturally purposeful activities, and ensuring ethical use of generative technologies. To address this gap, the following research questions have been articulated to guide the study:

1. How do EFL teachers integrate generative AI tools into their didactic practices to foster learners' intercultural communication?

2. Do learners have positive attitudes towards teachers' integration of generative AI tools to enhance their intercultural communication competency?

Addressing these questions is important to develop AI-informed didactics models that align with EFL teaching objectives and intercultural education values. This study seeks to explore EFL teachers' and students' practices, perspectives, and challenges in using generative AI as a pedagogical bridge for intercultural understanding.

### **3. Aims of the study:**

The aim of this study is to examine how EFL teachers integrate generative AI tools into their didactics practices to promote intercultural communication among learners and exploring the perceptions of learners about the integration of AI. This study seeks:

- Understand teachers' and students' perceptions of AI as a tool for intercultural communication.
- Examine how AI is incorporated into instructional activities.
- Identify the opportunities and challenges that teachers and students may encounter.

### **4. Research hypotheses:**

In alignment with the study's emphasis on teachers, only one hypothesis was retained to maintain methodological clarity and ensure alignment with research objectives. Several potential formulations were dismissed due to their excessive breadth, subjective nature, or weak alignment with the concept of intercultural communicative competence. Consequently, the selected hypothesis was identified as the focus for directing the quantitative dimension of the research:

- H1:

The teachers and the students believe that the integration of AI generative tools enhances learners' intercultural communication.

- H0:

The teachers and the students believe that the integration of AI generative tools does not enhance learners' intercultural communication.

### **5. Research methodology:**

This study adopts an exploratory mixed methods design in which qualitative data precedes quantitative data. The qualitative phase will be used to generate initial thematic insights into EFL teachers who integrate generative AI within their didactic practices to support intercultural communication. These emerging qualitative categories will develop the quantitative instrument which will then be later distributed to a wider sample of teachers to map the prevalence and distribution of these practices. Also, the study moves from in-depth exploration toward broader pattern identification which is related with logic of exploratory mixed-methods research. Evidence emerging from both phases will be integrated to gain comprehensive interpretation.

### **6. Significance of the study:**

This study provides meaningful contributions at several levels:

#### **Theoretical/Pedagogical significance:**

The study contributes to the theoretical understanding of how generative AI interlinks with intercultural communication in EFL contexts. While current theories in applied linguistics and digital pedagogy highlight the role of technology in language learning, there is

a common tendency to ignore the profound impact of AI on how teachers facilitate the learning of cultural knowledge, linguistic input, and communicative exchange. By exploring teachers' perceptions and practices, this research augments theoretical models of intercultural competence and expands existing frameworks of technology-enhanced language learning. Consequently, the research enriches academic discourse by integrating generative AI into current frameworks of global communication and digital literacy.

**Technological significance:**

Technologically, the study offers practical perspectives on the use of generative AI as a game-changing in the educational field. As AI becomes increasingly implanted in learning environments, it is essential to understand not only its capabilities but also its limitations and risks. This study provides empirical data on how teachers navigate issues such as accuracy, bias, accessibility, and technological readiness. The findings may bolster the development of AI-powered learning platforms, guide responsible AI deployment, and support the development of user-centered technological solutions that align with pedagogical goals and intercultural values.

**Entrepreneurial significance:**

Identifies a clear market gap and opportunity. The study can serve as a foundation for educational startups focused on “develop intercultural communication competence using AI conversation simulation”. It provides the research basis for developing and selling professional development workshops and best-practice guides for institutions worldwide.

**Societal significance:**

The development of learners' abilities to communicate responsibly and respectfully across different cultures plays a crucial role in promoting digital citizenship and increasing

global awareness. This creates a more inclusive and empathetic society, a quality that is vital in our increasingly interconnected world. By promoting mutual understanding across diverse groups whether defined by culture, identity, health status, or lived experience. Social systems become more resilient, equitable, and responsive to collective needs. Inclusivity is not merely an ethical imperative but a functional necessity in globalized contexts where interdependence shapes economic, environmental, and public health outcomes. By integrating generative AI into EFL teaching, learners can better support intercultural communication, ultimately contributing to more harmonious and culturally competent communities.

## **6. Structure of Dissertation:**

The thesis will follow the structure below:

### **Chapter One: Intercultural Communication Development in EFL Education**

Chapter One begins with introduction that situates intercultural communication within the broader field of EFL education, highlighting its relevance as it is increasing in parallel with growing diversity and globalization of learning environments. It then provides a clear definition of intercultural communication and discusses its pedagogical significance, emphasizing its role in enabling learners to interact meaningfully across cultural boundaries. Specific attention is given to the essential skills (the 12 skills of 21<sup>st</sup> century) required for effective intercultural interaction, including empathy, adaptability, critical awareness, and the ability to negotiate meaning across cultures. The chapter further examines key theoretical models of intercultural communicative competence, drawing on the influential frameworks proposed by Byram (1997), Deardorff (2006), and Fantini (2009), which collectively inform the conceptual foundation of the study. In addition, it addresses common challenges and barriers that may retard the development of intercultural communication skills, such as

linguistic limitations, cultural stereotypes, and ethnocentric perspectives. The chapter concludes by outlining pedagogical strategies aimed at fostering intercultural competence, including task-based intercultural activities, reflective practices, critical cultural analysis, and the strategic integration of generative AI tools as supportive resources for intercultural learning.

### **Chapter two: Generative AI tools in EFL education**

Building on the discussion of generative digital tools in EFL education, this chapter focuses on how teachers make informed instructional decisions when integrating artificial intelligence into their classroom practices. It begins by tracing the evolution of technology in language education, from early computer-assisted language learning to mobile-assisted approaches, and subsequently to contemporary generative applications that support interaction, personalization, and pedagogical flexibility. The chapter then examines the pedagogical affordances and constraints of these tools from a teacher's perspective, emphasizing the need for professional judgment in selecting, adapting, and contextualizing digital resources to meet intercultural learning objectives. There is a specific attention to the role of AI-supported tools as dialogic resources and cultural simulation environments, through which teachers can design activities that simulate authentic intercultural encounters and provide feedback that encourages learners' cultural reflection and critical awareness. These instructional practices are further connected to key language learning theories, including constructivist, sociocultural, and cognitive interactionist perspectives, which underscore the teacher's role as a mediator of interaction, meaning making, and learning. The chapter concludes by presenting an AI-supported approach to intercultural competence development that highlights how teachers can intentionally guide the use of digital tools to

enhance cultural awareness, empathy, and communicative competence while fostering learner-centered and reflective intercultural learning.

### **Chapter Three: Research Design and Methodological Framework**

This chapter presents the methodological framework adopted to explore the integration of generative digital tools in fostering intercultural communication within EFL education. Given the exploratory nature of the study, an exploratory mixed-methods design is employed to obtain both breadth and depth of understanding. Quantitative data are gathered through a questionnaire administered to master's students in EFL-related programs, aiming learners' perceptions and experiences of intercultural learning supported by digital tools. Complementing this, qualitative data are collected through semi-structured interviews with EFL teachers to gain deeper insight into their instructional decision-making, pedagogical strategies, and perspectives on integrating generative tools in intercultural contexts. A preliminary pilot phase is also conducted to refine the research instruments and ensure their clarity and relevance. The chapter further outlines the research context, participant selection procedures, methods of data analysis, and ethical considerations, including informed consent, confidentiality, and voluntary participation. Through the combination of quantitative and qualitative data, this methodological approach seeks to provide a comprehensive and nuanced understanding of the phenomenon under investigation.

### **Chapter Four: Findings and Interpretation**

Chapter Four presents and interprets the findings generated from the data collection procedures outlined in Chapter Three. The chapter integrates quantitative results obtained from the student questionnaire with qualitative insights derived from interviews with EFL teachers, allowing for comprehensive interpretation of the research outcomes. Quantitative

findings are first reported to highlight general trends related to learners' perceptions of intercultural communication and the use of digital generative tools in EFL contexts. These results are then complemented by qualitative interpretations drawn from teachers' interviews, which provide deeper insight into instructional practices, pedagogical intentions, and challenges associated with integrating such tools in intercultural language education. By bringing together both strands of data, the chapter offers an interpretive analysis that connects empirical findings to the theoretical frameworks discussed in Chapters One and Two. This integrated approach enables a nuanced understanding of how generative tools are perceived and employed by teachers and students, while also addressing research questions guiding the study.

### **Chapter Five: Synthesis, Implications, and Future Perspectives**

Chapter Five synthesizes the main insights emerging from the preceding chapters and brings the study to a coherent conclusion. The chapter begins with a concise summary of key findings, drawing together the theoretical foundations of intercultural communication presented in Chapter One, the pedagogical strategies discussed in Chapter Two, and the empirical evidence reported in Chapter Four. It then examines the pedagogical implications of these findings, with particular attention to how EFL teachers can meaningfully integrate generative digital tools to support intercultural communication in classroom contexts. Based on the study's outcomes, the chapter offers practical recommendations for teachers and curriculum designers, highlighting considerations for instructional planning, material development, and professional practice. The chapter also acknowledges the limitations of the study, including methodological and contextual constraints, to provide a balanced interpretation of the results. Finally, it proposes directions for future research that may extend

the scope of the current study by exploring additional educational contexts, learner populations, or emerging digital practices in intercultural language education.

# **Chapter One: Intercultural Communication in EFL Education**

---

## **Introduction**

### **1.1 Definition and Significance of Intercultural Communication**

#### **1.2 Essential Skills for Intercultural Communication**

##### **1.2.1 Cultural Empathy**

##### **1.2.2 Adaptability**

##### **1.2.3 Critical Awareness**

##### **1.2.4 Effective negotiation of Meaning Across Culture**

#### **1.3 Theoretical Models of Intercultural Competence**

##### **1.3.1 Byram (1997)**

##### **1.3.2 Deardorff (2006)**

##### **1.3.3 Fantini (2009)**

### **1.4 Challenges and Barriers in Developing Intercultural Communication Skills**

#### **1.4.1 Linguistics Limitations**

#### **1.4.2 Cultural Stereotypes**

#### **1.4.3 Ethnocentric Perspectives**

### **1.5 Strategies for Intercultural Competence Development**

#### **1.5.1 Task-Based Intercultural Activities**

#### **1.5.2 Reflection and Critical Cultural Analysis**

#### **1.5.3 Integration of Generative AI Tools**

## **Conclusion**

### **Introduction**

In modern language education, the role of culture in teaching and learning English as Foreign Language (EFL) has grown in importance in teaching and learning English as a Foreign Language (EFL). Since English functions as universe language, learners are not expected only to develop linguistic proficiency but also to communicate effectively with people from diverse cultural backgrounds. This shift has prompted educators and researchers to reevaluate the objectives of language instructions, moving beyond grammar and vocabulary toward a broader comprehensive concept of communicative competence that integrates intercultural dimensions. According to this perspective, developing intercultural communication skills is crucial to learn language effectively. Starting with its definition and pedagogical significance, this chapter examines the theoretical foundations of intercultural communication in EFL education.

### **1.1 Definition and Significance of Intercultural Communication**

Intercultural communication is defined as interactions between different individuals from diverse cultural backgrounds in which meaning is negotiated across diverse systems of values, beliefs, and communicative practices. In language education, it does not involve just the exchange of linguistic signals, but also the ability to interpret cultural references, detect differences, and respond appropriately in cross-cultural contexts. According to Byram (1997), effective language learning necessitates the development of intercultural communicative competence, which includes open attitudes, awareness of social groups and cultural practices, and skills of interpreting and relating. Similarly, Deardorff (2006) defines intercultural competence as a dynamic and process-oriented capacity that combines attitudes, knowledge, skills, and internal outcomes such as adaptability and empathy.

The significance of intercultural communication in EFL education lies in its contribution to prepare learners for real-world interaction. In multilingual and multicultural contexts, communication breakdowns often arise not from grammatical errors but from cultural misunderstandings. Therefore, promoting intercultural awareness enables learners to manage differences in communication styles, social norms, and perspectives. Scholars such as Fantini (2009) emphasize that intercultural competence fosters both effective communication and personal growth, as learners become more reflective and open-minded in their interactions. Within EFL classrooms, integrating intercultural communication development helps shift instruction from a purely linguistic focus to a more holistic educational approach that prepares learners to participate responsibly and confidently in global exchanges.

While Byram (1997) presents a structured model outlining specific components of intercultural competence, Deardorff (2006) adopts a more process-oriented perspective that emphasizes internal development and adaptability. Both approaches underline the importance of the development of individuals ability of engaging in effective, reflective, and open-minded intercultural interactions also Fantini (2009) share the same objective of these two approaches; however, they differ in the way competence is conceptualized either as a set of measurable dimensions or as a dynamic developmental process. While Fantini emphasizes personal transformation through experiential learning. Overall, despite their structural differences, these approaches collectively reinforce the view that intercultural communication competency entails both personal development and the ability to communicate successfully and reflectively across cultures.

### **1.2 Essential Skills for Intercultural Communication**

Building on the definition and significance of intercultural communication discussed in the previous section, developing intercultural communicative competence in EFL contexts requires more than linguistic proficiency, it involves a set of interrelated skills that make learners able to engage effectively and appropriately across cultural boundaries. In diverse contexts, the capacity to interpret cultural differences, respond with sensitivity, and negotiate meaning is an important component of successful interaction, as consistently emphasized by scholars in intercultural communication. In this perspective, intercultural competence is not perceived as a fixed body of knowledge, but rather as a dynamic combination of reflective capacities, skills, and attitudes that develop through supervised learning and experience. In accordance with the influential frameworks proposed by (Byram, 1997 )and (Deardorff, 2006); however, they differ in their conceptualization of how such competence develops, either through structured components or through an ongoing developmental process. Because of this difference, it is important to view intercultural skills as both set of pedagogical elements and a set of talents that develop through time in response to different experiences.

Among these skills, cultural empathy emerges as foundational elements, as it enables learners to move beyond surface-level interpretations and engage with alternative perspectives. As (Bennett, 1993) argues, the progression from ethnocentric to cultural relativism orientations reflects a deeper capacity for empathy, such development is not automatic and requires guided pedagogical support. Rather than focusing just on teaching factual cultural knowledge, EFL classes should aim to foster an environment where learners can encounter and analyze diverse cultural perspectives. In a similar vein, adaptability is essential in navigating intercultural interactions, as learners are often required to adjust their

communicative behavior in response to unfamiliar norms. While (Kim, 2001) defines adaptability as a process of gradual adjustment, its application in classroom settings remains dependent on the types of interactional experiences provided to learners.

Another key dimension is critical awareness, which involves reflecting on both one's own cultural assumptions and those embedded in communication practices. This perspective, emphasized by (Kramsch, 1993), views that language acquisition is a passive process and language learning as a space for critical engagement.

Nevertheless, as (Holliday, 2011) cautions, learners may still rely on simplified or stereotypical representations of culture if such awareness is not explicitly fostered. This highlights the need for instructional approaches that encourage deeper reflection and critical interpretation. Furthermore, the ability to negotiate meaning across cultures represents a practical dimension of intercultural competence, especially in cases where the misunderstanding arises. While (Byram, 1997) identifies this as a core skill, its effectiveness relies on the learner's capacity to integrate linguistic resources with cultural sensitivity, suggesting that misunderstandings between cultures, rather than linguistic deficiency, are a common cause of communication breakdowns.

Overall, all these perspectives indicate that intercultural communication skills are complex, interdependent, and context sensitive, also, the ability of the engagement in intercultural interaction is shaped by the interplay of learners' empathy, adaptability, critical awareness, and meaning negotiation, rather than functioning in isolation. This reinforces the view that developing intercultural competence in EFL education requires not only to be exposed to cultural context but also with structured opportunities for reflection, interaction,

and guided practices. The following sections examine each of these skills with a deeper look to have a better understanding of their pedagogical implications.

### 1.2.1 Cultural Empathy

Cultural empathy represents one of the central dimensions of intercultural communicative competence, as it enables individuals to understand and interpret the perspectives, values, and communicative behaviors of people from diverse cultural backgrounds. It goes beyond just recognizing cultural differences; empathy means being able to put oneself mentally and emotionally in someone else's shoes and see things from their point of view. In intercultural communication research, this skill is often related to the development of openness and tolerance toward cultural diversity.

(Byram, 1997) emphasizes that intercultural competence requires what he refers to as “attitudes of curiosity and openness”, which allow learners to avoid judging unfamiliar cultural practices. In this sense, empathy acts as a bridge between knowledge and interaction also, it makes learners able to interpret cultural meanings without evaluating them through the lens of their own cultural standards. However, Byram's model also suggests that empathy is not just an innate quality, it is a learned competency that can flourish through guided reflection and exposure to different cultures.

Similarly, (Bennett, 1993)'s Developmental Model of Intercultural Sensitivity highlights empathy as a key to shifting from an ethnocentric to ethnorelative perspectives. According to Bennett, individuals often reject or fail to understand different traditions because they evaluate cultural differences through the lens of their own cultural worldview, as intercultural sensitivity develops, however, people learn how to recognize cultural

differences as valid alternative ways of looking at the world. As a result, learners can conquer their cultural defensiveness and adapt with greater ease when they practice empathy.

Other scholars have also emphasized the cognitive dimension of empathy in intercultural learning. For instance, (Fantini, 2009) describes intercultural competence as a combination of attitudes, knowledge, and skills that allow the individual to engage effectively and appropriately across cultures. Within this approach, empathy is linked with the ability to understand cultural cues and being aware of the historical and social factors that have shaped communication. According to this view, empathy does not require only emotional openness but also knowledge of cultural dynamics.

In language education contexts, the development of cultural empathy plays a significant role because learners often encounter cultural perspectives through linguistic interaction. (Kramsch, 1993) argues that learners might find a “third place” between their mother culture and the target culture in language classes, where they can explore the cultural meanings embedded in discourse. From this point of view, learners develop empathy when they become able to understand cultural expressions without assuming that one cultural perspective is superior to another.

However, several researchers caution that empathy does not foster automatically through exposure to cultural materials alone. Despite that, intercultural education that focuses on providing learners with superficial descriptions of cultural behaviors may introduce them to prejudices and stereotyped cultural representations, as pointed out by (Holliday, 2011). As a result, classroom practices should inspire learners to reflect critically on cultural diversity and to accept and respect multiple perspectives.

Taken together, these perspectives cite that cultural empathy is a cognitive and affective skill at the same time, it enables learners to accept cultural differences with openness and understanding. In EFL education, developing empathy requires teaching methods that move beyond just learning about cultural knowledge toward meaningful engagement with multiple perspectives. Such skill does not only strengthen intercultural understanding but also prepares learners to communicate more effectively across cultural boundaries.

### 1.2.2 Adaptability

Adaptability represents another fundamental component of intercultural communicative competence, for an effective intercultural interaction often requires individuals to adjust their communicative behavior in reaction to unfamiliar cultural norms and expectations. In intercultural communication research, adaptability is defined as the ability to adjust one's linguistic, behavioral, and interpretive strategies when interacting with people from diverse cultural backgrounds. This ability allows individuals to explore cultural differences while communicating effectively and respectfully.

Within the field of intercultural competence, (Byram, 1997) emphasizes that successful intercultural communication does not involve only understanding cultural differences but also the ability to communicate appropriately in diverse cultural contexts. In this model, adaptability is linked to what he refers to as skills of interpreting and relating, with making the individual able to understand cultural practices and to adjust their responses appropriately. From this point of view, adaptability represents the learner's ability to connect knowledge about cultures with the practical strategies of communication.

A similar perspective has appeared in (Kim, 2001)'s theory of cross-cultural adaptation, which defines adaptability as a dynamic process of gradual modification during intercultural interactions. According to Kim, people who engage with new cultural environment experience face the process of stress, adaptation, and growth as they learn to understand and respond to unfamiliar cultural patterns. Although Kim's framework is primary focus on long-term intercultural contact, its implications are useful for educational settings where learners encounter diverse cultural opinions through language learning activities.

Other scholars define adaptability as a complex between behavioral flexibility and cognitive openness. For example (Gudykunst, 2005) argues that effective intercultural communication requires the individual to manage uncertainty and anxiety when communicating with different people with diverse cultural backgrounds. In this sense, adaptability is nearly linked to the ability to be open to alternative interpretations while adapting communicative strategies to avoid misunderstandings. According to this view, adaptability is not about linguistic modification only but also it involves managing attitudes and perceptions during intercultural communication.

Within language education, adaptability becomes particularly important because learners often must negotiate meaning using linguistic resources that may still be evolving. (Kramsch, 1993) suggests that EFL learners frequently navigate between cultural frameworks, which requires them to understand communicative norms that may sound different from those of their mother culture. Hence, the ability to adapt in communicative behaviors which includes shifts in levels of politeness, directness, and formality, is a crucial factor in the effectiveness of interactions.

Yet, researchers have noticed that adaptability cannot be assumed to occur spontaneously through exposure to cultural context. (Deardorff, 2006) states that intercultural competence develops through an ongoing process in which behaviors such as openness and curiosity eventually lead to internal changes and to appropriate external behavior. From this view, adaptability represents the tangible outcome of deeper intercultural learning processes rather than being a simple communicative technique.

Overall, these perspectives indicate that adaptability plays an important role in enabling learners to respond appropriately to cultural differences during communication. In EFL contexts, developing adaptability requires pedagogical approaches that offer learners with opportunities to engage in different communicative situations and to think on how cultural norms shape communication. Such experiences make learners develop the essential flexibility for handling intercultural interactions more effectively.

### 1.2.3 Critical Awareness

Critical cultural awareness represents a central dimension of intercultural communicative competence. By this skill, learners become able to reflect critically on cultural practices, values, and points of views including those of their own culture. Unlike basic cultural knowledge, critical awareness involves the ability to evaluate cultural meanings and communication practices in a reflective and attentive manner. In this sense, intercultural communication does not require only understanding cultural differences but also the ability to question assumptions and understand cultural phenomena within larger social and historical contexts.

One of the most influential conceptualizations of critical awareness is proposed by (Byram, 1997), who introduces the concept of critical cultural awareness as a key component

of intercultural communicative competence. According to Byram, learners should develop the ability to evaluate cultural practices and perspectives based on clear criteria rather than relying only on personal or ethnocentric judgments. This evaluative dimension encourages learners to examine both their own cultural values and those of others, thus encouraging intercultural interactions in a more balanced and thoughtful way.

Similarly, (Kramsch, 1993) emphasizes that language learning is inherently connected to cultural interpretation. She argues that learners must develop the ability to analyze cultural meanings that are embedded in language use, discourse speeches, and social interactions. From this opinion, critical awareness emerges when learners dive deeper than simple cultural descriptions and explore how symbolic meanings shape communication across cultures. Kramsch also suggests that language classrooms can serve as spaces where learners get a deeper understanding of cultural diversity while they navigate their own cultural identities.

Other scholars have also highlighted the importance of reflecting critically in intercultural learning. For instance, (Deardorff, 2006) identifies intercultural competence as a developmental process in which internal outcomes such as flexibility, openness, and empathy contribute to effective intercultural behavior. Within this process, thinking critically plays a crucial role in enabling learners to reconsider their assumptions about cultural norms and communication practices. This point of view suggests that critical awareness is not a fixed skill, but rather an evolving skill that is shaped by intercultural experiences and reflection.

(Holliday, 2011) also argues that intercultural learning should challenge simplified or stereotypical representations of culture that often dominate educational contexts. According to Holliday, cultures are complex, dynamic, and internally diverse, therefore, teaching approaches that present cultures as fixed or homogeneous may reinforce misconceptions

rather than promote clear understanding. Developing critical awareness thus requires learners to explore how cultural narratives are constructed and represented in the context of communication.

More recent research also emphasizes the role of critical thinking in intercultural competence development. (Baker, 2015) tells that intercultural communication in global contexts often involves negotiating multiple cultural perspectives simultaneously. As a result, learners must develop the ability to understand cultural meanings critically rather than presuming that communication follows fixed cultural patterns. This perspective highlights the need for educational practices that make learners analyze cultural situations, question assumptions, and engage in reflective dialogue.

Taken together, these perspectives suggest that critical cultural awareness plays a vital role in enabling learners to interpret cultural diversity wisely and responsibly. In EFL education, developing this skill requires pedagogical approaches that engage learners' reflection, discussion, and critical analysis of cultural issues rather than the passive transmission of cultural knowledge, through such practices, learners can develop deeper understanding of cultural complexity and become more effective participants in intercultural communication.

### **1.3 Theoretical Models of Intercultural Competence**

The increasing recognition of intercultural communication as a fundamental goal in language education has led scholars to create conceptual models that explain the understanding and development of intercultural competence. These theoretical models provide structured perspectives on the attitudes, knowledge, and skills necessary for effective

communication across cultural boundaries. In the context of foreign language education, such models have played a significant role in guiding pedagogical practices and research that focus on the integration of cultural learning within language instruction.

Several approaches have been developed to conceptualize intercultural competency; however, several models have a deep influence in the field of applied linguistics and language education. Among them, the models developed by (Byram, 1997), (Deardorff, 2006), (Fantini, 2009) are frequently cited in studies evaluating intercultural communication in educational contexts. While these models share the common goal of explaining how the individual develops the ability to communicate effectively with multiple people with diverse cultural backgrounds, they differ in their focus on specific elements and stages of growth. Exploring these models provides valuable insight into how intercultural competence can be conceptualized and developed within EFL learning environments.

### **1.3.1 Byram's Model of Intercultural Communicative Competence (1997)**

One of the most influential frameworks in the field of intercultural communication in language education is the model of intercultural communicative competence proposed by (Byram, 1997). This approach was developed for the use in the field of foreign language instruction; it stresses the integration of linguistic competence with cultural awareness. He argues that effective communication in foreign language requires more than just grammatical proficiency. Instead, learners must develop the ability to understand cultural meaning, to engage with cultural diversity, and to think critically on both their own and others' cultural perspectives.

Byram conceptualizes intercultural competence through five interconnected components, frequently called by the “savoirs”. These components include attitudes (*savoir-être*), knowledge (*savoirs*), skills of interpreting and relating (*savoir-comprendre*), skills of discovery and interaction (*savoir-apprendre/faire*), and critical cultural awareness (*savoir s’engager*). The model is based on attitudes, since learners cannot successfully participate in intercultural communication unless they show curiosity and openness toward cultural differences. This dimension involves the willingness to avoid immediate judgments about unfamiliar cultural practices and approach interactions with cultural diversity with a reflective attitude.

The second component is knowledge, it refers to learners’ understanding of social groups, cultural practices, and communicative standards in both their native culture and the target culture. According to (Byram, 1997), such knowledge allows learners to understand cultural behavior within their broader social and historical contexts. However, intercultural competence does not rely only on cultural information; it also involves the development of interpretive skills that make learners able to analyze and compare cultural phenomena.

The interpretative skills are reflected in the abilities of understanding and relating, which allow learners to identify cultural meanings that are embedded in communication and to connect them with their own cultural background. In addition, the abilities of discovery and interaction emphasize learners’ ability to acquire new cultural knowledge during real communications. This dynamic dimension highlights that intercultural competence develops through interaction and shared experiences rather than through passive acquisition of cultural facts only.

Perhaps the most noticeable element of Byram's model is the concept of critical cultural awareness, which refers to evaluating cultural behaviors and different perspectives critically. This component encourages learners to examine cultural values through an analytical perspective and to interrogate assumptions that may affect intercultural perception. As (Kramsch, 1993) and (Holliday, 2011) later suggest that such critical engagement is important for avoiding simplified or stereotypical representations of culture.

Overall, Byram's model has been broadly adopted in language education research due to its comprehensive framework that links linguistic competence with cultural awareness. By emphasizing attitudes, knowledge, interpretive skills, and critical reflection, the model highlights the multidimensional nature of intercultural communication. Consequently, it has influenced the integration of intercultural objectives in foreign language curriculum remains a benchmark for research on intercultural competence in EFL contexts.

### **1.3.2 Deardorff's Process Model of Intercultural Competence (2006)**

While (Byram, 1997)'s model conceptualizes intercultural competence through a set of interrelated components, new research has appeared to explain how such competence develops over time. One of the most important recognized contributions in this flow is the process model of intercultural competence proposed by (Deardorff, 2006). Unlike models that emphasize fixed categories of knowledge and skills, Deardorff conceptualizes intercultural competence as a dynamic and ongoing developmental process in which attitudes, inner disposition and communicative behaviors combine continuously.

Deardorff's model was developed through a Delphi study involving researchers and practitioners in the field of intercultural communication, which aimed to identify the main

important elements of intercultural competence in higher education contexts. The resultant model presents intercultural competence as an iterative process with multiple interrelated dimensions. Attitudes like openness, curiosity, and respect toward cultural diversity form the basis of the model. According to (Deardorff, 2006), these attitudes represent the point of beginning for intercultural learning because they make the individual able to approach cultural differences with a desire to understand rather than to judge.

Based on these attitudes, the model highlights the importance of knowledge and skills that support interaction between cultures. These include cultural self-awareness, knowledge of cultural opinions, and the ability to observe, interpret, and analyze cultural phenomena. Like the interpretive skills emphasized in Byram's model, these skills allow the individual to make sense of unfamiliar communicative practices and cultural meanings. However, Deardorff's theory highlights how these abilities develop when learners interact with diverse cultures.

A distinctive feature of Deardorff's model is the distinction between internal and external outcomes of intercultural competence. Internal outcomes refer to the development of personal qualities such as adaptability, empathy, flexibility, and an ethnorelative perspective. These internal developments reflect the learner's evolving ability to understand cultural differences constructively. External outcomes, on the other hand, refer to the remarkable ability to communicate and behave appropriately and effectively in intercultural situations. In this sense, effective intercultural interaction is understood as the visible manifestation of deep changes in attitudes and knowledge.

Scholars such as (Spitzberg et al., 2009) have noted that Deardorff's model contributes significantly to the field by emphasizing the developmental and reflective nature

of intercultural competency. Rather than seeing intercultural skills as static abilities that can be mastered independently, the model suggests that competence develops over time by continuous learning, interaction and reflection. This perspective aligns with modern theories of language that stress learner-centered approaches and real-world tasks.

In the context of EFL education, Deardorff's model provides clarification on how language learning environments can foster intercultural competence. This model stresses the need for ongoing exposure to cultural variation for the development of intercultural competence by paying attention to the connection between attitudes, knowledge, reflection, and communication outcomes. Consequently, educational practices that encourage dialogue, reflection, and intercultural communication may play a very important role in fostering these competencies among language learners.

Overall, Deardorff's process-oriented perspective complements earlier theoretical frameworks by showing how intercultural competence develops via ongoing interaction and reflection. When considered alongside Byram's component-based model, it provides a deep understanding of both the structure and nature of development of intercultural communicative competence in language teaching.

### **1.3.3 Fantini's Model of Intercultural Communicative Competence (2009)**

Building on both component and process-oriented perspectives, (Fantini, 2009) presents a comprehensive model of intercultural communication competence that integrates the key dimensions identified in previous models, with a particular focus on intercultural interaction and experiential learning. In contrast to the developmental process developed by (Deardorff, 2006) and the structured classification developed by (Byram, 1997). Fantini's

model aims to provide a more holistic perspective by linking attitudes, knowledge, abilities, and awareness within real communication situations.

At the core of Fantini's model are four main dimensions: knowledge, awareness, attitudes, and skills. A person's attitude can be defined as openness, curiosity, and respect toward cultural diversity, while knowledge refers to individual's comprehension of cultural customs, perspectives and communication patterns. Although these dimensions are parallel to previous models, Fantini stresses their interdependence, suggesting that intercultural skills cannot emerge in the absence of underdevelopment of any dimension.

A distinctive aspect of Fantini's model is the central role attributed to awareness; he thinks that it is the most important part of intercultural competence. Possessing cultural awareness requires reflection of both one's own cultural position and intercultural interaction. One way in which awareness bridges information, attitudes, and abilities is by facilitating the evaluation and interpretation of intercultural experiences. This perspective aligns with the focus on critical reflection mentioned by (Kramsch, 1993) and further supports the perspective of intercultural competence that requires more than functional communication skills.

Additionally, (Fantini, 2009) stresses the significance of intercultural communication as a setting for competence development. He argues that the ideal way for learners to develop their intercultural competence is to force them to put what they have learned into practice in real-life communicative situations. This experiential dimension emphasizes the need for practice and reflection in creating intercultural competence, rather than relying exclusively on education to achieve it.

Furthermore, Fantini presents the concept of proficiency levels in intercultural competence, indicating that individuals may cultivate multiple degrees of effectiveness based on their experiences and exposure to different intercultural contexts. This perspective adds a developmental dimension to the model, thus complementing (Deardorff, 2006)'s process-oriented approach while maintaining a clear focus on the practical outcomes of communication.

In EFL education, Fantini's model offers precious pedagogical implications by highlighting the need for the integration of cultural knowledge, reflective practices, and communicative interactions within the process of teaching language. By focusing on awareness and experiential learning, the model supports instructional approaches that encourage learners to engage actively with cultural diversity rather than receive cultural information passively. Consequently, it provides a flexible framework for creating learning spaces that foster both linguistic and intercultural growth.

Overall, Fantini's model contributes to this field by linking together the theoretical and practical perspectives of intercultural competence. Blending it with Deardorff's developmental model and Byram's structural framework strengthens the idea that intercultural competence is a multidimensional and dynamic ability that is shaped by interaction, experiences, and reflection.

#### **1.4 Challenges and Barriers in Developing Intercultural Communication Skills**

While intercultural communicative competence has been widely recognized as the key goal in language education, according to (Oumeddour, 2024), intercultural approach aims at to enabling the FL learners to function as mediators between the two cultures, as it facilitates

understanding how native culture may be different to other people, and appreciating these differences for appropriate and effective intercultural interactions. But there are several factors that can impede the progress of this goal and make it harder for learners to engage effectively in interaction with people from diverse cultural backgrounds. While previous models have proposed that intercultural competence involves the interaction of attitudes, skills, knowledge, and reflective abilities, it is important to note that these elements do not grow in isolation from contextual and individual factors. In EFL settings, learners frequently face linguistic, cognitive, and cultural difficulties that may delay their capacity to understand and respond appropriately to intercultural scenarios. Examining these barriers is essential for understanding the difficulties that are involved in fostering intercultural communication within the educational settings.

### **1.4.1 Linguistic Limitations**

Linguistic limitations are one of the most cited challenges in improving intercultural communication skills in the EFL settings. Although fluency in more than one language is a prerequisite for intercultural competence, learners' command of linguistic resources is still a vital aspect of their communication competency. To understand meaning within specific cultural situations, (Swain et al., 1980) argue that communicative competence does not include grammatical knowledge only but also sociolinguistic and strategic abilities.

In intercultural interactions, limited linguistic proficiency may hinder learners' ability to express complex concepts, interpret implicit meaning, or respond correctly to culturally embedded communication. Related to this idea (Byram, 1997) said that even if learners have cultural backgrounds, their ability to engage effectively in meaningful interactions may be

impeded due to linguistic challenges. This points to the fact that linguistic competence and intercultural competence are interrelated rather than separate domains.

Furthermore, research in second language acquisition highlights the role of interaction in language development. To better understand and learn new language, (Long, 1996) stresses the importance of meaning negotiation while communicating. However, when learners are not equipped with linguistic resources that are essential to engage in such interactions, the opportunities for intercultural engagement may be decreased. This challenge can lead to simplified communication or avoidance of difficult intercultural exchanges.

Also (Kramsch, 1993) also noted that language carries cultural meaning are frequently context-dependent and implicit. As a result, learners with limited proficiency may struggle with understanding what others are trying to convey and may even have trouble with grammar and vocabulary. Accordingly, pedagogical approaches that combine cultural awareness with language development are crucial because linguistic limitations may impact both accuracy and the depth of intercultural communication.

### **1.4.2 Cultural Stereotypes**

In addition to linguistic limitations, cultural stereotypes represent a major barrier to achieving intercultural competency. One common definition of stereotypes is an oversimplified picture of cultural group that may influence how individuals understand cultural differences. These representations have the potential to simplify and mislead, but they also offer a starting point for comprehending unfamiliar cultures.

(Holliday, 2011) critiques what he describes as essentialist perspectives of cultures, which portray cultures as static, permanent phenomena. According to this view, learners may develop rigid expectations about how individuals behave from specific cultural backgrounds,

and this will delay their ability to perceive variety within cultures. This can lead to communication based on assumptions rather than genuine understanding.

Likewise, (Byram, 1997) emphasized that intercultural competence requires learners to go beyond stereotypical descriptions and to develop the ability to interpret cultural practices within their settings. Without this critical perspective, intercultural interactions can be distorted when learners rely on prior beliefs. Because of this view, having critical cultural awareness is crucial for evaluating such assumptions.

More recent research suggests that stereotypes may influence how people interact as well as how they perceive things. According to (Baker, 2015) it is difficult for individuals to make sense of complicated and hybrid cultural identities in global communication contexts through fixed cultural categories. From this perspective, when the individual depends too much on stereotypes may hinder effective communication by decreasing the flexibility that is required to engage with diverse cultural backgrounds.

All in all, the need for instructional approaches that promote critical analysis of cultural representations, and the acceptance of diverse perspectives is emphasized by the fact that cultural stereotypes continue to exist. These practices can support the growth of a better awareness of cultural diversity and its complexities.

### **1.4.3 Ethnocentric Perspectives**

Another critical challenge to intercultural communication is the existence of ethnocentric perspectives, which involve understanding other cultures primarily based on one's own cultural norms and values. Ethnocentrism may lead individuals to see their own cultural practices as superior or more appropriate than others, and this will limit openness to alternative viewpoints.

(Bennett, 1993)'s developmental model of intercultural sensitivity provides a useful framework for understanding this phenomenon. In the early stages of the model, the individual tends to adopt ethnocentric orientations, where cultural differences are ignored or viewed negatively. As the individual progresses toward more ethnocentric stages, they become more capable of identifying and appreciating cultural diversity. However, this progress requires intentional learning and exposure to intercultural experiences.

In educational contexts, ethnocentrism may manifest itself in learners' reluctance to question their cultural assumptions or engage with unfamiliar perspectives. (Deardorff, 2006) highlights that attitudes such as openness and respect are essential for overcoming these limitations, as they enable learners to approach intercultural interactions with a desire to learn rather than judging. Without these attitudes, the growth of intercultural competence may remain superficial.

Also, (Kramsch, 1993) emphasizes that learners must distance themselves from purely ethnocentric interpretations since the process of language involves negotiating meaning across cultures. This approach makes learners able to gain deeper self-awareness and empathy for other people's cultural backgrounds. However, getting this level of reflection can be challenging, especially in settings where the exposure to cultural diversity is not enough or limited.

Taken together, ethnocentric perspectives limit learners' capacity to develop intercultural communication skills also they will be unable to approach cultural differences with objectivity and balanced manner. To address this barrier, it requires pedagogical approaches that promote intercultural dialogue, openness, and critical reflection.

### **1.5 Strategies for Intercultural Competence Development**

Related to the challenges associated with the development of intercultural communicative competence, recent research has highlighted the curial role of pedagogical strategies that actively involve learners in meaningful intercultural experiences as a solution to the difficulties for developing intercultural communicative competence. As discussed in previous sections, the component of intercultural competence is not only the knowledge of cultural practices but also it includes attitude development, interpretive skill acquisition, and critical awareness. Therefore, effective pedagogical approaches should not just focus on delivering cultural knowledge but also creating opportunities for discussion, reflection, and contextualized communication. Within EFL education, several strategies have been found to promote these competences within the EFL settings such as the incorporation of new digital tools like generative AI, reflective and critical practices, and task-based intercultural activities.

### **1.5.1 Task-Based Intercultural Activities**

Task-based approaches have been widely recognized to language teaching for their potential to develop communicative competence through meaningful interaction. In the settings of intercultural learning, task-based intercultural activities provide learners with opportunities to engage in authentic or communicative situations that are like real life scenarios that require the negotiation of meaning across cultural boundaries. (Ellis,2003) argues that activities encourage learners to use language as tool for certain communicative goals, because of that these activities will facilitate both linguistic development and interactional competence.

When these tasks are designed with a focus on intercultural interaction, they expose learners to multiple cultural perspectives and encourage them to interpret and engage with

culturally embedded meanings. (Byram, 1997) asserts that intercultural competence develops through interaction and discovery, suggesting that learners benefit from activities that require them to explore cultural differences actively. Similarly, (Scarino et al., 2013) emphasize the importance of engaging learners in the process of interpreting, connecting, and reflecting on cultural experiences when teaching intercultural languages.

More recent studies have supported the effectiveness of task-based intercultural learning. For instance, according to (Baker, 2015), learners can connect with multiple cultural perspectives instead of fixed cultural standards when given activities that are situated in global communication contexts. This approach reflects up-to-date understandings of English as a lingua franca, where interactions often occur between individuals with different cultural backgrounds. Therefore, learners can develop flexibility, adaptability, and the ability to manage intercultural interaction in dynamic situations.

### **1.5.2 Reflection and Critical Cultural Analysis**

In addition to task-based intercultural activities, reflective practices play a crucial role in the development of intercultural competence. Reflection allows learners to evaluate their own beliefs, examine intercultural experiences, and improve deeper understanding of cultural complexity. (Byram, 1997) emphasized in his model that critical awareness involves the ability to analyze cultural practices and perspectives using informed and reflective criteria.

(Scarino et al., 2013) argue that reflection is the key to intercultural language learning, as it makes the learners able to have deep observations and explore the hidden meanings of cultural interactions. Through reflective activities such as discussions, journals, or critical incident analysis, learners can dive into the ways in which cultural perspectives affect discourse and the ways in which their own beliefs impact comprehension.

(Kramsch, 1993) reinforces this idea, arguing that learners of a language should actively seek to understand cultural meanings through situating them in broader social and symbolic frameworks. However, (Holliday, 2011) warns that learners can keep using simple cultural representations or prejudices if they are not prompted to reflect on their assumptions and experiences. This underlines the need for structured educational practices that encourage critical inquiry and self-awareness.

Recent research has continued to stress the role of reflection in intercultural competence development. (Baker, 2015) suggests that reflective dialogue allows learners to negotiate meaning across multiple cultural situations, by that means, fostering more refined and flexible understandings of communication. In this sense, reflection is like a bridge between experience and learning and making learners able to transform intercultural challenges into meaningful insights.

### **1.5.3 Integration of Generative AI tools**

Newly, the integration of digital technologies has opened new doors for fostering intercultural competence in the field of language education. Among these innovations, generative AI tools have attracted the whole spotlight due to their ability to simulate interactive communication, expose learners to different cultural perspectives, and provide immediate feedback. While traditional approaches rely on classroom discussions, AI-based tools can prolong learning beyond the classroom by offering dynamic and personalized learning experiences.

From a pedagogical perspective, generative AI tools can operate as dialogic partners that allow learners to engage in simulated intercultural interactions. Such tools can introduce learners to multiple cultural scenarios, motivating them to interpret meanings, responding appropriately, and reflecting on communication strategies. This aligns with sociocultural

perspectives on learning, which underline the role of interaction and mediation in cognitive development (Vygotsky, 1978).

Additionally, AI tools might facilitate reflective learning by offering feedback on communication patterns. Learners may be motivated to reflect on the ways in which cultural variables impact their communication choices, which could help them acquire a stronger sense of critical awareness through this feedback. Also, AI-supported feedback can help in the reflection that is necessary to turn intercultural experiences into internal learning results, as was emphasized in (Deardorff's, 2006) process model.

Recent studies have begun to investigate AI's function in intercultural education. To illustrate this point, (Zhou et al., 2024) state that learners can improve their intercultural awareness by being exposed to diverse cultural perspectives and this is possible in digital contexts. Likewise, (Xu et al., 2025) highlight that individuals can engage with cultural information at their own pace and according to their needs with AI-supported learning, which promotes learner-centered approaches.

Despite these advantages, it must be pedagogical deliberation before the integration of AI tools. As like the other instructional strategies, their efficacy relies on how they are incorporated into learning activities and the scope to which they facilitate meaningful interaction and reflection. Tools like these have their limitations, but when they are used properly, they may enhance traditional approaches and even solve some of challenges that have been identified in the previous sections.

## Conclusion

This chapter examined the development of intercultural communicative competence within the EFL settings, highlighting that effective communication across cultures stretches

beyond linguistic proficiency to include attitudes, interpretive skills, and critical awareness. The discussion emphasized the key competencies such as cultural empathy, adaptability, critical thinking, and meaning negotiation, all of which contribute to learners' ability to engage with cultural diversity in effective way.

Theoretical models proposed by (Byram, 1997), (Deardorff, 2006), and (Fantini, 2009) have offered complementary perspectives on the structure and the growth of intercultural competence, while the evaluation of limitations particularly linguistic limitations, cultural stereotypes, and ethnocentric perspectives has underlined the complexity of fostering such competencies in EFL environments. In return, pedagogical strategies including task-based activities, reflective practices and critical cultural analysis have been identified as essential supporters for intercultural learning.

Relying on these insights, it becomes important to consider how recent educational tools can enhance intercultural competence development. On this matter, the following chapter explores the role of generative AI tools in the field of EFL education, focusing on their capabilities to support interactions, reflection, and engagement with multiple cultural backgrounds.

# **Chapter Two: Generative AI Tools in EFL Education**

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### Introduction

The integration of digital technologies into EFL education has entered the approaches of teaching and learning to the modern era. Over the past decades, a gradual shift has been occurring from the traditional approach (teacher-centered) to learner-centered, interactive, and digitally mediated environments because of technological developments. The first attempts to integrate technology in language learning mostly consisted of computer-assisted activities that aimed to improve learners' accuracy and fluency. However, the opportunities for learners to communicate, collaborate, and interact across cultures have grown because of the constantly evolving capabilities of educational technology.

The development of generative AI in the last several years has added new dimensions to digital language education. Unlike earlier technologies that mostly provided pre-programmed information, generative AI systems can mimic human conversation, generate adaptive answers, and provide personalized learning experiences. This development has attracted increasing interest, especially in the field of English as a foreign language (EFL) teaching, where learners acquire a language through conversation, feedback, and communicative practices. As a result, researchers are taking a glance at generative AI tools for a variety of purposes, including linguistic development, intercultural communication, and reflective learning.

According to recent research in the field of educational technology, AI-supported environments may contribute to more flexible and personalized learning experiences (Luckin et al., 2022; Holmes & Tuomi, 2022). Also, according to studies in applied linguistics, language learning systems powered by AI can open new pathways for authentic conversation, immediate feedback, and improved learner engagement (Kohnke et al., 2023). Within intercultural contexts, researchers like (Baker, 2015) and (Deardorff, 2020) argue that digital

interaction can help learners to be exposed to diverse cultural perspectives and encourage them to negotiate meaning across cultural barriers. Based on these viewpoints, the integration of generative AI into EFL instruction brings up more than just technology innovation; it also raises wider pedagogical and intercultural considerations.

The current chapter dives into the value of generative AI tools in EFL instruction, expanding upon the conceptual foundations presented in the previous chapter concerning intercultural communicative competence. The purpose of this chapter is to explore how educational settings might benefit from AI-supported technology in terms of language acquisition, communication development, and intercultural engagement. To achieve this objective, the chapter will trace the evolution of technology in language education, moving from Computer-Assisted Language Learning (CALL) to Mobile-Assisted Language Learning (MALL), before discussing the digital transformation of EFL classrooms and the rise of generative AI technologies.

Following a brief overview of generative AI, this chapter explores its key features, identifies the most popular AI-based educational tools, and explains how these technologies function within the educational settings. Also, the educational uses of generative AI in English as foreign language (EFL) classes are fully illustrated, with a focus on improving learners' writing, speaking, vocabulary, and personalized learning. Moreover, the discussion explores the relationship between generative AI and intercultural communication by examining the potential of AI tools to mediate intercultural engagement, model communicative scenarios, and enhance cultural awareness.

Besides, the chapter discusses the theoretical perspectives that support AI integration in language education that includes communicative, constructivist, sociocultural, and cognitive interactionist approaches. Also, it examines the ways in which AI helps teachers

make decisions in the classroom and offers design of intercultural learning activities. Finally, the chapter concludes by exploring the benefits and challenges associated with generative AI integration in EFL instruction before offering a more holistic view toward an AI-supported paradigm of intercultural language learning. Through this discussion, the chapter aims to provide a theoretical and pedagogical frameworks for understanding how generative AI foster intercultural communicative competence within the modern EFL contexts.

### **2.1 Evolution of Technology in EFL Education**

The integration of technology within EFL classrooms has major shifts over the past few decades, influencing both teaching and learning approaches within EFL contexts. Advances in technology have gradually replaced traditional classroom-based instruction with more dynamic, adaptable, and learner-centered environments. To help learners not only improve their linguistic skills but also improve their communication, collaboration, and access to authentic learning materials, educational institutions started using technological resources as digital tools becoming more widely available. This evolution mirrors broader changes in educational philosophy, where technology is no longer considered as supplementary resource but as an integral component of modern language education.

(Chapelle, 2001; Warschauer & Healey, 1998), are researchers in the field of applied linguistics and educational technology, state that the increasing use of digital technologies in EFL instruction has contributed to reshaping the relationship between teachers, learners, and knowledge construction. More recent research has shown that technology-supported learning environments can promote learner autonomy, interaction, and personalized learning experiences (Kukulska-Hulme, 2020). Indoors this evolving context, the development of language learning technologies can be understood through several key stages, starting with

Computer-Assisted Language Learning (CALL), followed by Mobile-Assisted Language Learning (MALL), and ultimately leading to the emergence of generative AI technologies.

### **2.1.1 From CALL to MALL in Language Learning**

The integration of technology into language teaching was initially closely linked to Computer-Assisted Language Learning (CALL), which emerged as one of first systematic attempts to incorporate digital tools into language instruction. Early CALL curricula focused primarily on grammar exercises, vocabulary drills, and repetitive language practice designed to enhance linguistic accuracy. Warschauer and Healey (1998) demonstrate that early CALL models were influenced by behaviorist approaches to learning, with technology serving as a key tool for structured practice and immediate correction.

As technology developed, more conversational and interactive components were added to CALL, eventually moving it beyond mechanical exercises. According to (Chapelle, 2001), authentic communication, learner interaction, and access to multimedia materials were increasingly crucial in upcoming CALL contexts. This transition was indicative of more general trends in communicative language instruction, which shifted the focus from grammatical structure acquisition to the social context of language acquisition.

The widespread use of mobile devices later contributed to the emergence of Mobile-Assisted Language Learning (MALL), which introduced greater flexibility and accessibility into language education. Unlike traditional CALL environments that were often limited to computer laboratories or institutional settings, MALL makes learners able to access language learning materials anytime and anywhere through smartphones and portable technologies. (Kukulska-Hulme et al., 2008) indicate that mobile technologies have transformed language

learning into a more continuous and individualized experience by supporting communication, collaboration, and self-learning outside the classroom boundaries.

Recent studies confirm that mobile learning environments encourage learners' engagement and self-learning through applications that integrate multimedia content, interactive tasks, and real-time communication (Burston, 2015). Consequently, the shift from CALL to MALL not only reflects technological advancements but also a broader pedagogical shift toward flexible, learner-centered approaches to language learning.

### **2.1.2 Digital Transformation in EFL Classrooms**

The fast advancement of digital technologies has profoundly influenced modern EFL classrooms also instructional approaches, classroom interactions, and the access to learning resources. The term “digital transformation” in education represents a broader restructuring of how teaching and learning are organized within the educational settings with the use of technological devices. In EFL contexts, digital platforms, online learning environments, and interactive applications have a growing integration into classroom practices, creating with those new possibilities for communication and collaborative learning.

According to (Blake, 2013), digital environments make learners exposed to more authentic language input through online communication, multimedia resources, and virtual interaction. Such environments also support the development of communicative competence by providing opportunities for learners to engage in a variety of interactions that might not be available in traditional classroom settings. Similarly, (Godwin-Jones, 2018) argues that learners are now able to access authentic linguistic and cultural content due to digital technologies, which provides more opportunities for informal and autonomous language learning.

The digital transformation of EFL classrooms has also changed the role of teachers. Rather than working only on transmission of knowledge, teachers are becoming facilitators who guide learners to be more critical and effective in the use of digital resources. This shift aligns with constructivist views of learning, which emphasize the active participation of learners and the construction of knowledge through interaction and exploration.

Recently, online and hybrid learning environments have accelerated the integration of digital technologies into language education. As distance learning practices have expanded, digital communication platforms have become essential tools for maintaining engagement and ensuring the continuity of the educational process. Consequently, modern EFL classes are increasingly characterized by blended learning approach that combines traditional instruction with digital engagement and interactive learning experiences.

### **2.1.3 Emergence of Generative AI technologies**

The latest stage in the evolution of educational technology has witnessed the emergence of generative artificial intelligence technologies. Unlike previous digital tools that offered static or pre-prepared content, generative AI systems can produce adaptive responses, generating text, simulating conversations, and supporting interactive learning experiences. This development has opened new possibilities for language teaching particularly in areas related to communication, feedback, and personalized learning.

Recent studies indicate that generative artificial intelligence technologies have begun to reshape educational practices by enabling more dynamic forms of learner interaction (Holmes & Tuomi, 2022). In the field of EFL, these technologies can support language practice through conversational interaction, writing assistance, pronunciation feedback, and exposure to culturally multiple content. According to (Kohnke et al., 2023), AI-supported

tools may enhance learner engagement by creating more responsive and personalized learning experiences.

In addition to linguistic development, recent discussions increasingly address the cultural dimensions of AI-assisted learning. Researchers such as (Deardorff, 2020) argue that digital interactions can contribute to intercultural learning by exposing learners to multiple perspectives and communicative contexts. From this perspective, generative AI techniques may provide learners with opportunities to engage in simulated intercultural communication and using language with consciousness.

Despite these emerging possibilities, researchers caution that integrating generative AI into education requires careful and pedagogically informed implementation. The effectiveness of these technologies depends heavily on how they are integrated into educational practices and whether they support meaningful interaction rather than passive reliance on automated systems. Nevertheless, the emergence of generative AI represents a significant development in the ongoing evolution of technology-assisted language learning, opening new opportunities for educational research and innovation in teaching English as foreign language.

### **2.2 Understanding Generative AI**

Building on the previous discussion concerning the evolution of technology in EFL education, the emergence of generative AI represents a very advanced stage in the digital transformation of language learning. While previous approaches focused primarily on information access and communication support, modern AI-based systems enable more interactive and adaptive learning possibilities. Consequently, understanding the nature,

characteristics, and function of generative AI in education has become increasingly important in modern EFL teaching research and practice.

### **2.2.1 Definition and Characteristics of Generative AI**

In general, generative AI refers to digital systems that can create unique content in response to user input such as texts, conversations, images, and audio materials. Unlike traditional software programs that mostly depend on pre-programmed activities or set replies, generative AI systems are built to mimic human communication and interaction by producing context-sensitive outputs. These technologies, according to (Holmes & Tuomi, 2022), are adaptive systems that can facilitate interactive and individualized learning in classrooms.

One of the main characteristics of generative AI lies in its capacity to respond instantly and engage in continuous interactions. Learners of foreign languages can take advantage of this responsiveness by practicing conversational skills, receiving immediate feedback, and gaining access to learning resources all in one place. Another significant feature is personalization, since AI systems may modify tasks and content based on learners' needs, proficiency levels, and learning pace. According to recent research (Kohnke et al., 2023), generative AI tools are multimodal, this means that there are abilities to combine written, oral, and visual forms of communication within a single learning environment.

Furthermore, generative AI technologies are strongly linked with interactive and learner-centered educational practices. Rather than being just as information-delivery tools, they can create opportunities for exploration, discussions, and collaborative learning. This characteristic aligns with modern perspectives in language education that focus on active learners' participation and communicative engagement.

### **2.2.2 Types of Generative AI Tools**

The growing integration of artificial intelligence in education has led to the development of diverse tools designed to support various aspects of language learning. Among the most widely used are chatbots and conversational agents, which enable learners to participate in virtual dialogues and communicative interactions. These tools are particularly important in the context of teaching English as a foreign language, as they provide opportunities to practice the language outside the traditional classroom setting.

A further significant category consists of AI writing aides that aid students with the writing process (from brainstorming to editing to final polishing). To help learners with their writing, these tools may offer advice regarding vocabulary, organization, coherence, and grammar. Also, learners now have immediate access to multilingual conversation and meaning negotiation because of translation technologies powered by AI, which are becoming more popular in language learning contexts.

In addition, speech recognition and pronunciation tools are another important area in AI-assisted language learning. These applications enable learners to practice speaking skills and receive feedback on pronunciation, fluency, and accuracy. According (Goodwin-Jones, 2021), these technologies contribute to creating more interactive and independent language learning experiences by encouraging continuous practice and self-assessment.

These tools serve different purposes and have different pedagogical uses, but they all contribute to the movement toward language learning that is more adaptable, interactive, and individualized.

### **2.2.3 How Generative AI Works in Educational Contexts**

In educational settings, generative AI systems operate through a continuous interaction between user input and AI-generated responses. Learners provide directions,

questions, or communicative tasks, and the system generates responses based on predefined patterns using extensive linguistic data. In the context of teaching English as a foreign language (EFL), this process enables learners to engage in interactive communication, receive corrective feedback, and explore language use in diverse contexts.

From an educational perspective, generative AI techniques are increasingly used to support individualized learning experiences. Because these systems are capable of immediate and adaptive responses, they help learners practice language skills at their own pace while receiving continuous support. (Luckin et al., 2022) suggest that AI-supported environments can enhance learner autonomy by encouraging self-directed learning and independent exploration.

Furthermore, generative AI tools can contribute to communicative and intercultural learning by simulating realistic interactive situations. Through scenario-based communication and dialogue generation, learners can be exposed to diverse cultural perspectives and communication styles. This interactive dimension aligns with sociocultural and communicative approaches to language learning, which emphasize the role of interaction in meaning-making and language development.

However, recent studies also indicate that the educational value of generative AI depends heavily on its integration into the learning process. AI systems alone do not guarantee meaningful learning outcomes; their effectiveness is shaped by how teachers and learners interact with these technologies within specific educational contexts. Therefore, understanding how generative AI functions in education requires considering both its technical capabilities and its pedagogical implications in language learning environments.

### **2.3 Major Generative AI Tools Used in EFL Education**

The growing integration of generative artificial intelligence into language teaching has led to the emergence of diverse tools designed to support various aspects of learning English as a foreign language (EFL). As mentioned in the previous section, generative AI technologies are characterized by their interactive and adaptive capabilities, enabling learners to engage with the language in more dynamic ways. In educational contexts, these tools are increasingly used to facilitate communication, provide personalized feedback, and create opportunities for self-directed learning. Despite their varying functions, AI-powered tools collectively contribute to reshaping language learning environments by fostering more flexible and learner-centered teaching practices.

### **2.3.1 AI Chatbots and Conversational Agents**

Among the most widely used AI-powered tools in teaching English as a foreign language are chatbots and conversation agents. These systems are designed to mimic human interaction by generating responses based on learners' questions, prompts, or communicative input. Their interactive nature allows learners to practice the language continuously outside the traditional classroom setting.

Recent studies indicate that interactive AI tools contribute to the development of communicative competence by encouraging spontaneous interaction and meaning negotiation (Kohnke et al., 2023). Through simulated conversations, learners can practice vocabulary use, sentence structure, and practical communication in less stressful environments. Furthermore, these tools allow learners to become familiar with diverse communicative contexts, which can support linguistic and cultural development.

From a pedagogical perspective, conversation agents are also associated with learner autonomy, enabling learners to practice language skills independently and at their own pace.

However, researchers emphasize that the effectiveness of these tools depends on their pedagogical integration and the guidance provided by teachers in educational settings.

### **2.3.2 AI Writing Assistants**

AI-powered writing assistants represent another important category of generative AI tools used in teaching English as a foreign language. These applications support learners throughout the writing process by providing suggestions related to grammar, vocabulary, organization, and coherence. Unlike traditional grammar checkers, modern AI-powered writing systems can generate more contextual feedback and help learners review and improve their writing.

Research in language learning suggests that AI-powered writing tools can contribute to the development of writing skills by encouraging self-revision and self-correction practices (Godwin-Jones, 2022). Instant feedback helps learners identify grammatical errors and improve the clarity and organization of their ideas. Furthermore, these tools can support learners who struggle with writing by reducing language barriers and facilitating text production.

Nevertheless, researchers also caution that over-reliance on AI-generated writing can negatively impact learners' independent critical thinking and writing skills development if not carefully monitored. Therefore, the educational value of AI-assisted writing aids depends largely on their balanced and guided use within pedagogical settings.

### **2.3.3 AI-Based Translation Tools**

AI-powered translation technologies have become widely available in language learning environments. These tools enable learners to quickly translate words, phrases, and entire texts between multiple languages, facilitating understanding and communication. In

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EFL contexts, AI-based translation tools are often used to support vocabulary learning, reading comprehension, and intercultural communication.

According to (O'Neill, 2019), translation technologies help learners access original materials and understand culturally specific expressions that might otherwise be difficult to interpret. Thus, these tools serve as support resources that help learners bridge linguistic and cultural differences during communication.

However, researchers also point out that translation tools may have limitations when dealing with cultural meanings, idiomatic expressions, or contextual nuances. Because language is so closely tied to culture, direct translation does not always guarantee accurate interpretation. Consequently, learners should develop a critical awareness of the optimal use of AI-powered translation systems and their limitations.

### **2.3.4 Speech Recognition and Pronunciation Tools**

Speech recognition is another important application of artificial intelligence in EFL teaching. These tools are designed to analyze learners' spoken language and provide feedback on pronunciation, fluency, emphasis, and intonation. Through repeated practice and corrective feedback, learners can improve their oral communication skills and gain greater confidence in speaking.

(Goodwin-Jones, 2021) notes that speech recognition systems offer opportunities for individual speaking practice, particularly in contexts where direct interaction with native or fluent speakers may be limited. These technologies also facilitate self-monitoring by enabling learners to identify pronunciation difficulties and track their progress over time.

Moreover, speech recognition tools can contribute to communicative competence by encouraging learners to focus on clarity of speech and effective interaction rather than focusing on linguistic accuracy only. Despite these advantages, researchers emphasize that

AI-powered speech feedback cannot completely replace real human interaction, which remains essential for developing practical communication skills and intercultural communication.

### **2.4 Pedagogical Applications of Generative AI in EFL**

Following up on the previous discussion of key generative AI tools, it is essential to examine how these technologies can be applied pedagogically in the context of teaching English as a foreign language. Beyond their technical functions, the integration of generative AI systems into educational practices is becoming increasingly important for supporting language development in more adaptive, interactive, and learner-centered ways. Recent studies in language teaching indicate that AI-enabled environments contribute to more personalized learning experiences, while also expanding opportunities for meaningful practice outside the classroom (Holmes and Toomey, 2022; Konke et al., 2023). In this sense, generative AI is not merely a technological innovation, but also an educational resource that is reshaping how language skills are developed and practiced.

#### **2.4.1 Personalized Language Learning**

One of the most significant contributions of generative artificial intelligence to EFL education is its ability to support personalized learning. AI-powered systems can adapt tasks, input, and feedback to learners' proficiency levels, learning pace, and individual needs. This flexibility aligns with learner-centered language teaching approaches, which emphasize differentiation and autonomy in the learning process.

Recent research indicates that personalized AI environments can enhance learner engagement by providing targeted support and bridging the gap between instructional input and individual performance (Lucin et al., 2022). In EFL contexts, this personalization allows

learners to focus on their specific language weaknesses while progressing at their own pace, thereby promoting more efficient language acquisition.

### **2.4.2 AI for writing Development**

Generative AI tools play a crucial role in supporting the development of writing skills. These systems help learners generate ideas, organize texts, and revise their writing through real-time feedback. Unlike traditional correction tools, AI-powered writing support can offer more context-appropriate suggestions regarding coherence, grammar, and vocabulary.

(Goodwin-Jones, 2022) notes that AI-supported writing environments encourage iterative writing processes, where learners continuously improve their texts based on feedback. This process not only enhances linguistic accuracy but also supports the development of writing strategies such as planning, drafting, and editing. However, effective pedagogical use requires learners to remain actively engaged in the decision-making process rather than passively relying on automated corrections.

### **2.4.3 AI-Supported Speaking and Pronunciation Practice**

In addition to writing, generative AI tools contribute significantly to the development of speaking skills. Speech and conversational recognition systems enable learners to practice oral communication in quiet environments, where they can repeat, experiment, and improve their speech without the pressure of direct classroom interaction.

According to (Lee, 2023), AI-powered speaking tools enhance learners' oral fluency by providing immediate feedback on pronunciation, intonation, and clarity. These systems also allow for repeated practice, which is essential for developing confidence and spontaneity in speech production. However, researchers emphasize that AI-based speaking practice should complement, not replace, real-world communicative interaction.

### **2.4.4 Vocabulary and Grammar Enhancement**

Generative AI tools are widely used to support vocabulary acquisition and grammar development. Through contextual examples, interactive exercises, and real-time feedback, learners can expand their linguistic knowledge and improve their grammar accuracy in meaningful contexts.

Recent studies indicate that AI-supported language environments help learners recognize vocabulary in diverse contexts, leading to deeper retention and greater flexibility in its use (Zhou et al., 2024). Similarly, grammar support tools help learners identify and correct errors while simultaneously introducing them to correct language patterns. This dual function of explanation and correction supports both explicit and implicit learning processes.

However, effective vocabulary and grammar learning using AI requires guided use, as over-reliance on machine suggestions may limit learners' critical engagement with language forms. Consequently, pedagogical integration remains essential to ensure that AI tools serve as supportive, rather than replacement, learning resources.

### **2.5 Generative AI and Intercultural Communication**

Building on the educational applications discussed previously, recent research increasingly highlights the potential of generative AI technologies in supporting intercultural communication in EFL education. Because intercultural competence develops through interaction, reflection, and exposure to diverse perspectives, AI-enabled environments can provide learners with additional opportunities to engage with cultural diversity beyond the confines of the traditional classroom. In this context, generative AI tools not only support language development but can also contribute to intercultural learning by facilitating communication, simulating real-life situations, and encouraging cultural reflection.

#### **2.5.1 AI as a Mediator of Intercultural Interaction**

One of the emerging roles of generative AI in language teaching is its role as a mediator for intercultural interaction. Through conversational systems and interactive platforms, learners can engage in dialogues that expose them to diverse communication styles, cultural references, and perspectives. This interactive dimension aligns with sociocultural approaches to language learning, which emphasize the importance of communication and social mediation in knowledge construction (Vygotsky, 1978).

Recent studies suggest that AI-enabled interaction can help learners develop confidence in intercultural communication by enabling them to practice in less restrictive environments (Konke et al., 2023). Furthermore, AI tools facilitate access to culturally diverse content that may not always be available in local classroom contexts. In this respect, generative AI can serve as a supportive bridge between language learning and intercultural interaction.

### **2.5.2 Simulated Intercultural Communication Scenarios**

One of the most significant contributions of generative AI lies in its ability to create simulated intercultural communication scenarios. Through role-playing interactions, dialogue generation, and scenario-based tasks, learners can engage in situations that mimic real-world intercultural encounters. These experiences encourage learners to negotiate meaning, interpret cultural cues, and adapt their communication strategies to the context.

(Bayram, 1997) asserts that intercultural competence develops through interaction and the ability to interpret cultural meanings within their context. Therefore, AI-generated simulations can provide learners with opportunities to practice these skills in controlled and dynamic environments. A recent study by (Zhou et al., 2024) also suggests that AI-based scenario-based interaction can enhance learners' communication flexibility and intercultural awareness by exposing them to diverse perspectives and communicative situations.

However, the researchers caution that simulated interaction cannot fully replicate the complexity of real human communication. Therefore, AI-powered scenarios should be viewed as complementary educational tools and not a replacement for real intercultural experiences.

### **2.5.3 Enhancing Cultural Awareness through AI**

Generative AI tools can contribute to the development of cultural awareness by encouraging learners to explore diverse cultural perspectives and reflect on cultural differences. Through access to multilingual content, culturally diverse examples, and interactive discussions, learners can engage with representations of different social and communicative practices.

(Deardorff, 2006) argues that intercultural competence requires openness, reflection, and the ability to critically evaluate cultural perspectives. In this context, AI-enabled learning environments can facilitate reflective engagement by introducing learners to multiple viewpoints and encouraging them to critically interpret cultural content. Similarly, (Baker, 2015) suggests that intercultural learning increasingly involves navigating flexible and diverse communicative contexts rather than relying on fixed cultural representations.

Recent studies also highlight the importance of critical guidance when integrating AI into intercultural learning. Because AI systems may reflect cultural biases or simplistic representations, learners must develop a critical awareness of the reliability of AI-generated content and its cultural implications. Therefore, the educational value of AI in fostering cultural awareness depends not only on technological access but also on thoughtful pedagogical mediation and reflective classroom practices.

## **2.6 Theoretical Foundations of AI Integration in EFL**

The integration of generative AI into EFL teaching supports several theoretical perspectives that focus on interaction, learner engagement, and knowledge construction. As mentioned in the previous section, AI-enabled environments can facilitate intercultural communication, reflection, and learning through adaptive, interactive experiences. These pedagogical possibilities are closely linked to broader theories of language learning, which view learners as active agents in meaning-making processes, rather than passive recipients of information. Therefore, understanding the theoretical foundations of AI integration is essential for examining its educational significance in contemporary EFL contexts.

### **2.6.1 Constructivist Perspectives on AI Learning**

Constructivist approaches view learning as an interactive process in which learners construct knowledge through exploration, interaction, and reflection. From this perspective, educational technologies gain value when they support learner engagement and problem-solving rather than simply the transmission of information. Generative AI tools align with constructivist principles because they enable learners to dynamically interact with content, generate responses, and receive personalized feedback.

According to (Piaget,1972), learning develops through active cognitive interaction with new experiences and information. In the context of EFL teaching, AI-enabled environments can foster this interaction by allowing learners to experience the language, review their understanding, and participate in interactive tasks. Recent studies indicate that AI-based learning systems can enhance learner autonomy and self-directed learning by adapting to their needs and learning pace (Holmes & Tuomi, 2022).

From a constructivist perspective, the pedagogical value of AI does not lie only in its technical efficiency but also in its ability to create environments that effectively encourage exploration, reflection, and knowledge construction.

### **2.6.2 Sociocultural Theory and Digital Interaction**

Sociocultural theory offers another important framework for understanding the integration of artificial intelligence in language learning. Building on the work of (Vygotsky, 1978), this theory emphasizes that learning develops through social interaction and communication across media. Therefore, language learning is viewed as a collaborative process shaped by interaction with others and with cultural tools.

Within AI-supported EFL environments, digital technologies can act as intermediaries, facilitating communication, providing support, and enabling collaborative learning experiences. For example, interactive AI systems can provide learners with opportunities to interact and practice guided language outside the classroom. According to (Lantolf & Thorne, 2006), mediation plays a pivotal role in cognitive and linguistic development, suggesting that technological interaction can contribute to the development of learners' communication skills when integrated pedagogically.

Recent studies also highlight that AI-enabled interaction can create spaces for intercultural dialogue and reflective communication, particularly in contexts where genuine intercultural exposure is limited (Konke et al., 2023). Thus, sociocultural theory supports the idea that AI technologies can contribute to language learning by expanding opportunities for interaction and mediated participation.

### **2.6.3 Cognitive Interactionist Approaches**

Cognitive interactionist perspectives focus on the role of interaction, input, and feedback in second language acquisition. From this perspective, language learning develops

through communicative exchanges in which learners negotiate meaning, observe linguistic forms, and modify their language production based on feedback.

(Long, 1996) argues that interaction facilitates language acquisition because it encourages learners to clarify meaning and process linguistic input more deeply. Similarly, (Swain, 2005) emphasizes the importance of language production and reflective use in developing language competence. Generative AI tools align with these principles by enabling learners to engage in frequent interaction and receive immediate feedback on their language production.

Therefore, AI-enabled communication environments may enhance opportunities for practice and meaning negotiation, particularly for learners with limited experience of real-world interaction outside the classroom. However, researchers also point out that the effectiveness of AI-enabled interaction depends on the quality of learner participation and instructional guidance within the learning environment.

### **2.6.4 Communicative Language Teaching and AI**

The integration of AI into EFL teaching is closely linked to the principles of communicative language teaching (CLT), which prioritizes effective communication and the functional use of language. Unlike traditional approaches that focus primarily on grammatical accuracy, CLT emphasizes learners' ability to communicate effectively in real-life situations.

Generative AI tools support communicative learning by providing opportunities for dialogue, interaction, and contextual language use. Through conversation simulations, role-playing activities, and interactive feedback, learners can practice language in communicative contexts that mimic real-life interactions. (Richards, 2006) points out that communicative approaches encourage learners to use language consciously and purposefully rather than automatically, a principle that aligns with the interactive capabilities of AI-powered systems.

Furthermore, AI-based communication tools can enhance intercultural communication competence by exposing learners to diverse communicative situations and perspectives. In this sense, the integration of artificial intelligence expands the scope of communicative learning beyond language practice alone and supports broader dimensions of interaction and cultural understanding.

### **2.7 The Role of Teachers in AI-Supported EFL Classrooms**

As generative artificial intelligence is increasingly integrated into EFL education, the role of teachers is constantly evolving beyond traditional teaching practices. While AI-powered technologies can provide learners with interactive and personalized learning experiences, their educational effectiveness remains closely tied to teachers' pedagogical choices and classroom management. Recent research emphasizes that AI tools should not be seen as replacements for teachers, but rather as supportive resources that require careful and purposeful integration within language learning environments (Holmes & Tuomi, 2022). Consequently, teachers remain central figures in facilitating interaction, designing learning experiences, and fostering effective intercultural communication.

#### **2.7.1 Teachers as Facilitators and Mediators**

In AI-supported classrooms, teachers are increasingly acting as facilitators and mediators of learning, rather than simply transmitters of knowledge. This shift reflects broader learner-centered trends in language teaching, where teachers guide learners in exploring, interpreting, and critically engaging with digital resources.

According to (Richards, 2006) effective language teaching involves creating communicative environments that encourage active learner participation. In AI-enabled environments, teachers play a crucial role in helping learners use technology critically and

purposefully. They also facilitate the relationship between learners and AI-generated content by clarifying misunderstandings, contextualizing information, and encouraging reflective learning practices.

Furthermore, in intercultural learning contexts, teachers contribute to fostering openness, critical awareness, and respectful engagement with cultural diversity. Their mediation is particularly important when learners encounter AI-generated representations that are culturally sensitive or potentially biased.

### **2.7.2 Instructional Decision-Making in AI Integration**

The successful integration of generative AI into EFL education depends heavily on teachers' pedagogical decisions. Teachers are responsible for determining when, how, and for what purpose AI tools should be integrated into instructional activities. This includes selecting appropriate technologies, aligning them with learning objectives, and ensuring their use supports effective learning outcomes.

Recent studies indicate that the pedagogically sound integration of AI requires balancing technological innovation with its educational relevance (Kohnke et al., 2023). In this regard, teachers must evaluate not only the technical capabilities of AI tools but also their impact on learner engagement, interaction, and critical thinking. Therefore, decisions regarding task design, feedback practices, and classroom interaction remain fundamental to the educational value of AI-assisted learning.

Furthermore, teachers play a crucial role in addressing ethical and pedagogical concerns related to the use of AI, including issues of reliability, academic integrity, and cultural representation. Their guidance is essential to helping learners develop responsible and reflective approaches to technology use in educational contexts.

### **2.7.3 Designing AI-Based Intercultural Activities**

Designing intercultural learning activities is another important aspect of teachers' roles in AI-enhanced EFL classrooms. Because intercultural competence develops through interaction, interpretation, and reflection, teachers are responsible for creating tasks that encourage learners to critically engage with diverse perspectives and different communicative situations.

Generative AI tools can support this process through role-playing scenarios, simulated dialogues, and culturally oriented communicative tasks. However, the effectiveness of these activities depends heavily on how teachers' structure and contextualize them. (Byram, 1997) emphasizes that intercultural learning requires providing learners with opportunities to interpret cultural meanings and reflect critically on differences, rather than simply acquiring cultural information.

Recent research also suggests that AI-enhanced intercultural learning activities can enhance learner engagement by creating interactive and flexible communication environments (Chu et al., 2024). However, the role of teachers remains essential to ensure that these activities foster meaningful reflection, balanced cultural representation, and authentic communicative practice. Therefore, the integration of artificial intelligence into intercultural English as a foreign language should be understood as a collaborative process in which technology supports, rather than replaces, pedagogical expertise and human interaction.

### **2.8 Benefits of Generative AI in EFL Education**

Building on the ongoing debate surrounding the roles of teachers in AI-enhanced classrooms, recent research increasingly highlights the potential benefits of generative AI in enhancing language learning experiences within EFL education. Through interactive and adaptive learning environments, AI-powered technologies can contribute to more flexible,

personalized, and learner-centered teaching practices. Educational technology researchers believe that these tools not only support language development but also foster learner engagement and autonomy, providing opportunities to learn beyond the constraints of traditional classrooms (Holmes & Tuomi, 2022). Nevertheless, the educational value of these technologies remains closely tied to their pedagogical integration and purposeful use within meaningful learning contexts.

### **2.8.1 Increased Learner Autonomy**

One of the most significant advantages of generative AI in EFL teaching is its ability to foster learner autonomy. AI-powered tools enable learners to practice the language independently, access learning materials, and receive support without constant teacher intervention. This flexibility encourages learners to take greater responsibility for their learning process.

According to (Benson, 2011), learner autonomy includes the ability to manage their learning through self-direction and independent decision-making. Generative AI tools can facilitate this process by enabling learners to practice language skills at their own pace and according to their individual needs. Recent studies indicate that AI-supported learning environments promote self-directed learning by encouraging learners to monitor their progress and participate more actively in learning tasks (Kohnke et al., 2023).

### **2.8.2 Immediate Feedback and Personalized Support**

One of the most important advantages of generative AI is its ability to provide immediate feedback and personalized learning support. Unlike traditional classroom environments, where feedback may be delayed due to time constraints, AI systems can respond instantly to learner input and provide corrective guidance in real time.

In language learning contexts, immediate feedback can help learners identify linguistic errors, improve the accuracy of their performance, and review their work more effectively. (Godwin-Jones, 2022) suggests that AI-supported feedback contributes to individualized learning experiences by tailoring responses to learners' proficiency levels and the difficulties they face. This personalized support can also reduce learners' anxiety by enabling them to practice and correct their mistakes in less stressful environments.

However, researchers emphasize that AI-generated feedback should complement, not replace, teacher interaction, especially in tasks requiring critical thinking or cross-cultural translation.

### **2.8.3 Enhanced Engagement and Motivation**

Generative AI techniques can also contribute to increased learner engagement and motivation in EFL learning environments. Interactive communication, adaptive responses, and dynamic learning activities all contribute to creating more stimulating learning experiences compared to traditional, rote-learning-based teaching practices.

Recent research indicates that learners often perceive AI-enabled environments as more interactive and accessible, which can encourage participation and sustained engagement (Lee, 2023). Conversational tools, simulated dialogues, and personalized tasks can be particularly helpful for learners who experience anxiety or hesitation during classroom interaction. Furthermore, the ability to interact immediately and practice continuously boosts learners' confidence and willingness to participate in communicative activities.

From a pedagogical perspective, increased engagement can positively contribute to language development by encouraging frequent exposure to language use and communicative practice.

### **2.8.4 Accessibility and Flexible Learning Opportunities**

Another significant benefit of generative AI in EFL education is the accessibility and flexibility of learning. AI-powered technologies enable learners to access educational resources regardless of time or place, expanding learning opportunities beyond the classroom.

(Kukulska-Holm, 2020) notes that digital learning environments contribute to more flexible forms of education by enabling learners to interact with learning materials via mobile and online platforms. In EFL contexts, this accessibility can be particularly beneficial for learners with limited opportunities for real-world language interaction or one-on-one support.

Furthermore, AI-supported systems provide continuous access to communicative exercises, writing assistance, and pronunciation support, offering opportunities for ongoing language exposure. This flexibility aligns with contemporary educational approaches that emphasize lifelong learning and learner-centered learning.

Despite these advantages, researchers consistently emphasize that accessibility alone does not guarantee effective learning outcomes. The educational effectiveness of AI-assisted learning depends on how learners and teachers interact with these technologies within purposeful educational frameworks.

### **2.9 Challenges of Generative AI in EFL Education**

Despite the growing educational potential of generative AI in EFL teaching, recent research highlights several challenges associated with its integration into the learning process. While AI-supported technologies can enhance interaction, personalization, and learner engagement, their use raises significant pedagogical, ethical, and cultural concerns.

Researchers increasingly argue that the effectiveness of AI in language teaching depends not only on technological advancements but also on the critical awareness and pedagogical guidance surrounding its application (Holmes & Tuomi, 2022). Therefore, understanding the limitations and risks of AI integration remains crucial for achieving balanced and effective teaching practices.

### **2.9.1 Academic Integrity and Plagiarism**

One of the most significant concerns regarding generative AI in education is academic integrity and plagiarism. Because AI systems can rapidly generate essays, summaries, and written responses, learners may become increasingly reliant on machine-generated content rather than engaging in authentic language production and critical thinking.

Recent studies suggest that the unrestricted use of AI-generated writing can blur the distinction between learner-produced work and machine-generated content (Cotton et al., 2023). This issue is particularly sensitive in the context of teaching English as a foreign language, where writing development requires active practice, revision, and experimentation. Therefore, excessive reliance on AI-generated texts may limit opportunities for genuine language production and weaken learners' writing skills over time.

For this reason, researchers emphasize the importance of establishing clear pedagogical and ethical guidelines for the use of AI in academic settings. Teachers play a crucial role in encouraging the responsible use of AI tools while maintaining academic integrity and learner accountability.

### **2.9.2 Dependency on AI Tools**

Another significant challenge is learners' reliance on AI-powered technologies. While generative AI can provide immediate assistance and personalized support, over-reliance on

these systems may diminish learners' ability to solve problems independently and their active engagement in language learning tasks.

According to (Selwyn, 2019), educational technologies may unintentionally encourage passive learning behaviors when learners rely heavily on automated support instead of developing their own cognitive and communicative strategies. In EFL education, excessive reliance on AI tools can particularly affect writing, vocabulary retention, and spontaneous communication skills if learners consistently depend on generated responses rather than producing their own language.

This concern highlights the need for balanced pedagogical integration where AI serves as a supportive resource, not a replacement for learner effort, reflection, and communicative practice.

### **2.9.3 Bias and Cultural Representation in AI Systems**

The issue of bias and cultural representation is another major concern in discussions surrounding generative artificial intelligence. Because AI systems are trained on massive datasets drawn from digital sources, the content they produce may reproduce cultural stereotypes, prevailing viewpoints, or biased representations.

In the context of intercultural learning, this challenge is particularly significant, as learners may encounter overly simplified or culturally unbalanced information presented as neutral or accurate. As (Baker, 2015) argues, intercultural communication requires critical engagement with cultural diversity, rather than relying on rigid or reductive notions of culture. Therefore, an uncritical reliance on AI-generated cultural content may reinforce stereotypes instead of fostering intercultural understanding.

Recent studies also underscore the importance of developing learners' critical digital literacy skills to enable them to critically evaluate AI-generated information and recognize

potential cultural limitations within technological systems (Kohnke et al., 2023). Thus, the role of educators remains crucial in facilitating AI-enabled intercultural learning and encouraging reflective interpretation of digital content.

### **2.9.4 Limitations of AI in Human Communication**

Although generative AI systems can simulate interaction and provide dialogic responses, researchers consistently emphasize the limitations of AI technologies in mimicking the complexities of authentic human communication. Human interaction involves emotional understanding, contextual interpretation, nonverbal communication, and sociocultural sensitivity that cannot be fully replicated by automated systems.

(Kramsch, 1993) emphasizes that language learning is inextricably linked to the processes of constructing sociocultural meaning. While AI tools may facilitate communication, they cannot replace the spontaneity and personal dimensions of genuine human interaction. Similarly, (Deardorff, 2006) argues that intercultural competence encompasses traits such as openness, empathy, and reflective understanding, which develop through authentic interpersonal engagement.

Therefore, AI-supported communication should be viewed as complementary to human interaction, not a replacement for authentic communicative experiences. Its educational effectiveness ultimately depends on how it is integrated into balanced learning environments that value human dialogue, collaboration, and intercultural exchange.

### **2.10 Toward an AI-Supported Model of Intercultural EFL Learning**

The discussions in this chapter demonstrate that generative AI technologies can significantly contribute to the development of modern EFL education when integrated into effective pedagogical frameworks. Beyond supporting language development, AI-based tools offer increased opportunities for interaction, reflection, and exposure to diverse cultural

perspectives. In this context, the integration of generative AI into EFL can be seen as part of a broader movement toward more interactive, learner-centered, and intercultural teaching practices.

Therefore, an AI-enabled intercultural EFL model goes beyond simply using digital tools in language teaching. It requires the purposeful integration of AI technologies into communicative and intercultural learning activities, encouraging learners to engage critically with language and culture and to negotiate meaning. This model aligns with constructivist, social, cultural, and communicative approaches to language learning, which emphasize interaction, mediation, and active learner participation.

Within this framework, teachers remain central figures in guiding learners' interaction with AI-enabled environments. Their educational decisions influence how technological tools are used to foster intercultural awareness, reflective communication, and meaningful interaction. Therefore, the educational value of generative artificial intelligence does not depend only on technological innovation but also on the pedagogical and cultural practices that accompany its integration into EFL classrooms.

### **Conclusion**

This chapter explores the development, applications, theoretical foundations, benefits, and challenges of generative AI in EFL education. The discussion highlights the growing role of AI-enabled technologies in supporting personalized learning, communicative practice, and intercultural interaction, while emphasizing the pedagogical and ethical considerations surrounding their use. The chapter also demonstrates that integrating generative AI into EFL contexts requires a balanced pedagogical approach and critical awareness to foster meaningful linguistic and cultural learning experiences.

Building on these theoretical perspectives, the following chapter presents the methodological framework adopted in the present study. It explains the research design, participants, data collection instruments, and procedures used to investigate EFL teachers' integration of generative AI in fostering intercultural communication.



# **Chapter Three: Research and Methodology**

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## **Conclusion**

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## **Introduction**

Following the theoretical discussion presented in the previous chapters regarding intercultural communicative competence and the pedagogical integration of generative AI in EFL education, the present chapter introduces the methodological framework adopted in the current study. The research aims to investigate how EFL teachers integrate generative AI tools to foster intercultural communication and to explore learners' perceptions of AI-supported intercultural learning within EFL contexts.

More specifically, the study seeks to understand teachers' perceptions of generative AI as a pedagogical tool for intercultural communication, examine how these technologies are incorporated into instructional practices, and identify the opportunities and challenges teachers encounter during their integration into language teaching. In relation to these objectives, the study is guided by the hypothesis that the integration of generative AI tools may contribute positively to the development of learners' intercultural communication skills.

Given the exploratory nature of the topic, the study adopts an exploratory mixed-methods design combining both quantitative and qualitative approaches. Quantitative data are collected through a questionnaire administered to Master One EFL students to explore their experiences and perceptions regarding AI-supported intercultural learning. In parallel, qualitative data are gathered through semi-structured interviews conducted with EFL teachers to gain deeper insight into their instructional decision-making, classroom practices, and perspectives concerning the pedagogical use of generative AI tools.

In addition, a pilot phase was conducted to ensure the clarity and relevance of the research instruments before their administration. The chapter further presents the research

context, participant selection procedures, data collection methods, data analysis procedures, and ethical considerations guiding the study. Through the combination of quantitative and qualitative data, this methodological framework seeks to provide a comprehensive understanding of the role of generative AI in fostering intercultural communication within EFL education.

### **3.1 Research Design**

Selecting an appropriate research design is essential in ensuring coherence between the research objectives, the nature of the study, and the methods used for data collection and analysis. Since the present research seeks to explore both learners' and teachers' perceptions regarding the integration of generative AI tools to foster intercultural communication within EFL education, a design capable of combining quantitative and qualitative insights was considered the most appropriate approach.

#### **3.1.1 Exploratory Mixed-Methods Design**

The current study adopts an exploratory mixed-methods design to investigate the integration of generative AI tools in fostering intercultural communication within EFL education. The selection of this design is closely related to the nature of the research topic, which requires both quantitative and qualitative exploration to obtain a more comprehensive understanding of the phenomenon under investigation. Since the study examines not only learners' perceptions but also teachers' instructional practices and pedagogical perspectives, the combination of numerical and interpretive data was considered the most appropriate methodological approach.

According to Creswell and Plano Clark (2018), mixed-methods research enables researchers to combine the strengths of quantitative and qualitative approaches to develop deeper and more balanced interpretations of educational phenomena. In the present study, the quantitative dimension relies on a questionnaire administered to 40 Master One EFL students at Abbas Laghrour University of Khenchela. The questionnaire aims to explore learners' perceptions and experiences regarding intercultural communication and the pedagogical use of generative AI tools in language learning contexts.

Complementing this approach, the qualitative dimension is based on semi-structured interviews conducted with six EFL teachers from the same institution. The interviews seek to provide deeper insight into teachers' perceptions of generative AI, their instructional decision-making, and the opportunities and challenges they encounter while integrating AI-supported tools into intercultural EFL teaching practices. In addition, the interviews aim to explore teachers' perspectives regarding the development of intercultural communication skills in EFL education and the potential role of emerging digital tools in supporting such development. This qualitative component therefore allows the study to move beyond descriptive data and examine the pedagogical reasoning underlying teachers' classroom practices.

The exploratory nature of the study further justifies the adoption of this methodological design. Since the integration of generative AI in fostering intercultural communication remains relatively recent within EFL research, the study requires flexible and interpretive investigation capable of capturing both measurable tendencies and contextualized experiences. Consequently, the mixed-methods design contributes to developing a more

nuanced understanding of how generative AI may support intercultural communication within contemporary EFL education.

### **3.1.2 Rationale for Choosing the Mixed-Methods Approach**

The choice of a mixed-methods approach is motivated by the objectives of the present study and the complexity of the research problem. Investigating the integration of generative AI in fostering intercultural communication involves multiple dimensions that cannot be fully explored through a single methodological perspective. While quantitative data helps identify general tendencies and learners' attitudes toward AI-supported intercultural learning, qualitative data provide deeper explanations concerning teachers' pedagogical practices, experiences, and perceptions.

The questionnaire administered to students allows the researcher to collect measurable information related to intercultural communication skills, the use of generative AI tools, and learners' perceptions of AI-supported learning environments. At the same time, semi-structured interviews with teachers provide richer interpretive insights into how AI technologies are incorporated into instructional activities and how teachers evaluate their pedagogical value within intercultural EFL contexts.

Furthermore, combining quantitative and qualitative data strengthens the overall credibility of the study by enabling the comparison and interpretation of findings from different perspectives. This methodological integration therefore contributes to producing a more comprehensive analysis of the educational opportunities and challenges associated with generative AI in EFL education. Through this approach, the study seeks to develop a balanced understanding of the relationship between AI-supported learning, pedagogical practices, and intercultural communication development.

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### **3.2 Research Context and Participants**

This section presents the research context and the participants involved in the present study. It provides an overview of the educational setting in which the research was conducted, as well as the characteristics of both the student participants and the EFL teachers who contributed to the investigation. Since the study seeks to explore the pedagogical integration of generative digital tools in fostering intercultural communication within EFL education, the selection of participants was closely related to their experience within university language learning and teaching environments.

The study was conducted at Abbas Laghrour University of Khenchela and involved Master One EFL students alongside EFL teachers from the same institution. The participants were selected in relation to the objectives of the study, particularly in examining perceptions toward intercultural communication, digital learning practices, and the integration of emerging AI within EFL classrooms.

#### **3.2.1 Research Setting**

Following the selection of the research design, it is equally important to present the educational context in which the study was conducted. The present research took place at Abbas Laghrour University of Khenchela within the Department of English. The university represents an appropriate context for investigating the integration of generative AI tools in EFL education due to its increasing engagement with digital learning practices and communicative approaches to language teaching.

The study was conducted during the academic year 2025–2026 and focused on EFL learning environments where students and teachers are regularly engaged in academic, communicative, and intercultural activities. Since the research explores the relationship

between generative AI and intercultural communication development, the university context provided a relevant setting for examining how digital technologies may support language learning and intercultural engagement within higher education.

### **3.2.2 Master One EFL Students**

The quantitative dimension of the study targeted Master One students enrolled in the English Department at Abbas Laghrour University of Khenchela. A total of 40 students participated in the questionnaire phase of the research. The participants were selected because they possess an academic background related to language learning, communication, and intercultural studies, which makes them particularly relevant to the objectives of the study.

The questionnaire was administered in paper-based form and written in English to ensure consistency with the participants' field of specialization. Through this instrument, the study aimed to explore students' perceptions of intercultural communication development, their experiences with AI-supported learning tools, and their attitudes toward the pedagogical integration of generative AI within EFL education.

### **3.2.3 EFL Teachers**

In addition to students, the qualitative phase of the study involved six EFL teachers from the English Department at Abbas Laghrour University of Khenchela. The teachers were selected based on their professional experience in EFL instruction and their familiarity with digital educational practices.

Semi-structured interviews were conducted in English to gain deeper insight into teachers' perspectives regarding the integration of generative AI tools in fostering intercultural communication. The interviews focused particularly on teachers' instructional decision-making, classroom practices, perceived opportunities, and challenges related to AI-

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supported learning environments. This qualitative contribution was essential in providing a more interpretive understanding of how generative AI may be pedagogically integrated within intercultural EFL contexts.

### **3.3 Research Instruments**

Following the presentation of the research context and participants, the present section introduces the instruments used for data collection. To obtain both quantitative and qualitative insights into the research problem, two main instruments were employed: a questionnaire administered to Master One EFL students and semi-structured interviews conducted with EFL teachers. The combination of these instruments was intended to provide a more comprehensive understanding of the integration of generative AI tools in fostering intercultural communication within EFL education.

#### **3.3.1 Research Questionnaire**

The questionnaire constitutes one of the principal research instruments employed in the present study. It was designed to collect quantitative and qualitative data concerning students' perceptions of intercultural communication development within EFL education and the pedagogical role of generative AI tools in supporting such development. The questionnaire additionally sought to explore learners' attitudes toward the integration of AI-supported practices in language learning environments and their perceived influence on communication, cultural awareness, and classroom interaction.

The questionnaire was administered to Master One EFL students at Abbas Laghrour University of Khenchela and was written entirely in English to ensure consistency with the academic and linguistic context of the study. It included both closed-ended and open-ended questions, allowing participants to express not only their general perceptions and experiences

but also their personal reflections concerning the opportunities and limitations associated with the pedagogical integration of generative AI in fostering intercultural communication.

- **Purpose of the Questionnaire**

The student questionnaire was designed to collect quantitative data related to learners' perceptions and experiences concerning intercultural communication and the pedagogical use of generative AI tools in EFL learning. More specifically, the instrument aimed to examine students' awareness of intercultural communication skills, their attitudes toward AI-supported learning environments, and their perceptions regarding the role of generative AI in supporting intercultural interaction and language development.

The questionnaire also sought to identify some of the opportunities and challenges learners may encounter while engaging with AI-supported educational tools within EFL contexts.

- **Structure of the Questionnaire**

The questionnaire was administered in paper-based form and written in English to ensure consistency with the participants' academic specialization. It consisted of three main sections in addition to an open-ended question at the end of the instrument.

The first section focused on personal information related to the participants. The second section explored learners' perceptions of intercultural communication development, including dimensions such as cultural empathy, adaptability, critical awareness, and intercultural interaction. The third section addressed the pedagogical integration of generative AI tools in EFL learning and examined students' attitudes toward AI-supported educational practices.

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- **Closed-Ended Questions**

Most of the questionnaire items were designed as closed-ended questions using different formats, particularly Likert-scale statements. This structure allowed participants to express varying degrees of agreement concerning the topics addressed in the study. The use of closed-ended questions facilitated the organization, comparison, and quantitative analysis of the collected data through descriptive statistics.

Furthermore, Likert-scale questions were considered appropriate for identifying general tendencies related to learners' perceptions of intercultural communication and AI-supported learning environments.

- **Open-Ended Question**

In addition to the closed-ended items, the questionnaire included an open-ended question intended to provide participants with greater freedom to express their personal perspectives and experiences. This question focused on learners' views regarding the role of generative AI tools in fostering intercultural communication within EFL education, as well as the possible challenges associated with their use.

The inclusion of an open-ended question aimed to enrich the quantitative findings by allowing participants to provide more reflective and individualized responses related to the research topic.

### **3.3.2 Semi-Structured Teacher Interviews**

The semi-structured format was selected because it allows flexibility during the interview process while ensuring that the discussion remains aligned with the research objectives and questions. This approach additionally enabled participants to express their

experiences, opinions, and pedagogical reflections in greater detail, thereby providing richer and more nuanced data concerning AI-integrated instructional practices and the role of generative AI in fostering intercultural communication within EFL classrooms.

- **Purpose of the Interviews**

The semi-structured interviews were conducted to collect qualitative data concerning teachers' perspectives on the pedagogical integration of generative AI tools within EFL education. The interviews aimed to explore how teachers perceive the role of AI in fostering intercultural communication, how they incorporate AI-supported tools into instructional activities, and what opportunities and challenges they encounter during this integration process.

The qualitative dimension of the study was essential in providing deeper insight into teachers' instructional decision-making and classroom practices beyond the numerical data obtained through the questionnaire.

- **Structure of the Interviews**

The interview consisted of a series of open-ended questions organized around the main objectives of the study. The questions addressed themes related to intercultural communication, the educational use of generative AI tools, classroom practices, learner engagement, and the pedagogical challenges associated with AI integration in EFL contexts.

The interviews were conducted in English to maintain consistency with the participants' academic and professional background. This structure allowed participants to provide detailed explanations and reflective responses concerning their experiences and perspectives.

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- **Rationale for Semi-Structured Interviews**

The selection of semi-structured interviews was motivated by the exploratory nature of the study and the need for flexibility during the data collection process. Unlike highly structured interviews, semi-structured interviews allow the researcher to guide the discussion while also giving participants the opportunity to elaborate on their experiences and introduce additional ideas relevant to the research topic.

This flexibility was particularly important for the present study because it enabled deeper exploration of teachers' pedagogical perspectives regarding the integration of generative AI in fostering intercultural communication. In addition, semi-structured interviews facilitated the collection of richer and more interpretive qualitative data capable of supporting the broader objectives of the research.

### **3.4 Pilot Study**

Before administering the research instruments to the target participants, a pilot study was conducted to evaluate the clarity, organization, and relevance of both the questionnaire and the interview questions. Conducting a pilot phase was considered an important step in strengthening the overall quality and coherence of the data collection process. It also allowed the researcher to identify potential ambiguities and ensure that the instruments were appropriately aligned with the objectives of the study.

#### **3.4.1 Purpose of the Pilot Study**

The primary purpose of the pilot study was to assess the effectiveness and comprehensibility of the research instruments before their final administration. More specifically, the pilot phase aimed to determine whether the questionnaire items and

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interview questions were clear, understandable, and relevant to the participants' academic background and the research objectives.

In addition, the pilot study helped evaluate the suitability of the language used in the instruments, particularly because both the questionnaire and interviews were conducted in English. This preliminary stage also provided an opportunity to estimate the approximate time required for participants to complete the questionnaire and respond to the interview questions.

Given the exploratory nature of the study, the pilot phase contributed to improving the reliability and coherence of the data collection process by identifying possible weaknesses before the actual administration of the instruments.

### **3.4.2 Refinement of Research Instruments**

Based on the observations gathered during the pilot phase, minor modifications were introduced to improve the clarity and organization of the research instruments. Certain questionnaire items were reformulated to avoid ambiguity and ensure greater precision in meaning, while some interview questions were adjusted to encourage more detailed and reflective responses from participants.

The refinement process also focused on improving the logical sequence of questions and maintaining coherence between the different sections of the instruments. These adjustments contributed to making the questionnaire and interviews more accessible and relevant to the participants while ensuring closer alignment with the objectives of the study.

Consequently, the pilot's study played an important role in strengthening the overall validity and effectiveness of the research instruments prior to the main phase of data collection.

### **3.5 Data Collection Procedures**

Following the refinement of the research instruments through the pilot phase, the main stage of data collection was carried out. The procedures adopted in the present study were organized according to the quantitative and qualitative dimensions of the research design. Special attention was given to ensuring clarity during administration, maintaining ethical considerations, and creating appropriate conditions for participants to provide reliable and meaningful responses.

#### **3.5.1 Administration of the Questionnaire**

The questionnaire was administered to 40 Master One EFL students from the English Department at Abbas Laghrour University of Khenchela during the academic year 2025–2026. The instrument was distributed in paper-based form and written in English to maintain consistency with the participants' academic specialization.

Before distributing the questionnaire, participants were informed about the objectives of the study and the academic nature of the research. They were also assured that their responses would remain confidential and would be used exclusively for research purposes. Participation was voluntary, and students were encouraged to answer the questions honestly and independently.

The administration process was conducted in an organized classroom setting, allowing participants sufficient time to complete the questionnaire. After completion, the

responses were collected and prepared for quantitative analysis using descriptive statistical procedures.

### **3.5.2 Conducting the Interviews**

In parallel with the questionnaire administration, semi-structured interviews were conducted with six EFL teachers from the English Department at Abbas Laghrour University of Khenchela. The interviews were carried out in English and aimed to obtain deeper insight into teachers' perspectives concerning the pedagogical integration of generative AI tools in fostering intercultural communication.

Prior to the interviews, the participants were informed about the purpose of the study and assured that their responses would remain confidential and anonymous. The teachers participated voluntarily and were encouraged to share their professional experiences and perspectives openly.

The semi-structured format allowed flexibility during the discussion, enabling the researcher to ask follow-up questions whenever additional clarification or explanation was needed. This approach contributed to obtaining richer qualitative data related to teachers' instructional decision-making, classroom practices, and perceptions of AI-supported intercultural learning environments.

### **3.6 Data Analysis Procedures**

After the completion of the data collection phase, the gathered data were organized and analyzed according to the quantitative and qualitative dimensions of the study. Since the present research adopts an exploratory mixed-methods design, different analysis procedures were employed to obtain a comprehensive understanding of the research problem. The

quantitative data collected through the questionnaire were analyzed statistically, while the qualitative data obtained from the interviews were interpreted through thematic analysis.

### **3.6.1 Quantitative Data Analysis**

The quantitative data collected from the student questionnaire were analyzed using descriptive statistical procedures through Microsoft Excel. The responses obtained from the closed-ended questions, particularly the Likert-scale items, were organized into tables to facilitate data interpretation and comparison.

The analysis mainly focused on calculating frequencies, percentages, and general response tendencies related to learners' perceptions of intercultural communication and the pedagogical use of generative AI tools in EFL education. These statistical procedures contributed to identifying recurring patterns and providing a clearer overview of students' attitudes and experiences concerning AI-supported intercultural learning.

In addition, the quantitative findings were interpreted in relation to the objectives and hypotheses of the study to examine the extent to which generative AI tools may contribute to fostering intercultural communication within EFL contexts.

### **3.6.2 Qualitative Data Analysis**

The qualitative data obtained through the semi-structured teacher interviews were analyzed using thematic analysis. This method was selected because it allows the researcher to identify, organize, and interpret recurring themes and patterns within participants' responses.

Following the interviews, the collected responses were carefully reviewed and categorized according to the major themes related to the objectives of the study, including

teachers' perceptions of generative AI, instructional practices, intercultural communication development, pedagogical opportunities, and challenges associated with AI integration in EFL classrooms.

Thematic analysis was considered appropriate for the present research because it provided deeper interpretive insight into teachers' experiences and perspectives while supporting the exploratory nature of the study. Furthermore, this qualitative analysis complemented the quantitative findings by contributing more contextualized and reflective understanding of the phenomenon under investigation.

### **3.7 Ethical Considerations**

In addition to the methodological procedures adopted in the present study, particular attention was given to ethical considerations throughout the research process. Since the study involved both students and teachers as participants, the researcher ensured that the data collection procedures respected the principles of academic ethics and participant protection. Ethical considerations were therefore integrated into all stages of the research to maintain the credibility and integrity of the study.

- **Informed Consent**

Before administering the questionnaire and conducting the interviews, participants were informed about the objectives and academic purpose of the study. They were provided with clear explanations regarding the nature of their participation and the use of the collected data. Informed consent was obtained from all participants prior to their involvement in the research process.

- **Confidentiality and Anonymity**

The researcher ensured the confidentiality and anonymity of all participants throughout the study. The collected data were used exclusively for academic research purposes, and participants' identities were not disclosed in any part of the research. In addition, the responses obtained through the questionnaire and interviews were treated with confidentiality to protect participants' privacy and encourage honest participation.

- **Voluntary Participation**

Participation in the study was entirely voluntary. Students and teachers were informed that they had the right to participate or withdraw from the research at any stage without any pressure or negative consequences. This ethical principle was maintained throughout the data collection process to ensure respectful and responsible research practices.

## **Conclusion**

This chapter presented the methodological framework adopted in the present study to investigate the integration of generative AI tools in fostering intercultural communication within EFL education. The chapter outlined the exploratory mixed-methods design, the research context and participants, the research instruments, the pilot study, as well as the procedures used for data collection and analysis. Ethical considerations related to informed consent, confidentiality, and voluntary participation were also addressed to ensure responsible and credible research practices.

Through the combination of quantitative and qualitative approaches, the methodological framework aimed to provide a comprehensive understanding of both learners' and teachers' perspectives regarding AI-supported intercultural learning within EFL

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contexts. The integration of questionnaire data and semi-structured interviews further contributed to developing a more balanced and interpretive exploration of the phenomenon under investigation.

Building upon these methodological foundations, the following chapter focuses on the presentation, analysis, and interpretation of the findings obtained from the student questionnaire and teacher interviews. It examines the collected data in relation to the research objectives and hypotheses to explore how generative AI tools may contribute to fostering intercultural communication within EFL education.

## **Chapter Four: Findings and Interpretation**

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### **Introduction**

#### **4.1 Questionnaire Findings and Interpretation**

##### **4.1.1 Participants' Profile**

##### **4.1.2 Students' Perceptions of Intercultural Communication**

##### **4.1.3 Students' Perceptions of Generative AI in EFL Learning**

##### **4.1.4 Analysis of the Open-Ended Responses**

#### **4.2 Teacher Interview Findings and Interpretation**

##### **4.2.1 Teachers' Perceptions of AI Integration**

##### **4.2.2 AI and Intercultural Communication Development**

##### **4.2.3 Challenges and Pedagogical Concerns**

##### **4.2.4 Teachers' Instructional Decision-Making**

#### **4.3 Discussion of Findings**

### **Conclusion**

## **Introduction**

This chapter presents and interprets the findings obtained through the questionnaire administered to Master One EFL students and the semi-structured interviews conducted with EFL teachers at Abbas Laghrour University of Khenchela. The purpose of this chapter is to examine participants' perceptions regarding intercultural communication and the pedagogical integration of generative AI tools within EFL education. The analysis seeks to explore the extent to which these digital technologies may contribute to the development of intercultural communication skills while also identifying the pedagogical opportunities and challenges associated with their use.

The chapter is divided into two major sections. The first section presents the quantitative findings derived from the student questionnaire, focusing on learners' perceptions of intercultural communication and generative AI in EFL learning. The second section discusses the qualitative findings obtained from teacher interviews to provide deeper insight into teachers' instructional practices, pedagogical decision-making, and perspectives concerning AI-supported intercultural learning. The chapter concludes with a general discussion linking the findings to the theoretical framework and research objectives presented in the previous chapters.

## **4.1 Questionnaire Findings and Interpretation**

### **4.1.1 Participants' Profile**

**Table 4.1*****Distribution of Participants According to Gender***

| Gender | Number | Percentage |
|--------|--------|------------|
| Female | 33     | 82.5%      |
| Male   | 7      | 17.5%      |
| Total  | 40     | 100%       |

The findings reveal that female participants represented most of the sample with 82.5%, whereas male participants represented 17.5%. This distribution reflects a stronger participation of female students within the investigated EFL context.

**Table 4.2*****Distribution of Participants According to Years of Learning English***

| Years of Learning English | Female | Male | Total |
|---------------------------|--------|------|-------|
| Less than 5 years         | 8      | 1    | 9     |
| 5–8 years                 | 4      | 1    | 5     |
| 9–12 years                | 6      | 1    | 7     |
| More than 12 years        | 15     | 4    | 19    |
| Total                     | 33     | 7    | 40    |

As demonstrated in Table 4.2, most of participants reported more than twelve years of learning English. This suggests that most respondents possessed advanced experience in EFL learning environments, which may have influenced their awareness of intercultural communication and digital learning practices.

#### **4.1.2 Students' Perceptions of Intercultural Communication Development**

**Table 4.3**

##### *Main Intercultural Communication Skills Identified by Students*

| <b>Participants</b>                  | <b>Main Skills Identified</b>                                            |
|--------------------------------------|--------------------------------------------------------------------------|
| Female students (Less than 5 years)  | Cultural empathy, critical awareness                                     |
| Female students (5–8 years)          | Communication skills, critical awareness, cultural empathy               |
| Female students (9–12 years)         | Critical awareness                                                       |
| Female students (More than 12 years) | Cultural empathy, adaptability, critical awareness                       |
| Male students (Less than 5 years)    | Cultural awareness                                                       |
| Male students (5–8 years)            | Adaptability, communication skills, cultural empathy, critical awareness |
| Male students (9–12 years)           | Cultural empathy                                                         |
| Male students (More than 12 years)   | Cultural empathy                                                         |

The results indicate that cultural empathy and critical awareness were among the most emphasized dimensions of intercultural communication competence. Students appeared aware of the importance of respecting cultural diversity, understanding different perspectives, and communicating appropriately within multicultural contexts. In addition, adaptability and communication skills were identified as essential elements supporting effective intercultural interaction.

4.1.3 Students’ Perceptions of Generative AI in EFL Learning

Table 4.4

*Students’ Perceived Benefits of Generative AI Tools*

| Main Benefits Identified       |
|--------------------------------|
| Improving language skills      |
| Access to cultural information |
| Practicing communication       |
| Receiving immediate feedback   |

Most students expressed positive attitudes toward the pedagogical use of generative AI tools in EFL learning. Most participants selected all proposed benefits, indicating that AI-supported technologies are perceived as valuable resources for language improvement, communication practice, intercultural exposure, and immediate support during learning activities.

Table 4.5

*Negative Perceptions and Concerns Related to AI Integration*

| Reported Concerns                                                   |
|---------------------------------------------------------------------|
| AI tools cannot fully improve intercultural communication abilities |
| Lack of confidence in managing intercultural misunderstandings      |

| Reported Concerns                 |
|-----------------------------------|
| Limited human empathy             |
| Possibility of cultural bias      |
| Limited or inaccurate information |

Although most responses were positive, a limited number of participants expressed reservations regarding the integration of generative AI tools. The reported concerns focused on the absence of authentic human interaction, bias, and occasional inaccuracies in AI-generated information.

4.1.4 Analysis of Open-Ended Responses

Table 4.6

Main Themes Emerging from Students’ Open-Ended Responses

| Main Themes                                      | Examples from Responses                              |
|--------------------------------------------------|------------------------------------------------------|
| Exposure to diverse cultural backgrounds         | AI tools foster intercultural exposure               |
| Development of language and communication skills | AI improves communication and language learning      |
| Promotion of cultural awareness                  | AI supports respect toward cultural norms and values |
| Support for the learning process                 | AI assists learners during educational activities    |
| Challenges and limitations                       | Bias, lack of human empathy, limited information     |

The analysis of the open-ended responses revealed favorable perceptions toward the use of generative AI tools in EFL education. Students emphasized that AI technologies facilitate communication practice, intercultural exposure, and language development. One

participant specifically highlighted that AI tools may encourage respect toward cultural norms and values. However, some respondents also identified several limitations related to cultural bias, reliability of information, and the absence of genuine human empathy during interaction.

## **4.2 Teacher Interview Findings and Interpretation**

### **4.2.1 Teachers' perceptions of Generative AI in EFL Education**

**Table 4.7**

*Teachers' Perceptions of Generative AI Integration in EFL Education*

| <b>Teacher</b> | <b>Main Perspective</b>                                             |
|----------------|---------------------------------------------------------------------|
| Teacher A      | AI provides feedback, cultural exposure, and communication practice |
| Teacher B      | AI contributes positively to meaningful communication practice      |
| Teacher C      | AI effectiveness depends on pedagogical use                         |
| Teacher D      | AI saves time and supports classroom interaction                    |
| Teacher E      | AI may support intercultural competence and learner engagement      |
| Teacher F      | AI can be beneficial when combined with teacher guidance            |

The interview findings revealed positive perceptions regarding the integration of generative AI tools within EFL education. Teachers acknowledged the pedagogical potential of AI-supported technologies in enhancing learner engagement, facilitating communication practice, and providing access to authentic cultural content. Nevertheless, most teachers emphasized that the effectiveness of AI depends on the way these tools are pedagogically integrated and supervised.

4.2.2 AI and Intercultural Communication Development

Table 4.8

Teachers’ Views on AI and Intercultural Communication Development

| Main Ideas Reported by Teachers                        |
|--------------------------------------------------------|
| AI can simulate intercultural communication situations |
| AI facilitates exposure to diverse cultures            |
| AI supports communication practice                     |
| AI contributes to intercultural awareness              |
| Teacher guidance remains essential                     |

Teachers agreed that generative AI tools may contribute to the development of intercultural communication skills by exposing learners to diverse cultural contexts and simulated communicative situations. Several participants highlighted the importance of combining AI-supported learning with pedagogical guidance to ensure critical understanding and appropriate cultural interpretation.

4.2.3 Challenges and Pedagogical Concerns

Table 4.9

Main Challenges Related to AI Integration

| Challenges Identified |
|-----------------------|
|-----------------------|

| Challenges Identified                                     |
|-----------------------------------------------------------|
| Lack of teacher training                                  |
| Overdependency on AI tools                                |
| Bias and inaccuracies in AI-generated content             |
| Lack of institutional resources                           |
| Limited classroom time                                    |
| Difficulty balancing AI with traditional teaching methods |

Despite their positive attitudes toward AI integration, teachers identified several pedagogical and institutional concerns. The findings revealed that reliability, bias, and dependency remain among the most significant challenges associated with AI-supported learning. Teachers additionally emphasized the importance of maintaining balance between technological innovation and traditional pedagogical practices.

4.2.4 Teachers’ Instructional Decision-Making in AI-Supported Learning

Table 4.10

Teachers’ Instructional Practices Supporting Intercultural Learning

| Instructional Practices                   |
|-------------------------------------------|
| Use of authentic materials                |
| Videos, movies, and songs                 |
| Role-plays and simulations                |
| Cultural discussions and comparisons      |
| Exposure to real communicative situations |
| Integration of digital technologies       |

The interview findings demonstrated that teachers rely mainly on authentic and communicative practices to foster intercultural awareness among learners. Teachers considered exposure to real-life cultural situations as an effective strategy for helping students understand cultural norms, communication styles, and intercultural differences. Digital technologies were therefore viewed as complementary pedagogical resources capable of enriching intercultural learning experiences within EFL classrooms.

### **4.3 Discussion of Findings**

The findings obtained through both the questionnaire and the teacher interviews reveal positive perceptions regarding the pedagogical integration of generative AI tools in fostering intercultural communication within EFL education. Students emphasized the role of AI-supported technologies in improving communication skills, facilitating intercultural exposure, and supporting language development. Similarly, teachers acknowledged the pedagogical value of AI tools in creating interactive learning environments and exposing learners to authentic cultural content.

The results further indicate that cultural empathy, critical awareness, and adaptability constitute central dimensions of intercultural communication competence among EFL learners. These findings remain consistent with the theoretical perspectives discussed in previous chapters, particularly those emphasizing the importance of intercultural understanding in foreign language learning.

However, the findings also revealed several challenges related to the integration of generative AI technologies. Both students and teachers expressed concerns regarding cultural bias,

overdependency on technology, limited human empathy, and the necessity of balancing digital tools with traditional pedagogical practices. Consequently, the study suggests that AI-supported learning should remain critically guided by teachers to ensure meaningful and pedagogically effective integration.

Overall, the findings support the first research hypothesis (H1), indicating that the integration of generative AI tools may positively enhance the development of learners' intercultural communication skills when implemented within appropriate pedagogical frameworks.

## **Conclusion**

This chapter presents and interprets the findings obtained from both the student questionnaire and the semi-structured teacher interviews. The results revealed positive attitudes toward the integration of generative AI tools in fostering intercultural communication within EFL education. Both students and teachers acknowledged the pedagogical value of AI-supported technologies in enhancing communication practice, intercultural exposure, and language development. At the same time, the findings highlighted several pedagogical and institutional challenges related to bias, dependency, and the need for continuous teacher guidance.

The chapter additionally demonstrated the importance of combining technological innovation with critical pedagogical practices to ensure balanced and meaningful intercultural learning experiences. These findings therefore reinforce the theoretical perspectives discussed throughout the previous chapters and provide empirical support for the research objectives and hypothesis of the study.

Building on these findings, the next chapter will present the conclusion of the study, along with pedagogical implications, limitations, and recommendations for future research in the field of generative AI and intercultural communication in EFL education.

## **Chapter Five: Synthesis, Implications, and Future perspectives**

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### **Introduction**

#### **5.1 Synthesis of the Study**

- Overview of Chapter One
- Overview of Chapter Two
- Overview of Chapter Four
- General Synthesis of the Findings

#### **5.2 Pedagogical Implications**

- Implications for EFL Teachers
- Implications for Intercultural Communication Development
- Implications for AI Integration in EFL Education

#### **5.3 Recommendations**

- Recommendations for teachers
- Recommendations for Curriculum Designers
- Recommendations for Educational Practice

#### **5.4 Limitations of the Study**

#### **5.5 Directions for Future Research**

### **Introduction**

This chapter provides a comprehensive synthesis of the major findings emerging from the present study concerning the integration of generative digital tools in fostering intercultural communication within EFL education. Drawing upon the theoretical foundations discussed in the previous chapters and the empirical findings obtained through the questionnaire and teacher interviews, the chapter aims to establish a coherent understanding of the pedagogical value, opportunities, and challenges associated with technology-supported intercultural learning.

The chapter begins with a synthesis of the main insights developed throughout the dissertation, including the conceptual foundations of intercultural communication, the pedagogical role of emerging digital technologies, and the findings obtained from the practical investigation. It then discusses the pedagogical implications of the study for EFL teachers, intercultural communication development, and technology integration within educational contexts. In addition, the chapter presents several recommendations for teachers, curriculum designers, and educational practice. Finally, the limitations of the study are acknowledged, followed by suggestions for future research in the field of intercultural language education and digital pedagogy.

### **5.1 Synthesis of the Study**

The present study investigated the integration of generative AI tools in fostering intercultural communication within EFL education. The research was developed through a combination of theoretical exploration and empirical investigation to obtain a comprehensive understanding of the topic.

## **Chapter Five: Synthesis, Implications, and Future Perspectives**

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Chapter One focused on the theoretical foundations of intercultural communication and examined its significance within EFL learning environments. The chapter emphasized that intercultural competence extends beyond linguistic proficiency and involves several interconnected skills, including cultural empathy, adaptability, critical awareness, and the ability to negotiate meaning across cultures. The discussion also explored major theoretical models proposed by Byram (1997), Deardorff (2006), and Fantini (2009), in addition to the challenges and strategies related to intercultural competence development.

Chapter Two examined the evolution of generative AI technologies within language education and explored their pedagogical applications in EFL contexts. The chapter discussed the transition from traditional technology-supported learning environments to AI-supported educational practices and highlighted the potential of generative AI tools to support personalized learning, intercultural interaction, and communicative engagement. At the same time, the chapter addressed important pedagogical and ethical challenges related to AI integration, including dependency, bias, and limitations in human communication.

The empirical dimension of the study was presented in Chapter Four; it presented the practical findings obtained from the questionnaire administered to Master One EFL students and the semi-structured interviews conducted with EFL teachers at Abbas Laghrour University of Khenchela. The findings revealed generally positive perceptions toward the pedagogical use of generative digital tools in fostering intercultural communication within EFL education. Students emphasized the role of these technologies in improving communication skills, facilitating exposure to diverse cultural perspectives, and supporting language development. Similarly, teachers acknowledged the pedagogical value of digital tools in creating interactive learning environments and promoting intercultural awareness.

Nevertheless, both students and teachers also identified several concerns related to dependency, cultural bias, reliability of information, and the need for continuous pedagogical guidance.

Overall, the synthesis of the theoretical and empirical findings demonstrates that intercultural communication constitutes an essential dimension of contemporary EFL education. The study confirms that the integration of generative AI tools may contribute positively to learners' intercultural development when implemented within balanced pedagogical frameworks. The findings additionally indicate that both teachers and learners perceive digital technologies as supportive resources capable of facilitating authentic communication, intercultural exposure, and learner engagement. However, the study also demonstrates that technological integration alone remains insufficient without teacher mediation, critical reflection, and pedagogical supervision. Consequently, meaningful intercultural learning requires a combination of technological innovation, authentic interaction, and human guidance. The findings therefore support the confirmed research hypothesis suggesting that the integration of generative digital tools enhances learners' intercultural communication within EFL educational contexts.

### **5.2 Pedagogical Implications**

The findings of the present study carry several pedagogical implications for EFL education, particularly regarding the integration of generative AI tools in intercultural communication development.

First, the findings of the present study suggest that EFL teachers occupy a central role in guiding the pedagogical integration of generative digital tools within intercultural learning environments. Teachers are not only responsible for selecting appropriate digital resources

but also for ensuring that technological practices remain pedagogically meaningful, culturally appropriate, and critically balanced. The study further demonstrates that teachers should encourage reflective intercultural interaction rather than passive technological dependence. Consequently, teachers are required to combine digital innovation with communicative and human-centered pedagogical approaches capable of promoting critical thinking, empathy, and authentic communication.

Second, the study highlights that generative digital tools may facilitate intercultural communication development by exposing learners to diverse cultural perspectives, authentic communicative situations, and interactive learning experiences. Such exposure may contribute to the development of cultural empathy, adaptability, critical awareness, and communication skills among EFL learners. However, the findings also reveal that intercultural competence cannot be reduced solely to technological interaction. Genuine intercultural development requires pedagogical guidance capable of helping learners interpret cultural meanings critically and avoid superficial or stereotypical representations of culture.

Furthermore, the findings indicate that the growing pedagogical relevance of generative digital technologies within EFL education. Their integration may enhance learner autonomy, classroom interaction, and access to authentic cultural resources. Nevertheless, the findings emphasize the necessity of maintaining pedagogical balance between digital tools and traditional instructional practices.

The study additionally suggests that educational institutions should provide teachers with sufficient pedagogical and technological preparation to support effective and responsible digital integration within language education contexts.

### **5.3 Recommendations**

Based on the findings of the study, several recommendations can be proposed for EFL teachers, curriculum designers, and educational practitioners.

#### **Recommendations for Teachers**

- Integrate generative AI tools as complementary pedagogical resources rather than substitutes for classroom interaction.
- Encourage learners to critically analyze AI-generated cultural content.
- Design communicative activities that combine technological engagement with reflective intercultural discussion.
- Maintain a balance between AI-supported learning and traditional instructional approaches.

#### **Recommendations for Curriculum Designers**

- Incorporate intercultural communication objectives into AI-supported language learning activities.
- Develop pedagogical materials that promote critical cultural awareness and responsible AI use.
- Provide training opportunities that support teachers' digital and pedagogical competencies.

#### **Recommendations for Educational Practice**

- Promote responsible and ethical use of generative AI tools within EFL education.

- Encourage learner-centered approaches that emphasize interaction, reflection, and intercultural understanding.
- Support the development of digital literacy skills necessary for evaluating AI-generated information critically.

### 5.4 Limitations of the Study

Despite the contributions of the present study, several limitations should be acknowledged to ensure a balanced interpretation of the findings.

First, the study was conducted within a single institutional context at Abbas Laghrour University of Khenchela, which limits the generalizability of the results to other EFL contexts. In addition, the sample size, particularly in the qualitative phase, remained relatively limited, which may restrict the depth of perspectives gathered from teachers.

Second, the study relied mainly on self-reported data collected through questionnaires and interviews, without direct classroom observation of AI-supported intercultural practices. This may influence the extent to which findings reflect actual classroom behavior.

Finally, it is important to note that this research initially aimed to be developed in connection with a digital startup project (“AI Bridge”), designed as an AI-powered intercultural communication platform intended to support both linguistic competence and intercultural awareness. However, due to administrative and organizational constraints, the implementation and integration of this project could not be completed within the timeframe of the dissertation. As a result, the study was redirected to focus on theoretical and empirical investigation without the operational deployment of the proposed platform. This unexpected adjustment in scope, combined with time limitations, may have influenced certain aspects of the depth and development of the research design. It is also worth noting that the

development and implementation of the “AI Bridge” project is intended to be further explored and expanded in future research at the doctoral (PhD) level.

### **5.5 Directions for Future Research**

Future research may expand the scope of the present study by investigating the integration of generative AI tools across different educational contexts and learner populations. Comparative studies involving multiple universities or educational levels may provide broader insight into the pedagogical impact of AI-supported intercultural learning.

Further studies may also explore the long-term effects of generative AI integration on intercultural competence development and communicative performance. In addition, future research could examine specific AI-based classroom activities, teacher training programs, or the ethical dimensions of AI-supported language education in greater depth.

Given the continuous evolution of educational technologies, further investigation remains necessary to better understand the changing relationship between AI, language learning, and intercultural communication.



### **General Conclusion**

The current dissertation explored the integration of generative AI tools in fostering intercultural communication within EFL education through both theoretical and empirical perspectives. The study emerged from the growing recognition that contemporary language learning extends beyond the development of linguistic proficiency and increasingly requires learners to engage effectively with cultural diversity, critical awareness, and communicative interaction in digitally mediated environments.

The theoretical part of the research examined the foundations of intercultural communication and emphasized its multidimensional nature within EFL contexts. The study highlighted that intercultural competence involves a combination of interrelated skills, including cultural empathy, adaptability, critical awareness, and the negotiation of meaning across cultures. Drawing on the contributions of scholars such as Byram (1997), Deardorff (2006), and Fantini (2009), the dissertation demonstrated that intercultural communication should be approached as a dynamic and developmental process shaped through interaction, reflection, and pedagogical guidance.

In parallel, the study investigated the growing role of generative AI technologies in language education and their potential contribution to intercultural learning. The discussion showed that AI-supported tools may provide learners with greater access to authentic communication opportunities, immediate feedback, personalized learning experiences, and exposure to diverse cultural perspectives. At the same time, the research also addressed important concerns related to technological dependency, bias, cultural representation, and the limitations of AI in reproducing the human dimensions of communication.

The empirical investigation further enriched the study by examining the perceptions of Master One EFL students and EFL teachers at Abbas Laghrour University of Khenchela. The findings revealed generally positive attitudes toward the pedagogical integration of generative AI tools, particularly regarding their role in improving communication skills, supporting language learning, and facilitating intercultural exposure. Students emphasized the importance of cultural empathy and critical awareness as central components of intercultural competence, while teachers highlighted the necessity of maintaining a balanced relationship between technological innovation and traditional pedagogical practices.

Nevertheless, the findings also confirmed that effective intercultural communication cannot rely solely on technological tools. Human interaction, reflective engagement, and pedagogical mediation remain essential in developing deeper intercultural understanding and meaningful communication. In this respect, the study demonstrated that generative AI should not be viewed as a replacement for the teacher or the educational process, but rather as a complementary resource capable of enriching EFL learning environments when integrated critically and responsibly.

Ultimately, the present dissertation contributes to the ongoing discussion surrounding the intersection of language education, intercultural communication, and emerging digital technologies. It highlights the importance of preparing EFL learners not only for linguistic performance but also for cultural awareness and reflective participation in increasingly interconnected environments. As educational technologies continue to evolve, the integration of generative AI in EFL education will likely remain an important field of pedagogical and academic exploration.

**References (APA 7)**

- Bennett, M. J. (1993). Towards ethnorelativism: A developmental model of intercultural sensitivity. In R. M. Paige (Ed.), *Education for the intercultural experience* (pp. 21–71). Intercultural Press.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Multilingual Matters.
- Chapelle, C. A. (2003). *English language learning and technology: Lectures on applied linguistics in the age of information and communication technology*. John Benjamins.
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241–266.
- Fantini, A. E. (2009). Assessing intercultural competence: Issues and tools. In D. K. Deardorff (Ed.), *The SAGE handbook of intercultural competence* (pp. 456–476).
- Godwin-Jones, R. (2018). Using mobile technology to develop language skills and cultural understanding. *Language Learning & Technology*, 22(3), 1–17.
- Holliday, A. (2011). *Intercultural communication and ideology*.
- Kim, Y. Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation*. SAGE Publications.
- Kramsch, C. (1993). *Context and culture in language teaching*. Oxford University Press.
- O’Dowd, R. (2020). A transnational model of virtual exchange for global citizenship education. *Language Teaching*, 53(4), 477–490.

- Paige, R. M., Jorstad, H., Siaya, L., Klein, F., & Colby, J. (2003). Culture learning in language education: A review of the literature. University of Minnesota.
- Sharples, M. (2023). Towards social generative AI for education: Theory, practices and ethics. *Learning: Research and Practice*, 9(2), 159–167.
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3–10.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Warschauer, M. (1996). Computer-assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching* (pp. 3–20).
- Xu, W., & Ouyang, F. (2022). The application of artificial intelligence technologies in STEM education: A systematic review from 2011 to 2021. *International Journal of STEM Education*, 9(59), 1–20.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(39), 1–27.
- Oumeddour, S. (2024). The impact of technology-based instruction on enhancing learners' development of intercultural knowledge in foreign language classrooms: Case study of third year students of English at the Department of Letters and English Language, University of 8 Mai 1945-Guelma (Doctoral dissertation, Abbes Laghrour University of Khenchela).

**Appendices**

**Appendix A:** Teachers' interview Questions

**Appendix B:** Students' Questionnaire

**Appendix A: Teachers' Interview Questions****Teacher's interview****Integration of Generative AI to Foster Intercultural Communication in EFL Classrooms****Introduction**

This interview aims to explore teachers' perspectives on the development of intercultural communication skills in EFL education and the potential role of emerging digital tools in supporting such development. The interview forms part of a research project conducted for a master's dissertation. All responses will remain confidential and will be used exclusively for academic purposes.

**Section 1: Intercultural Communication in EFL**

1. How do you understand the concept of intercultural communication in EFL education?
2. How important do you think intercultural communication skills are for EFL learners?
3. What classroom practices do you use to help students develop intercultural awareness?
4. What difficulties do students face when communicating across cultures in the EFL classroom?

**Section 2: Integration of Generative AI**

5. According to you, how do digital technologies support language learning in your teaching context? And do you use digital tools to expose students to different cultural perspectives?
6. What do you think about using generative AI tools to support intercultural communication in EFL learning?
7. Do you believe that such tools can help simulate intercultural interaction or communication situations for students? and What challenges or limitations might teachers face when integrating AI-supported tools into intercultural language learning?

**Appendix B : Students' Questionnaire****Students' Questionnaire****Generative AI and Intercultural Communication in EFL  
Education: Investigating Teachers' and Students' Perceptions****Introduction**

This questionnaire aims to explore students' perceptions of intercultural communication development in English as a Foreign Language (EFL) education and the role of artificial intelligence (AI) tools in supporting this development.

Your responses are anonymous and will be used for academic research purposes only. Please answer all questions honestly.

**Section A: Personal Information****1. Gender**

☐ Male    ☐ Female    ☐ Prefer not to say

**2. How long have you been learning English?**

☐ Less than 5 years  
☐ 5–8 years  
☐ 9–12 years  
☐ More than 12 years

**Section B: Intercultural Communication Development in EFL  
Education****Instruction:**

Please indicate your level of agreement with the following statements.

**Scale:**

1 = Strongly Disagree    2 = Disagree    3 = Neutral    4 = Agree    5 = Strongly Agree

---

| Statement                                                                         | 1                        | 2                        | 3                        | 4                        | 5                        |
|-----------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 3. I am aware that communication styles differ across cultures.                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I try to understand perspectives from different cultural backgrounds.          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I can adapt my communication style depending on the cultural context.          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. I reflect on my own cultural beliefs when communicating in English.            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. I feel confident managing misunderstandings during intercultural interactions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

8. Which of the following skills do you consider most important in intercultural communication?

- ☐ Cultural empathy
- ☐ Adaptability
- ☐ Critical awareness
- ☐ Communication skills
- ☐ All are equally important

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| Statement                                                                       | 1                        | 2                        | 3                        | 4                        | 5                        |
|---------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 9. Cultural differences sometimes make communication in English more difficult. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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## Section C: Generative AI Tools in EFL Education

10. How often do you use AI or digital tools to support your English learning?

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Very often

### Instruction:

Please indicate your level of agreement with the following statements.

### Scale:

1 = Strongly Disagree    2 = Disagree    3 = Neutral    4 = Agree    5 = Strongly Agree

---

| Statement                                                                           | 1                        | 2                        | 3                        | 4                        | 5                        |
|-------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 11. AI tools help me discover different cultural perspectives.                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. AI tools allow me to practice communication in realistic situations.            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. AI tools encourage me to reflect on cultural differences.                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. AI tools improve my ability to communicate with people from different cultures. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

---

15. In your opinion, what is the main benefit of using AI tools in EFL learning?

- ☐ Improving language skills
- ☐ Access to cultural information
- ☐ Practicing communication
- ☐ Receiving immediate feedback
- ☐ All of the above

16. In your opinion, how can AI tools support the development of intercultural communication skills in EFL learning, and what challenges might limit their effectiveness?

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## **Résumé**

Le développement rapide de l'intelligence artificielle générative (IAG) a transformé l'enseignement de l'anglais langue étrangère (ELE) en offrant aux apprenants un retour d'information immédiat, des opportunités de communication authentiques et une initiation à diverses perspectives culturelles. Malgré son utilisation croissante, peu de recherches ont exploré la manière dont les enseignants et les étudiants d'ELE perçoivent le rôle de l'IAG dans le développement de la communication interculturelle, notamment dans le contexte universitaire algérien. Cette étude examine donc les perceptions des enseignants et des étudiants quant à l'intégration des outils d'IAG dans l'enseignement de l'ELE afin d'améliorer leurs compétences communicatives interculturelles. Elle vise à analyser la perception qu'ont les enseignants de l'IA comme ressource didactique, à explorer comment ces outils sont intégrés aux pratiques pédagogiques et à identifier les opportunités et les défis liés à leur utilisation pédagogique. Adoptant une méthodologie mixte, des données quantitatives ont été recueillies au moyen d'un questionnaire administré à 40 étudiants de Master 1 d'ELE, tandis que des données qualitatives ont été collectées par le biais d'entretiens semi-directifs avec six enseignants d'ELE de l'Université Abbas Laghrour de Khenchela. Les résultats révèlent des attitudes globalement positives envers l'intégration de l'IAG dans l'apprentissage de l'ELE. Les enseignants et les élèves ont reconnu son rôle dans l'amélioration de l'apprentissage des langues, la promotion de la sensibilisation interculturelle et le soutien à la pratique de la communication. Cependant, plusieurs défis ont également été identifiés, notamment la dépendance technologique, les biais, les préoccupations éthiques et l'interaction humaine limitée. L'étude conclut que l'IA générative peut favoriser efficacement la communication interculturelle lorsqu'elle est mise en œuvre de manière critique et pédagogique, en servant de ressource éducative complémentaire, plutôt que de remplacer les enseignants et l'interaction humaine authentique.

**Mots-clés :** IA générative, communication interculturelle, enseignement de l'anglais langue étrangère, compétence interculturelle, intégration de l'IA, apprentissage des langues.

### الملخص

أحدث التطور السريع للذكاء الاصطناعي التوليدي نقلة نوعية في تعليم اللغة الإنجليزية كلغة أجنبية، إذ يتيح للمتعلمين الحصول على تغذية راجعة فورية، وفرص تواصل حقيقية، والتعرف على وجهات نظر ثقافية متنوعة. ورغم تزايد استخدامه، إلا أن الأبحاث التي تناولت كيفية إدراك معلمي وطلاب اللغة الإنجليزية كلغة أجنبية لدور الذكاء الاصطناعي التوليدي في تعزيز التواصل بين الثقافات، لا سيما في السياق الجامعي الجزائري، لا تزال محدودة. لذا، تبحث هذه الدراسة في تصورات المعلمين والطلاب حول دمج أدوات الذكاء الاصطناعي التوليدي في تعليم اللغة الإنجليزية كلغة أجنبية لتعزيز الكفاءة التواصلية بين الثقافات. وتهدف الدراسة إلى فحص تصورات المعلمين للذكاء الاصطناعي كمورد تعليمي، واستكشاف كيفية دمج أدوات الذكاء الاصطناعي في الممارسات التعليمية، وتحديد الفرص والتحديات المرتبطة باستخدامها التربوي. وباستخدام منهجية بحثية مختلطة، جُمعت البيانات الكمية من خلال استبيان وزّع على 40 طالبًا في برنامج الماجستير الأول في اللغة الإنجليزية كلغة أجنبية، بينما جُمعت البيانات النوعية من خلال مقابلات شبه منظمة مع ستة معلمين للغة الإنجليزية كلغة أجنبية في جامعة عباس لغرور بخنشلة. وتُظهر النتائج وجود مواقف إيجابية بشكل عام تجاه دمج الذكاء الاصطناعي التوليدي في تعلم اللغة الإنجليزية كلغة أجنبية. أقرّ كلٌّ من المعلمين والطلاب بدور الذكاء الاصطناعي التوليدي في تعزيز تعلم اللغات، ونشر الوعي بين الثقافات، ودعم ممارسات التواصل. ومع ذلك، فقد تمّ تحديد العديد من التحديات، بما في ذلك الاعتماد على التكنولوجيا، والتحيز، والمخاوف الأخلاقية، ومحدودية التفاعل البشري. وتخلص الدراسة إلى أن الذكاء الاصطناعي التوليدي يُمكنه تعزيز التواصل بين الثقافات بفعالية عند تطبيقه بشكل نقدي وتربوي، ليكون بمثابة مورد تعليمي تكميلي، وليس بديلاً عن المعلمين والتفاعل البشري الحقيقي.

**الكلمات المفتاحية:** الذكاء الاصطناعي التوليدي، التواصل بين الثقافات، تعليم اللغة الإنجليزية كلغة أجنبية، الكفاءة بين الثقافات، دمج الذكاء الاصطناعي، تعلم اللغات.