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**AI and Intercultural Competence :Exploring How AI Tools Expose
Learners To Global English varieties**
**Case Study of third years Students in the Department of English at Chadli Ben Djedid Tarf
University**

Dissertation submitted to the Department of English in Partial Fulfillment of the
Requirements of the Master's Degree in "Didactics of language"

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Declaration

We hereby declare that this research work, which we submit for assessment of the program of study leading to the award of Master in English Didactics, represents our original work and has not been submitted to another assessment. We also declare that all words and ideas from other works have been appropriately cited and acknowledged.

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Dedication

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To my beloved parents , to my life partner , my dear husband who has been my unwavering support , with his encouragement and belief in me , I found the strength to continue even through the most difficult times .

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Dedication

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List of abbreviations

AI : Artificial Intelligence

AWE : Automated Writing Evaluation

EFL : English as a Foreign Language

ICC : Intercultural Communicative Competence

ITS: Intelligent Tutoring Systems

i.e: that is

%: Percentage

Abstract

Education is continuously influenced by emerging technologies, among which Artificial Intelligence (AI) stands out as a key driver of innovation in the language learning process. Within this context, the present study investigates EFL teachers' and students' perceptions of the integration of AI tools and their role in developing intercultural competence and awareness of Global English Varieties at Chadli Bendjedid University, El Tarf. Furthermore, it aims to identify the major intercultural and linguistic challenges faced by students and examine how AI tools may contribute to overcoming them. The study also seeks to explore the extent to which AI tools expose EFL learners to Global English Varieties and enhance their intercultural competence. The study hypothesized that both EFL teachers and students hold positive perceptions toward the use of AI tools and recognize their contribution to enhancing learners' intercultural competence and exposure to Global English Varieties. It also hypothesized that AI tools significantly contribute to exposing EFL learners to Global English Varieties and developing their intercultural competence. To achieve the objectives of the study, a mixed-methods research design was adopted, combining quantitative and qualitative data. Two data collection tools were employed: a questionnaire administered to 25 third-year EFL students and semi-structured interviews conducted with 4 EFL teachers. The findings revealed that the majority of students and teachers perceived AI tools as beneficial in exposing learners to diverse English accents, cultural contexts, and communication styles. Most participants expressed positive perceptions toward the use of AI tools in language learning, while a smaller number remained neutral. The findings confirmed the research hypotheses. The study concludes with recommendations for the effective integration of AI tools in intercultural EFL instruction and suggests directions for future research.

Keywords: Artificial Intelligence ; Intercultural Competence ; Global English Varieties; EFL Learners ; AI Tools.

الملخص

يُتأثر التعليم بشكل مستمر بالتكنولوجيات الحديثة، ومن بينها الذكاء الاصطناعي (AI) الذي أصبح من أهم العوامل التي تساهم في تطوير عملية تعلم اللغات. في هذا السياق، تهدف هذه الدراسة إلى استكشاف تصورات أساتذة وطلبة اللغة الإنجليزية كلغة أجنبية حول دمج أدوات الذكاء الاصطناعي ودورها في تنمية الكفاءة بين الثقافات والوعي بتنوعات اللغة الإنجليزية العالمية بجامعة الشاذلي بن جديد، الطرف. كما تهدف إلى تحديد أهم التحديدات الثقافية واللغوية التي يواجهها الطلبة، ودراسة كيفية مساهمة أدوات الذكاء الاصطناعي في التغلب عليها. وتسعى الدراسة أيضاً إلى معرفة مدى مساهمة هذه الأدوات في تعريض متعلمي اللغة الإنجليزية كلغة أجنبية لتنوعات اللغة الإنجليزية العلمية وتعزيز كفاءتهم بين الثقافات. افترضت الدراسة أن كل من أساتذة وطلبة اللغة الإنجليزية كلغة أجنبية يمتلكون تصورات إيجابية تجاه استخدام أدوات الذكاء الاصطناعي، ويركزون مساهمتها في تعزيز الكفاءة بين الثقافات لدى المتعلمين وزيادة تعرضهم لتنوعات اللغة الإنجليزية العالمية. كما افترضت أن استخدام أدوات الذكاء الاصطناعي يساهم بشكل كبير في تعريض الطلبة لهذه التنوعات وتطوير كفاءتهم بين الثقافات. ولتحقيق أهداف الدراسة، تم اعتماد منهج بحث مختلط يجمع بين البيانات الكمية والنوعية. حيث تم استخدام أداتين لجمع البيانات: استبيان وزُرع على 25 طالباً من طلبة السنة الثالثة لغة إنجليزية، ومقابلات شبه موجهة أُجريت مع 4 أساتذة للغة الإنجليزية كلغة أجنبية؛ أظهرت النتائج أن غالبية الطلبة والأساتذة يرون أن أدوات الذكاء الاصطناعي مفيدة في تعريض المتعلمين لهجات إنجليزية مختلفة، وسياقات ثقافية متنوعة، وأساليب تواصل متعددة. كما عبّر معظم المشاركين عن تصورات إيجابية تجاه استخدام أدوات الذكاء الاصطناعي في تعلم اللغة، في حين بقيت فئة قليلة ذات موقف محايد. وأكدت النتائج صحة فرضيات الدراسة. وتختتم الدراسة بمجموعة من التوصيات المتعلقة بالدمج الفعّال لأدوات الذكاء الاصطناعي في تعليم اللغة الإنجليزية من منظور ثقافي، مع اقتراح توجهات مستقبلية للبحث.

الكلمات المفتاحية: الذكاء الاصطناعي؛ الكفاءة بين الثقافات؛ تنوعات اللغة الإنجليزية العالمية؛ متعلمو اللغة الإنجليزية كلغة أجنبية؛ أدوات الذكاء الاصطناعي.

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Chapter One

Introductory chapter

Introduction

In today's globalized world, communication across cultures has become an essential requirement in education and professional contexts. English, as the dominant international language, plays a central role in facilitating global interaction. Consequently, language education has shifted from focusing solely on grammatical accuracy toward developing learners' communicative and intercultural abilities. Within this global context, English has evolved into a language used by speakers from diverse linguistic and cultural backgrounds.

At the same time, intercultural competence has become an important objective in modern language education. It refers to the ability to understand and interact appropriately with people from different cultural backgrounds. Developing this competence helps learners communicate effectively in multilingual and multicultural environments.

With the rapid advancement of educational technology, Artificial Intelligence tools have become increasingly integrated into language learning. These tools offer learners opportunities for interaction, practice, and exposure to more authentic language use. In EFL contexts, AI tools can support language learning by providing flexible and accessible learning environments. In the Algerian EFL context, English teaching often remains focused on standardized language forms and textbook-based instruction, which may limit learners' exposure to global English use and intercultural perspectives. Therefore, integrating AI tools into EFL classrooms may provide valuable opportunities to enrich students' intercultural experiences and enhance their understanding of English as a global language.

Statement of the Problem

Despite the increasing availability of Artificial Intelligence (AI) tools and their recognized potential in language education, their integration into EFL classrooms in Algerian universities remains limited, particularly in relation to the development of intercultural competence and exposure to Global English varieties. Traditional teaching approaches continue to dominate EFL instruction, with a strong focus on British and American English standards, while other legitimate varieties of English used worldwide are often overlooked. This restricted exposure may limit students' ability to recognize different accents, understand diverse communication styles, and develop the intercultural awareness required for effective communication in multilingual and multicultural contexts. In addition, many students tend to use AI tools independently without clear pedagogical guidance, while a significant number of teachers lack the training and institutional support needed to effectively integrate these technologies for intercultural learning purposes. Consequently, a gap exists between the potential of AI tools and their actual implementation in promoting intercultural competence and awareness of Global English varieties in EFL classrooms.

Moreover, empirical research on the use of AI for intercultural language learning within the Algerian EFL context remains limited. Therefore, this study seeks to address this gap by investigating the role of AI tools in enhancing intercultural competence and raising awareness of Global English varieties among third-year EFL students, as well as exploring teachers' perceptions of integrating AI into intercultural language instruction.

Research Questions

Q1. What are EFL teachers' perceptions of integrating AI tools into English language teaching at Chadli Bendjedid University?

Q2. What are third-year EFL students' perceptions of the use of AI tools in English language learning at Chadli Bendjedid University?

Q3. To what extent do AI tools contribute to exposing third-year EFL students at Chadli Bendjedid University to Global English Varieties and developing their intercultural competence?

Research Hypotheses

H1: EFL teachers at Chadli Bendjedid University demonstrate positive perceptions toward the integration of AI tools in English language teaching.

H2: Third-year EFL students at Chadli Bendjedid University demonstrate positive perceptions toward the use of AI tools in English language learning.

H3: The use of AI tools significantly contributes to exposing third-year EFL students at Chadli Bendjedid University to Global English Varieties and enhancing their intercultural competence.

Aims of the Study

This study aims to investigate the role of Artificial Intelligence tools in English as a Foreign Language learning among third-year university students. Specifically, it seeks to examine how AI tools contribute to exposing learners to Global English Varieties and enhancing their intercultural competence. In addition, this research explores both students' and teachers' perceptions of AI-supported language learning and identifies the pedagogical benefits and challenges associated with integrating AI technologies in EFL classrooms. Furthermore, the study provides a clear overview of AI tool usage in the Algerian university context and examines its impact on language learning practices.

Significance of the Study

This study is significant as it explores the pedagogical role of Artificial Intelligence in promoting intercultural competence and global language awareness in EFL learning. It contributes to a better understanding of how AI tools can be used not only to improve linguistic skills but also to enhance cultural understanding and communicative competence.

The findings of this research will be beneficial for teachers, students, curriculum designers, and educational institutions seeking innovative approaches to integrating technology into English language instruction. For students, the study provides insights into how AI-supported learning can influence their intercultural awareness and exposure to Global English Varieties. For teachers, it highlights effective practices and potential challenges related to AI integration. Furthermore, this research contributes to future curriculum development and teacher training programs by offering practical recommendations for the effective implementation of AI tools in higher education.

Research Design

This study adopts a mixed-methods research design to explore the role of AI tools in developing intercultural competence and global language awareness among third-year EFL students. Quantitative data are collected through student questionnaires in order to examine patterns of AI usage, exposure to Global English Varieties, and learners' perceptions. Qualitative data are gathered through teacher interviews to gain deeper insights into teachers' perspectives on AI integration and its pedagogical implications. This combination of research methods allows for a more comprehensive understanding of the research problem.

Participants

The population of this study consists of third-year EFL students (N = 25) enrolled in the English language program and EFL teachers (N = 4) at Chadli Bendjedid University. Both groups are directly involved in the teaching and learning process in which AI tools are used, making them central to the objectives of this research..

Data Gathering Tools

Two research instruments are used for data collection. A questionnaire is administered to students in order to gather information about their use of AI tools, exposure to Global English Varieties, and perceptions of AI-supported learning. In addition, semi-structured interviews are conducted with teachers to explore their views on the effectiveness of AI tools in promoting intercultural competence and improving language learning outcomes.

Structure of the Study

The present dissertation consists of five chapters. Chapter One introduces the background of the study, statement of the problem, research questions, hypotheses, aims of the study, significance of the study, research design, participants, data collection tools, and the structure of the dissertation.

Chapter Two presents the literature review related to Artificial Intelligence in education, intercultural competence, and Global English Varieties.

Chapter Three describes the research methodology adopted in the study.

Chapter Four presents the analysis and interpretation of the collected data.

Finally, Chapter Five discusses the findings, pedagogical implications, limitations of the study, and recommendations for future research.

Conclusion

This chapter has introduced the present study by presenting its background, objectives, and significance. It has outlined the research problem and formulated the research questions and hypotheses guiding the investigation. In addition, it described the research design, participants, and data collection tools. The chapter also provided an overview of the dissertation structure. The following chapter will present the literature review related to Artificial Intelligence in education, intercultural competence, and Global English Varieties.

Chapter Two

Literature Review on Artificial Intelligence, Intercultural Communicative Competence, and Global English Varieties

Introduction

Artificial Intelligence (AI) has emerged as an influential technology in language education, transforming the ways in which teaching and learning processes are carried out. AI tools are increasingly used in EFL contexts to enhance learning, provide personalized support, and foster learner engagement. They also contribute to the development of intercultural awareness and exposure to Global English Varieties, which have become essential in today's globalized world. Therefore, this chapter is divided into two main sections that explore the key theoretical foundations related to AI and intercultural communicative competence. The first section focuses on Artificial Intelligence in EFL learning, including its definition, historical development, AI-powered tools, as well as its benefits, challenges, and limitations. The second section addresses intercultural communicative competence and Global English Varieties. It discusses the main concepts, Byram's model, the relationship between language and culture, and the importance of exposing learners to different English varieties. Finally, the chapter presents related studies on the role of AI in developing intercultural competence and awareness of Global English Varieties.

Section One :Artificial Intelligence in EFL Learning

2.1.1. Definition of Artificial Intelligence (AI)

Artificial Intelligence (AI) was first introduced by John McCarthy, who is widely recognized as the father of AI, in 1955. He coined the term while preparing a proposal for the Dartmouth

Summer Research Project on Artificial Intelligence in 1956 (Sumakul et al., 2022). Since then, AI has developed into a major field within computer science, with contributions from various disciplines such as anthropology, biology, philosophy, psychology, and linguistics. Due to its interdisciplinary nature, it is difficult to provide a single, universally accepted definition of AI, as different scholars approach it from different perspectives (Luckin et al., 2016). According to John McCarthy (1955), AI is defined as “the science and engineering of making intelligent machines” (as cited in Manning, 2020). In this sense, AI refers to the development of computer systems capable of performing tasks that typically require human intelligence, such as problem-solving, learning, and language understanding. These systems do not necessarily replicate human thinking but aim to produce intelligent behavior through various computational methods.

In the field of education, AI refers to the use of intelligent systems and algorithms to support teaching and learning processes. Holmes, Bialik, and Fadel (2019) define AI in education as computer systems capable of performing tasks such as pattern recognition, decision-making, and adapting to learners’ individual needs. Similarly, Saini (2023) describes AI as a branch of computer science concerned with the study and application of machine intelligence. Another widely accepted definition is provided by Stuart Russell and Peter Norvig, who define AI as the study of intelligent agents systems that can perceive their environment and take actions to achieve specific goals (Russell & Norvig, 2021). This definition emphasizes that AI involves not only machines, but also their ability to act and make decisions effectively.

2.1.2. Historical Development of Artificial Intelligence (AI) in Education

The development of Artificial Intelligence (AI) in education has passed through several important stages over time. The first applications appeared in the 1960s with early computer-based learning systems such as PLATO and TICCIT. These systems allowed students to access lessons and receive immediate feedback, but they were limited in terms of personalization (Guan et al., 2020). According to Guan et al. (2020), AI in education became more advanced in the 1980s with the development of Intelligent Tutoring Systems (ITS). Systems like SCHOLAR and GUIDON were designed to simulate human tutors by guiding learners and answering their questions.

Artificial Intelligence technologies continued to evolve during the 1990s and early 2000s, as noted by Wayne Holmes et al. (2019). During this period, tools such as AutoTutor and Carnegie Learning were developed to provide more interactive and personalized learning

experiences. In recent years, AI has grown rapidly in education with the development of advanced technologies such as natural language processing and generative AI. For example, ChatGPT and Duolingo allow students to engage in interactive learning and receive instant feedback. This stage represents a major shift toward more flexible and accessible learning environments, as highlighted by Łodzikowski et al. (2023).

2.1.3. AI-Powered Tools in Language Learning

Artificial intelligence has developed many tools that can help learners learn languages more effectively. These tools can be grouped into three main types: intelligent tutoring systems, automated writing evaluation tools, and conversational agents or chatbots (Hwang & Chen, 2023). Each type has its own uses and advantages for learners.

Intelligent Tutoring Systems (ITS) are among the oldest and most established AI tools for language learning. Nye, Graesser, and Hu (2014) explain that ITS are computer programs which give personalized lessons and immediate feedback without a teacher. These systems use AI to understand what learners know and adjust the lessons accordingly. For example, Duolingo adapts its exercises based on each student's performance (OpenAI, 2023). Similarly, Rosetta Stone uses AI speech recognition to help learners improve pronunciation (Golonka et al., 2014). The second type is Automated Writing Evaluation (AWE) tools, which check students' writing automatically. Tools like Grammarly and ProWritingAid can correct grammar, vocabulary, punctuation, and style. Ranalli, Link, and Chukharev-Hudilainen (2017) confirm that AI helps detect typical grammar errors that teachers would normally correct by hand. Over time, learners can notice their common errors and improve their language skills. However, Kasneci et al. (2023) warn that AWE tools sometimes miss bigger issues, such as organizing ideas or writing clearly. In addition, students may accept AI corrections without thinking critically (Hwang & Chen, 2023).

The third type includes conversational agents and chatbots. These are newer tools that let learners practice speaking and writing in a natural way. Tools like ChatGPT, Google Bard (Gemini), and Microsoft Copilot can answer questions, explain grammar, paraphrase sentences, and simulate real-life conversations (OpenAI, 2023). Several studies show their benefits. For instance, learners who practice with AI chatbots can improve their speaking fluency and confidence (Tai, 2024). Similarly, students who use ChatGPT for writing often show better vocabulary and sentence variety (Tai, 2024).

However, there are still some challenges. Kasneci et al. (2023) note that AI sometimes gives wrong or made-up answers. This problem is known as "hallucinations." In addition, researchers warn that students might use AI to complete assignments without actually learning (Hwang & Chen, 2023). Teachers need to guide AI use carefully because not all tools are designed specifically for education (Kasneci et al., 2023). Artificial Intelligence (AI) also offers exposure to different English varieties. AI tools can provide responses in various accents, styles, and cultural contexts. This is unlike traditional textbooks, which usually focus only on standard British or American English. Moreover, new multimodal AI tools combine text, speech, and images. For example, DALL-E helps learners create images from descriptions, which can improve vocabulary and writing skills (OpenAI, 2023). Speech-to-text tools like Whisper let learners transcribe spoken English, helping with both listening and pronunciation (OpenAI, 2023). AI tools for language learning are diverse and continuously evolving. From intelligent tutoring systems to conversational chatbots, each type offers unique advantages and challenges. As indicated by Hwang and Chen (2023) and Tai (2024), understanding these tools is important for using them effectively in EFL (English as a Foreign Language) classrooms.

2.1.4. Benefits of Artificial Intelligence (AI) Integration in EFL Learning

Artificial Intelligence (AI) brings several important benefits to English as a Foreign Language (EFL) learning. AI-powered tools can personalize lessons, provide instant feedback, and create low-pressure practice opportunities.

2.1.4.1. Personalized Learning

According to Méndez-Vargas, Chiappe, Ramírez-Montoya, and Becerra Rodríguez (2025), personalized learning means that the lesson changes based on each student's level, needs, and learning speed. The same authors explain that personalized learning has developed over time and is now connected to modern technologies like adaptive learning systems (Méndez-Vargas et al., 2025). One advantage of AI is that it can make learning personal for each student. In traditional classrooms, a teacher has many students and it is hard to give each one exactly what they need. However, AI can help address this issue. For example, if a student has trouble with grammar, the AI gives them more grammar exercises. But if another student is good at grammar, AI lets them move to something harder. According to Alshammari and Alhamazany (2026), AI looks at how the student is doing and changes the lessons by itself. There is also a large study that found AI helps students learn better when it gives them personalized lessons (Acta Psychologica, 2025).

This can be seen in applications like Duolingo and Rosetta Stone. When a student makes a mistake on Duolingo, the app remembers it and gives the same question again later until the student gets it right. It also sends notifications to practice the words that were forgotten. Rosetta Stone works differently. It uses speech recognition to listen to how a student says a word. If the pronunciation is wrong, the app asks the student to repeat until the pronunciation sounds more natural. Both apps track student progress and change the lessons based on what each student needs most. As a result, students can learn at their own pace and feel more motivated to study.

2.1.4.2. Immediate Feedback

According to Polakova and Klimova (2024), immediate feedback means that the learner receives correction or guidance right after making a mistake, without waiting for a teacher. To put it differently, when a student makes an error, the AI tool tells them instantly what is wrong and how to fix it. The student does not have to wait for the teacher to check their work.

This is one of the most useful features of AI tools. In traditional classrooms, students often have to wait days or even weeks to get their assignments corrected. With AI, feedback comes in seconds. The same researchers explain that chatbots and AI writing tools can correct grammar, spelling, and pronunciation in real time (Polakova & Klimova, 2024).

For example, when a learner writes a wrong sentence on Grammarly, the tool immediately shows the correct version and explains the error. Similarly, Duolingo corrects pronunciation instantly using speech recognition. If the learner pronounces a word incorrectly, the app asks them to try again until it sounds better. As argued by Polakova and Klimova (2024), immediate feedback contributes to better learning by helping students correct their mistakes quickly and understand language rules more clearly. It also allows learners to practice more efficiently and improve step by step.

2.1.4.3. Improved Writing Accuracy and Speaking Fluency

One of the main benefits of AI tools is that they help students improve both writing accuracy and speaking fluency. Simply put, when learners use AI regularly, they make fewer grammar mistakes in their writing and speak more smoothly without long pauses. A large meta-analysis published in *Acta Psychologica* (2025) examined 23 studies and found that AI has a strong positive effect on students' writing accuracy and speaking fluency, with a large overall effect size ($g = 1.10$). For writing, tools such as Grammarly and ProWritingAid help students

identify their repeated grammar mistakes. When a learner writes an incorrect sentence, the tool immediately shows the correct version. Over time, students learn to avoid the same errors without relying completely on the tool.

For speaking, chatbots such as ChatGPT and Google Gemini allow students to practice conversations without a partner. Learners can interact with these chatbots at any time and receive natural responses. According to a systematic review by a researcher at the Universitat de València (2025), chatbots provide instant feedback and help students improve pronunciation, vocabulary, and grammar through real-life conversations. As stated by Macinska and Vinkler (2025), AI tools offer students more practice opportunities than traditional classrooms can provide. Students who feel nervous speaking in front of others can practice privately with a chatbot until they gain confidence. This regular practice helps them become more fluent speakers and more accurate writers.

2.1.4.4. Learner Autonomy and Critical Thinking

AI tools can also help students become more independent learners. In traditional classrooms, students often depend on the teacher to check their work and tell them what is wrong. With AI, students can check their own writing, look up grammar rules, and practice conversations without waiting for a teacher. According to Arif and Naeem (2025), using generative AI in EFL writing classrooms helps students take more responsibility for their own learning. This is what researchers call learner autonomy. Namely, when students use AI tools such as Grammarly or ChatGPT, they learn to find and correct their own mistakes instead of relying on the teacher for everything. A study by Luan and Guo (2025) found that AI tools provide learning opportunities that support students' independent learning and improve performance. The same study also reported that AI tools increase students' satisfaction with the learning process.

However, there is also an important warning. Arif and Naeem (2025) explain that while AI can help students think more critically, there is a risk that some students may accept AI corrections without thinking. Good learners should compare AI suggestions with what they already know and decide whether to accept them. When used in the right way, this process actually strengthens critical thinking skills because students must evaluate the feedback they receive rather than blindly following it.

2.1.5. Challenges of Artificial Intelligence (AI) in EFL Learning

Challenges are difficulties or problems that can be reduced over time with better technology, training, or rules. Despite the many benefits of AI in EFL learning, there are also several challenges that need to be addressed. The main challenges are discussed below.

2.1.5.1. AI Hallucinations

AI hallucinations (i.e., false or made-up information generated by AI) mean that AI tools sometimes provide incorrect answers that appear correct but are actually false. In other words, a student might ask ChatGPT a question about English grammar, and the AI could provide an explanation that seems logical but is completely wrong. As noted by Lupoli (2025), this is one of the biggest challenges of using generative AI in English language teaching. The researcher explains that AI models are trained to predict the next word in a sentence, not to determine what is true or false.

To illustrate, if a student asks an AI chatbot to explain a grammar rule, the AI might invent an example that does not follow the rule. The student may then learn incorrect information without being aware of it. This is problematic because students often trust AI answers without double-checking them. A study by Bumber and Toffoli (2025) examined how students perceive AI errors in automatically generated subtitles. The findings showed that while some students can identify these hallucinations, others may accept them as correct.

2.1.5.2. Over-reliance on AI

Over-reliance on AI indicates that students use AI tools in a compulsive and emotionally dependent way. According to Kasap and Babayiğit (2026), this type of dependency has two main aspects: compulsive overuse (using AI excessively without control) and emotional dependence (feeling unable to complete tasks without AI assistance). That is, instead of thinking independently, students let AI do the thinking for them. According to Cotton, Cotton, and Shipway (2024), some students use ChatGPT to write their essays without adding their own ideas. This means they are not practicing their writing skills or learning from their mistakes. For example, a student who needs to write a paragraph in English might simply ask ChatGPT to generate it. Then they copy and paste the answer without making any changes. This student learns nothing new and may even forget what they already knew.

A study by Derin, Andira, and Awaliyah (2026) found that when students had unrestricted access to AI, they produced fluent but script-dependent English. The researchers also discovered that when AI support was suddenly removed, students showed more hesitation and

reverted to their native language instead of speaking English. This challenge is problematic because it can negatively affect the development of critical thinking and independent learning skills.

2.1.5.3. Lack of Teacher Training

Lack of teacher training signifies that many teachers do not know how to use AI tools effectively in their classrooms. In other words, even when good AI tools are available, teachers may lack the skills or confidence to integrate them into teaching practices. According to Alshammari and Alhamazany (2026), many EFL teachers have limited experience with AI and require professional development programs to learn how to use these tools effectively.

For instance, a teacher who wants to use ChatGPT to help students practice writing might not know how to design effective prompts or how to verify whether the AI's answers are accurate. Without proper training, the teacher may avoid using AI altogether or use it in ways that do not support learning. A study by Biri, Rácz, and Szabó (2025) found that although most language teachers are aware of AI, many are not ready to integrate it into their daily teaching practices. The researchers also found that younger teachers and those with more digital experience are more open to using AI, while older or less experienced teachers feel uncertain.

2.1.6. Limitations of AI in EFL Learning

Limitations are weaknesses or shortcomings that are built into the technology itself and are difficult or impossible to fully solve. Unlike challenges which can be reduced over time with better training or tools, limitations are permanent features of AI that cannot be completely fixed. The main limitations are discussed below.

2.1.6.1. Lack of human interaction

Lack of human interaction refers to the fact that AI tools cannot replace the emotional and social connection between teachers and students. According to Alshammari and Alhamazany (2026), this limitation is defined as the inability of AI systems to build genuine relationships with learners, provide emotional support, or respond to non-verbal cues such as body language and tone of voice. In other words, AI can teach grammar and vocabulary effectively, but it cannot show empathy, encouragement, or understanding. To put it differently, no matter how advanced AI becomes, it will never truly understand how a student feels.

For instance, when a student feels frustrated or demotivated, a human teacher can notice this and offer words of encouragement. AI cannot do this. To illustrate, a teacher can adapt their

teaching style based on a student's mood or body language, while AI only follows its programming. Consider a shy student who is afraid to make mistakes. A teacher can create a safe environment, but AI cannot.

2.1.6.2. Data Privacy and Ethical Concerns

Data privacy and ethical concerns mean that AI tools collect and store student data, which may be used in ways that are not safe or transparent. In other words, when students use AI apps, their personal information, writing samples, and even their voices may be collected by companies. According to Alshammari and Alhamazany (2026), this is one of the most serious ethical limitations of AI in education. The researchers explain that many AI tools do not clearly inform users about how their data will be used or who will have access to it. They also note that students, especially young learners, may not fully understand the privacy risks when using these tools. For example, a student who uses an AI chatbot for speaking practice might have their conversations recorded and stored on a server. The company could use this data to improve its product, but there is also a risk that the data could be accessed by unauthorized parties or used for purposes the student did not agree to. Respecting students' right to privacy is essential, and parents and schools also have a responsibility to ensure the protection of student data.

2.1.6.3. Bias in AI Outputs

Bias in AI outputs refers to the fact that AI tools may reflect the prejudices or imbalances present in the data they were trained on. According to Lupoli (2025), this limitation is defined as the tendency of generative AI systems to reproduce and amplify existing stereotypes, cultural biases, and linguistic imbalances found in their training data. In other words, if an AI is trained mostly on English texts written by native speakers from one country, it will likely favor that dialect over others. To put it differently, AI does not understand that there are many correct varieties of English; it only knows what it has seen most often in its training data.

For instance, an AI tool might mark a student's sentence as incorrect because it uses Indian English or African American English instead of standard American English. The AI does not understand that these are valid varieties of English. This may lead students to perceive their way of speaking or writing as "incorrect," even though it is actually valid within their own linguistic community.

Section Two: Intercultural Communicative Competence and Global English Varieties

2.2.1. Definition of Intercultural Competence

The concept of intercultural competence has been defined in various ways by different scholars in the fields of language education and communication studies. One of the earliest definitions is provided by Byram (1997), who states that intercultural competence includes knowledge, skills, and attitudes that help individuals interact respectfully and successfully across cultures. To clarify, intercultural competence is not just about knowing facts about other cultures, such as their food, music, or holidays. It also involves being open to new experiences, curious about differences, and willing to change one's behavior when necessary. For example, a person with intercultural competence does not judge another culture as "strange," but instead tries to understand why people act the way they do.

Later, Deardorff (2006) offered a more detailed definition. According to her, intercultural competence is "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and attitudes." In simpler terms, a person with intercultural competence knows how to adjust their behavior and language depending on the cultural background of the person they are talking to. In other words, it is not enough to be fluent in a language; one must also understand when to be formal or informal, what topics to avoid, and how to show respect in different cultural settings.

In the same vein, a more contemporary definition is provided by Spitzberg and Changnon (2009), they define intercultural competence as "the appropriate and effective management of interaction between people who, to some degree, represent different or divergent affective, cognitive, and behavioral orientations." Put differently, intercultural competence is about managing conversations with people who see the world differently from us. To elaborate, this means that when two people from different cultural backgrounds meet, they may have different feelings (affective), different ways of thinking (cognitive), and different habits (behavioral). A competent person knows how to handle these differences smoothly without causing offense or misunderstanding.

2.2.2. Byram's (1997) Model of Intercultural Communicative Competence

The concept of Intercultural Communicative Competence (ICC) has been extensively discussed in the field of language education. One of the most influential contributions to this area was made by Michael Byram in his 1997 book *Teaching and Assessing Intercultural Communicative Competence*. Byram (1997) defines someone with ICC as a person who is "able to interact with people from another country and culture in a foreign language. They are able to negotiate a mode of communication and interaction which is satisfactory to themselves and the other and they are able to act as mediators between people of different cultural origins." In other words, a learner who possesses intercultural communicative competence can do more than just speak a foreign language correctly. They can successfully communicate with people from different cultural backgrounds, find ways to understand each other even when cultural differences exist, and help others from different cultures understand one another.

In Byram's view, the goal of language learning is not to produce a learner who simply imitates a native speaker, but rather to produce an intercultural speaker who can navigate between different cultures and act as a bridge or mediator. A learner with ICC does not need to forget their own cultural identity or pretend to be a native English speaker. Instead, they can use their knowledge of the foreign language and their understanding of cultural differences to communicate successfully with people from other cultures while also helping those people understand their own cultural perspective.

Byram's model consists of five components, which he calls "savoirs" (a French term meaning "knowledge" or "things to know"), as cited in Byram, 1997. These five components work together to help individuals communicate effectively and appropriately with people from different cultural backgrounds.

2.2.2.1. Attitudes

According to Byram (1997), attitudes include "curiosity and openness, readiness to suspend disbelief about other cultures and beliefs about one's own." In simple terms, learners should be interested in learning about other cultures and willing to avoid judging them immediately. Instead of thinking "this is strange" or "this is wrong," they should take time to understand why people from other cultures behave differently. They should also be ready to question their own cultural beliefs and consider how their behaviors might appear to someone from another culture. A learner with the right attitude does not judge another culture as strange or inferior. For example, when an EFL learner from a culture where students raise their hands before

speaking sees a classroom in another country where students speak freely without raising their hands, they should not immediately think "this is disrespectful." Instead, they should try to understand that different cultures have different rules for classroom communication.

2.2.2.2. Knowledge

The second component, knowledge, is defined by Byram (1997) as "knowledge of social groups and their products, practices, and values in one's own country and in other countries." In simple words, learners need to understand how different social groups function, what they create, how they behave, and what they value. This includes knowledge of traditions, holidays, food, art, social rules, and how people from different cultures perceive others. For example, knowing that in some educational systems students call their teachers by their first name, while in others they must use formal titles like "Mr." or "Mrs." and stand up when the teacher enters the room is part of this knowledge.

2.2.2.3. Skills of Interpreting and Relating

The third component, skills of interpreting and relating, is defined by Byram (1997) as "the ability to interpret a document or event from another culture and relate it to one's own." In other words, learners should be able to examine something from another culture, such as a news article, a movie, or a social custom, and explain its meaning. They should also be able to connect it to something similar in their own culture. For example, an EFL learner who watches an English classroom interaction in a video can explain how students participate in class and compare it with participation styles in their own educational context.

2.2.2.4. Skills of Discovery and Interaction

The fourth component in Byram's model, known as skills of discovery and interaction (*savoir apprendre/faire*), is defined as "the ability to acquire new knowledge of a culture and cultural practices and the ability to use knowledge, attitudes, and skills under the constraints of real-time communication and interaction." Put simply, learners should be able to learn new things about another culture while interacting with people from that culture in real time, without having time to prepare or look things up in advance.

For example, when an EFL learner meets a student from another country and wants to know if it is polite to ask about their family, they must quickly decide what to say and how to say it.

They cannot stop to check a book or ask a teacher. Instead, they rely on what they already know while learning new information during the conversation itself.

2.2.2.5. Critical Cultural Awareness

Critical cultural awareness, which Byram (1997) calls *savoir s'engager*, is defined as "the ability to evaluate, critically and on the basis of explicit criteria, perspectives, practices, and products in one's own and other cultures and countries." In essence, learners should be able to evaluate cultural practices, behaviors, and products fairly using clear criteria, not just personal feelings or biases.

For example, when an EFL learner reads about a school system where students wear uniforms and another where they do not, they should not simply say "uniforms are better" or "no uniforms are better." Instead, they should consider the reasons behind each system, such as equality, freedom of expression, or cost. Based on these criteria, they can form a balanced and informed judgment.

2.2.3. Global English Varieties and World Englishes

Global English varieties refer to the different forms of English used across the world. Kachru (1985) classifies these varieties into three main concentric circles: the Inner Circle, the Outer Circle, and the Expanding Circle. The Inner Circle represents countries where English is spoken as a native language, including the United Kingdom, the United States, and Australia. The Outer Circle includes countries where English functions as a second or official language, such as India, Nigeria, and Singapore. In contrast, the Expanding Circle refers to countries where English is learned as a foreign language, including China, Brazil, and Algeria.

The concept of World Englishes is closely related to these global varieties. It is used by linguists to describe the diversity of English around the world. As explained in the *Encyclopedia of Bilingual Education* (Gonzalez, 2008), this concept emphasizes that all English varieties have their own unique features, and none is considered superior or inferior to another. In other words, English is not limited to one standard form, such as British or American English, but varies depending on its social and cultural context. Therefore, all forms of English are considered valid as long as they serve effective communication.

2.2.4. The Importance of Exposing Learners to Global English Varieties

Exposing EFL learners to different global English varieties is important for several reasons. First, it helps learners understand real-world English. In everyday communication, learners are likely to encounter a wide range of accents and expressions, not only British or American English. For instance, a learner who is only familiar with American English may find it difficult to understand speakers from countries such as India or Nigeria. Matsuda (2012) argues that exposure to multiple English varieties improves learners' listening comprehension and increases their confidence in international communication.

Second, exposure to global English varieties promotes respect and reduces linguistic prejudice. When learners are introduced to different accents, they begin to understand that no single variety of English is superior to others. As the linguist David Crystal explains, "It is essential for learners to be aware of the diversity of English worldwide, as English is not a single variety but a collection of many different forms." In other words, a speaker from Nigeria is not "incorrect" simply because their English differs from that of a British speaker. This awareness helps create a more inclusive and supportive learning environment where all learners feel respected and valued.

Third, exposing learners to global varieties prepares them for real-life communication. English is widely used today as a global lingua franca, meaning that it serves as a common language among people from diverse cultural and linguistic backgrounds. For example, a businessperson from China may communicate in English with a client from Brazil. Although neither of them is a native speaker, they can still communicate effectively using English. McArthur (2001) states that English is widely recognized as a global lingua franca, connecting people from different linguistic and cultural backgrounds without requiring native-like proficiency. Therefore, exposing learners to global English varieties not only improves their communicative skills but also prepares them to understand the cultural dimensions of language use.

2.2.5. The Relationship Between Language and Culture

The relationship between language and culture is very close and inseparable. According to Claire Kramsch (1993), "language is not only a system of communication, but also a way of expressing culture." In other words, when people use a language, they also express their values, beliefs, and social norms.

To begin with, language reflects culture, this means that the words, expressions, and meanings used in a language are influenced by the culture of its speakers. For example, certain

expressions or idioms may only exist only in one culture and may be difficult to understand for learners from different cultural backgrounds. Therefore, learning a language also requires understanding the cultural context in which it is used.

Additionally, culture influences how language is used in communication. Different cultures have different ways of speaking, such as how to greet others, show respect, or express opinions. For instance, in some cultures, people speak directly, while in others, they prefer indirect communication. As Kramsch (1993) further explains, understanding these differences is essential for effective communication.

Finally, language learning helps learners develop intercultural competence, this implies that learners become able to communicate and interact with people from different cultures in an appropriate and respectful way. By learning both language and culture, students can avoid misunderstandings and communicate more successfully in real-life situations.

2.2.6. Related Studies on AI and Intercultural Competence: Exposure to Global English Varieties

The relationship between artificial intelligence and intercultural competence, particularly through exposure to global English varieties, has received increasing attention in recent research. A scoping review by Masoudi (2025) examined peer-reviewed studies published between 2010 and 2024. The findings show that AI platforms such as ChatGPT, Grammarly, and ELSA can improve learner motivation, enhance language proficiency (especially in writing and speaking), and support the development of intercultural competence by exposing learners to different cultural contexts. This review highlights that AI technologies are reshaping EFL education by offering interactive and personalized learning experiences that encourage cross-cultural understanding.

In the Chinese context, Qu and Chen (2026) conducted a quasi-experimental study on the impact of voice-based generative AI interlocutors on EFL learners' intercultural communicative competence. The study compared an experimental group using GenAI with a control group using peer interaction over a 10-week course. The results indicated that the experimental group performed better in intercultural speaking tasks and reported higher levels of perceived intercultural competence. In addition, learners using GenAI experienced lower speaking anxiety. The qualitative findings further showed that AI provided a psychologically safe environment that encouraged learners to take risks and receive immediate cultural feedback.

Another study, conducted from a critical ecological perspective, explored the role of AI in developing Global Englishes-oriented teaching materials. The results revealed several benefits, including improved efficiency in materials design, better student-centered learning, and increased learner engagement. However, the study also identified challenges such as rigid curricula, technical limitations, and inaccuracies in AI outputs. It concluded that while AI can support teaching practices, it cannot replace the teacher's pedagogical and cultural role.

Similarly, Sayer and Stefano (2025) examined the pedagogical use of ChatGPT for representing different varieties of Global Englishes. The authors argue that since English is a pluricentric language, learners should be exposed to its diverse forms. They propose the use of ChatGPT with structured prompting techniques to generate examples of different English varieties and encourage learners to reflect on sociolinguistic differences. They also suggest classroom tasks that help students explore global English usage in meaningful contexts.

A cross-cultural study by Abdelhalim, Alsahil, and Baek (2025) investigated how EFL university teachers in Saudi Arabia, Egypt, Mexico, and Turkey integrate generative AI into their teaching practices. The findings revealed differences in pedagogical approaches across countries. While Mexican and Turkish teachers tended to adopt constructivist approaches, Saudi and Egyptian teachers were more aligned with traditional, teacher-centered methods. The study also found that teachers' attitudes toward AI strongly influenced their willingness to use it in classrooms. This highlights the importance of context-sensitive training and policy development.

In the Algerian context, research on AI and intercultural competence is still developing. Abdelhadi (2025) explored EFL university teachers' perceptions of AI in teaching culture. The results of a questionnaire administered to 89 teachers showed generally positive attitudes toward AI, with many participants recognizing its potential to enhance students' cultural competence. However, the study also noted that AI integration in Algerian classrooms is still in its early stages.

In addition, Sellami (2025) conducted an experimental study at the University of Guelma to examine the effect of Google's Gemini AI chatbot on learners' intercultural sensitivity. Using a quasi-experimental design with eight students, the study found a significant improvement in intercultural sensitivity after the intervention. Learners also developed greater cultural awareness and more positive attitudes toward other cultures. These results suggest that AI-based tools can effectively support intercultural learning in the Algerian EFL context.

Conclusion

This chapter has presented the literature review related to Artificial Intelligence (AI) and intercultural communicative competence as the two main concepts of this study. The first section presented the definition of AI, its development in education, AI-powered tools in language learning, as well as the benefits, challenges, and limitations of its integration in EFL contexts. The second section discussed intercultural communicative competence, global English varieties, and the role of AI in developing learners' intercultural awareness. In the next chapter, the research design and methodology of the study will be presented.

Chapter Three Method

Introduction

The present chapter represents the practical part of this research, focusing on the methodology adopted to investigate the role of AI tools in exposing EFL learners to global English varieties and developing their intercultural competence. It begins by presenting the research setting, followed by a detailed explanation of the research design and approach. The chapter also introduces the population and the sample. Furthermore, it describes the data collection tools, namely the students' questionnaire and the teachers' interview, as well as the procedures followed in collecting and analyzing the data.

3.1 Research Setting

This study was conducted at Chadli Bendjedid University in El Tarf, within the Department of English. The participants are third-year EFL students from different social and educational backgrounds. This level was selected because students are expected to have a relatively advanced level of English. At this stage, learners are more able to use AI tools and interact with different English varieties and cultures. The setting was therefore chosen to explore how AI tools can expose students to global English varieties and help develop their intercultural competence in a real university context.

3.2. Research Design

Research design refers to the overall strategy that a researcher uses to integrate the different components of a study in a coherent and logical way. Kerlinger (1986) defines it as “the plan, structure, and strategy of investigation conceived so as to obtain answers to research questions

and to control variance” (p. 275). This means that research design provides a clear and organized framework that guides the researcher in determining how data will be collected and how potential variables will be controlled. Similarly, Creswell (2014) emphasizes that research design serves as a conceptual blueprint for the entire research process, including data collection, measurement, analysis, and interpretation. Thus, it acts as a comprehensive guide that leads the researcher from the formulation of research questions to the presentation of final results.

In the present study, an exploratory research design was adopted to investigate the role of AI tools in exposing EFL learners to global English varieties and developing their intercultural competence among third-year university students. The decision to use this design stems from the nature of the topic, which explores learners’ and teachers’ perceptions of AI tools and how they contribute to language learning, particularly in terms of exposure to different English accents and cultural aspects in the Algerian context. According to Singh (2021), “exploratory research is a study that seeks to answer a question or address a phenomenon” (p. 2), which aligns with the objective of this research: to gain deeper insights into the use of AI tools in EFL learning and their potential impact on students’ intercultural competence within the selected educational setting.

3.3. Research Approach

Depending on the nature and objectives of a study, a researcher may choose between a quantitative, qualitative, or mixed methods approach. A quantitative approach generally focuses on objective measurement and the statistical analysis of data gathered through tools such as surveys and tests. In contrast, a qualitative approach aims to gain an in-depth understanding of phenomena, typically through the use of open-ended questions, interviews, and observations. For the purpose of this study, a mixed methods approach was adopted. Creswell and Plano Clark (2011) define mixed methods research as “an approach to inquiry that combines or associates both qualitative and quantitative forms” (p. 5). In other words, this approach enables the researcher to obtain a more comprehensive understanding of the research problem by integrating numerical data with detailed qualitative insights. Similarly, Ivankova, Creswell, and Stick (2006) describe mixed methods as a procedure for collecting, analyzing, and integrating both quantitative and qualitative data within a single study. This definition highlights the complementary nature of this approach, making it particularly suitable for

investigating complex educational phenomena such as the role of AI tools in enhancing learners' intercultural competence.

In the present study, a questionnaire was administered to third-year university students to collect quantitative data, while an interview was conducted with EFL teachers to obtain qualitative insights. This combination of tools allows the researcher to explore the role of AI tools in exposing learners to global English varieties and developing their intercultural competence from different perspectives. As Ivankova, Creswell, and Stick (2006) suggest, the mixed methods approach enables researchers to address research questions with both depth and breadth, thereby enhancing the validity of the findings and making them more relevant to the broader educational context.

3.4 Population

The term population refers to the entire group of individuals relevant to the focus of a particular research study. Taherdoost (2016) defines population as "the entire set of individuals or objects that share common characteristics and are of interest to the researcher" (p. 28). This highlights the importance of participants in providing the necessary data to answer the research questions. In the present study, the population includes third-year university students (N=46) and EFL teachers at Chadli Bendjedid University El Tarf, who are directly involved in the English language teaching and learning process. This population is relevant to the study as it allows the researcher to explore how AI tools expose learners to global English varieties and contribute to the development of their intercultural competence.

3.5 Sample

A sample is a specific portion of the population selected for participation in the study. Hanlon and Larget (2011) define the sample as "a subset of the individuals in a population" (p. 7), meaning it represents a manageable group drawn from the larger population. Similarly, Riazi (2016) describes the sample as "a small proportion of a population which researchers consider for study when investigating a particular topic" (p. 284). This emphasizes the importance of selecting a representative group to ensure meaningful data collection.

For the current study, the sample consists of twenty five (25) third-year university students, selected randomly to complete a questionnaire examining their exposure to global English varieties through AI tools, and four (4) EFL teachers, who were interviewed to provide in-

depth insights into the role of AI tools in enhancing learners' intercultural competence in the classroom.

In the current study, a purposive-convenience sampling technique was used. According to Etikan, Musa, and Alkassim (2016), purposive sampling is “the deliberate choice of a participant based on the qualities the participant possesses” (p. 2), while convenience sampling refers to selecting participants based on their accessibility and proximity to the researcher. The combination of these two approaches allows the researcher to intentionally select participants who meet specific criteria while also considering practical limitations such as time and accessibility. This method enabled the researcher to collect data efficiently from individuals who are both relevant to the research topic and easily accessible within the educational setting. The participants in this study included third-year students and EFL teachers at Chadli Bendjedid University, El Tarf. The students were selected because they had been exposed to AI tools in their learning process and could provide insights into how these tools expose them to global English varieties and influence their intercultural competence. Similarly, the teachers were chosen due to their active involvement in integrating AI tools into their teaching practices. Their professional perspectives are essential for evaluating the effectiveness of AI tools in the classroom.

3.6 Data Collection Tools

Data collection tools refer to the methods and instruments used by researchers to gather information relevant to their studies. According to Kumar (2011), data collection techniques are “the procedures through which information is collected for the purpose of answering research questions and testing hypotheses” (p. 140). In other words, these tools help researchers obtain the necessary data required to understand and analyze the research problem.

For the purpose of the current study, two main tools were used: a questionnaire and an interview. The questionnaire was administered to third-year university students to explore their perceptions of the role of AI tools in exposing them to global English varieties and developing their intercultural competence. On the other hand, the interview was conducted with EFL teachers to gain deeper insights into their views regarding the integration of AI tools in English language teaching and their impact on learners' intercultural awareness. The use of both tools allowed the researcher to collect data from different perspectives and enhanced the validity and depth of the findings through the combination of quantitative and qualitative approaches.

3.7 Description of the Questionnaire

For the present study, the questionnaire was selected as a research tool due to its effectiveness in collecting a large amount of data within a short period of time. It is also practical in terms of time, cost, and ease of administration. The questionnaire was self-designed and developed specifically to investigate third-year university students' perceptions regarding the role of AI tools in exposing learners to global English varieties and developing their intercultural competence. It consists of thirteen (13) questions, including Likert-scale items, multiple-choice questions, and open-ended questions. The questionnaire is divided into three main sections.

Section One: General Information

To begin with, Section One (Question 1) contains one multiple-choice question that aims to collect general information about students' use of AI tools in English language learning. More specifically, the question examines whether learners have previous experience using AI-based tools to learn English, which helps determine their familiarity with such technologies.

Section Two: Use of AI Tools in Language Learning

Moving on, Section Two (Questions 2 to 6) focuses on students' perceptions of the use of AI tools in English language learning. Questions 2 to 4 are Likert-scale items that explore learners' attitudes toward AI tools, including their role in making language learning more engaging, providing immediate feedback, and encouraging independent learning. Each question is followed by an open-ended "Why?" prompt to allow students to justify their answers and provide deeper explanations.

In addition, Questions 5 and 6 are open-ended questions designed to gather more detailed insights into students' experiences with AI tools. Question 5 investigates the AI tools most commonly used by learners and the reasons behind their preferences, while Question 6 explores how AI tools contribute to improving students' English language skills.

Section Three: AI, Global English Varieties, and Intercultural Competence

Finally, Section Three (Questions 7 to 13) examines the relationship between AI tools, global English varieties, and intercultural competence. Questions 7 to 11 are Likert-scale items

that investigate learners' perceptions regarding the role of AI tools in exposing them to different English varieties, increasing their awareness of cultural differences, and improving their ability to communicate with people from different cultural backgrounds. Similar to the previous section, these questions include open-ended "Why?" prompts to encourage participants to explain their responses.

Moreover, Questions 12 and 13 are open-ended questions that allow students to express their personal opinions and experiences in greater detail. Specifically, Question 12 explores how AI tools help learners understand different English accents and varieties, whereas Question 13 investigates students' views on the role of AI tools in developing intercultural competence.

3.8 Description of the Interview

The interview aims to explore teachers' perceptions regarding the role of AI tools in exposing EFL learners to global English varieties and developing their intercultural competence. It was conducted orally in a face-to-face format with EFL teachers at Chadli Bendjedid University, El Tarf. The interview is structured into two main sections.

Section One: Teacher's Background (3 Questions)

Question 1 aims to identify how long the teacher has been teaching English as a foreign language. This helps determine the teachers' level of experience and professional background in EFL teaching.

Question 2 explores the level taught by the participants, including first year, second year, third year, and Master students. This question helps identify the educational context in which teachers interact with learners.

Question 3 examines whether teachers have previously used AI tools in their teaching practices. It aims to determine their familiarity and experience with integrating AI technologies into language instruction.

Section Two: Teachers' Perceptions of AI and Intercultural Competence (8 Questions)

Question 4 investigates whether AI tools expose students to different English accents and varieties. Teachers are invited to explain how AI tools may contribute to learners' awareness of global English use.

Question 5 explores whether teachers have noticed changes in students' awareness of global English varieties after using AI tools. This question focuses on learners' understanding of English beyond traditional native-speaker models.

Question 6 examines whether AI tools can help students understand cultural differences beyond British and American cultures. It seeks to identify the role of AI in promoting intercultural awareness and cultural understanding.

Question 7 focuses on whether AI tools help learners become more familiar with non-native English pronunciation patterns. This question aims to explore the contribution of AI tools to learners' exposure to diverse forms of spoken English.

Question 8 investigates whether AI tools reinforce or reduce cultural stereotypes among learners. Teachers are encouraged to discuss the possible positive or negative cultural effects of AI-assisted learning.

Question 9 explores the potential limitations of using AI tools to develop students' intercultural competence. These limitations may include technical issues, lack of guidance, inaccurate information, or overreliance on technology.

Question 10 examines whether teachers would recommend integrating AI tools into EFL classrooms to enhance students' intercultural competence. This question highlights teachers' attitudes toward the educational value of AI technologies.

Finally, Question 11 invites teachers to provide additional comments or suggestions regarding AI and intercultural learning. Their responses may offer valuable recommendations and practical insights related to the integration of AI tools in EFL education.

Conclusion

his chapter presented the methodology adopted in the present study, which aims to explore the role of AI tools in exposing EFL learners to global English varieties and developing their intercultural competence. It provided a detailed description of the research setting, research design, research approach, population, sample, and sampling technique. Furthermore, the chapter explained the data collection tools used in this study, namely the students' questionnaire and the teachers' interview, as well as the procedures followed in collecting the required data. The next chapter will present and analyze the findings obtained from these research instruments in order to answer the research questions and achieve the objectives of the study.

Chapter Four

Results

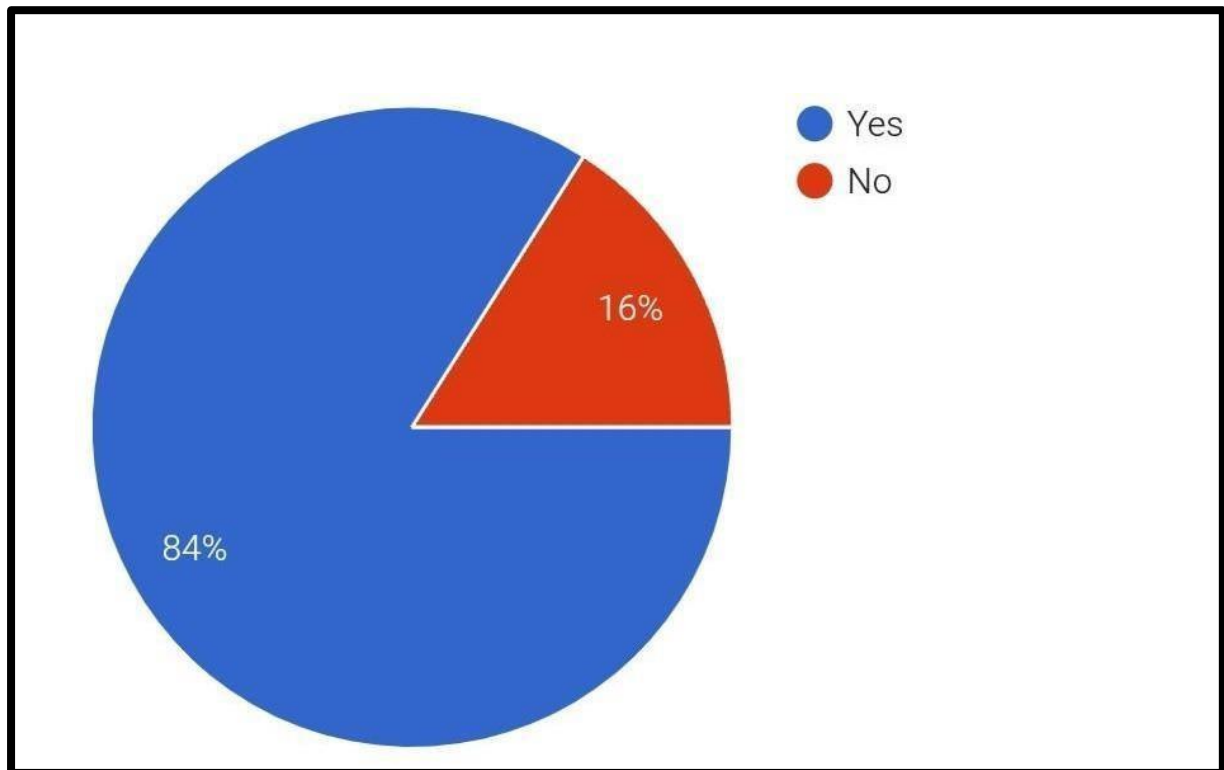
Introduction

This chapter presents a detailed analysis of the collected data in order to explore both students' and teachers' perceptions regarding the role of Artificial Intelligence (AI) tools in exposing EFL learners to global English varieties and developing their intercultural competence. The analysis aims to identify how AI tools contribute to learners' awareness of different English varieties, enhance their understanding of cultural differences, and improve their intercultural communication skills. It also examines teachers' perspectives regarding the effectiveness, benefits, and potential limitations of integrating AI tools into English language learning and teaching. The data were collected through two main research instruments: a questionnaire administered to third-year university students and an oral face-to-face interview conducted with EFL teachers at Chadli Bendjedid University, El Tarf. The findings are analyzed both quantitatively and qualitatively and are organized into two main sections based on the participants' responses.

Section One: General Information

Question1. Have you ever used AI-based tools to learn English?

Figure 1: Use of AI-Based Tools for Learning English



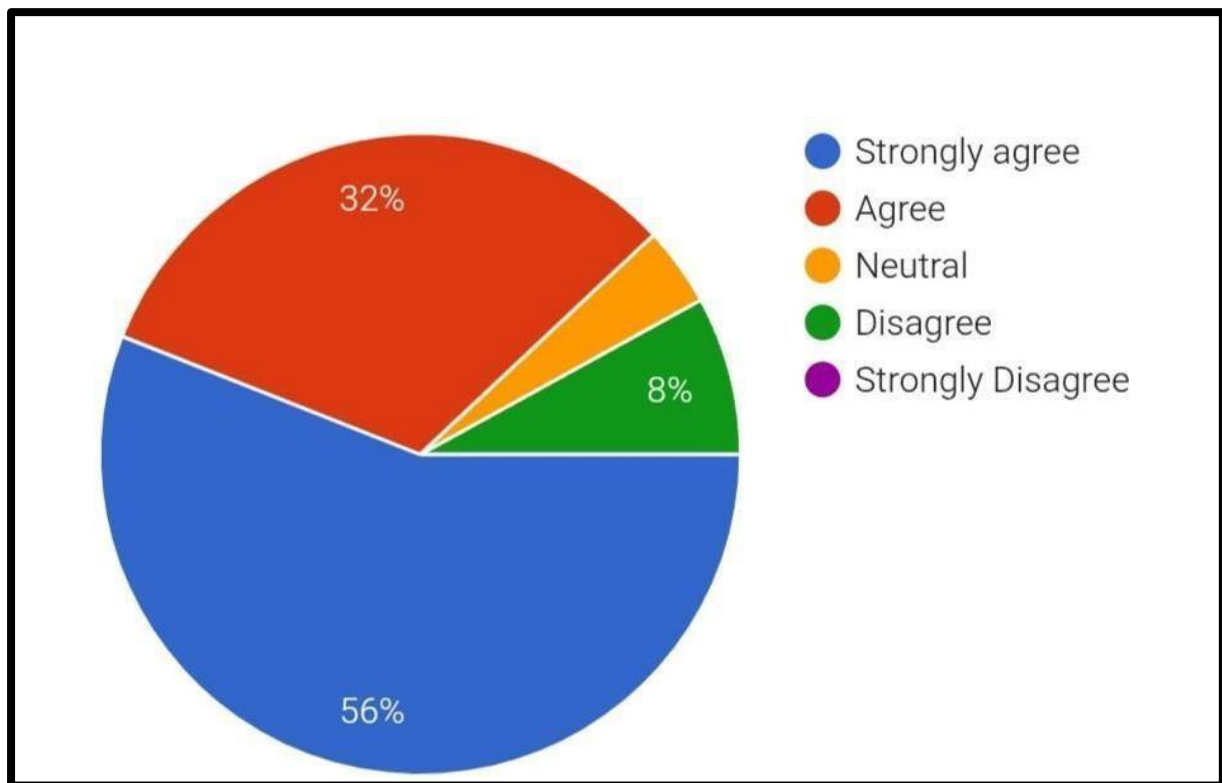
As illustrated in the pie chart, the majority of the participants reported that they had used AI-based tools to learn English, representing 84% of the total sample, while only 16% indicated that they had never used such tools. Out of the 25 students who responded to the questionnaire, 21 students answered “Yes,” whereas 4 students answered “No.” The data indicate that most

learners are familiar with AI-based tools and have previous experience using them in English language learning.

Section two :Use of AI Tools in Language Learning

Question 2.I find that AI tools make English learning more engaging.why?

Figure 2.Students' Perceptions of AI Tools in Making English Learning More Engaging



A Likert scale was used to assess students' perceptions of whether AI tools make English learning more engaging. The results show that the majority of participants (56%) strongly

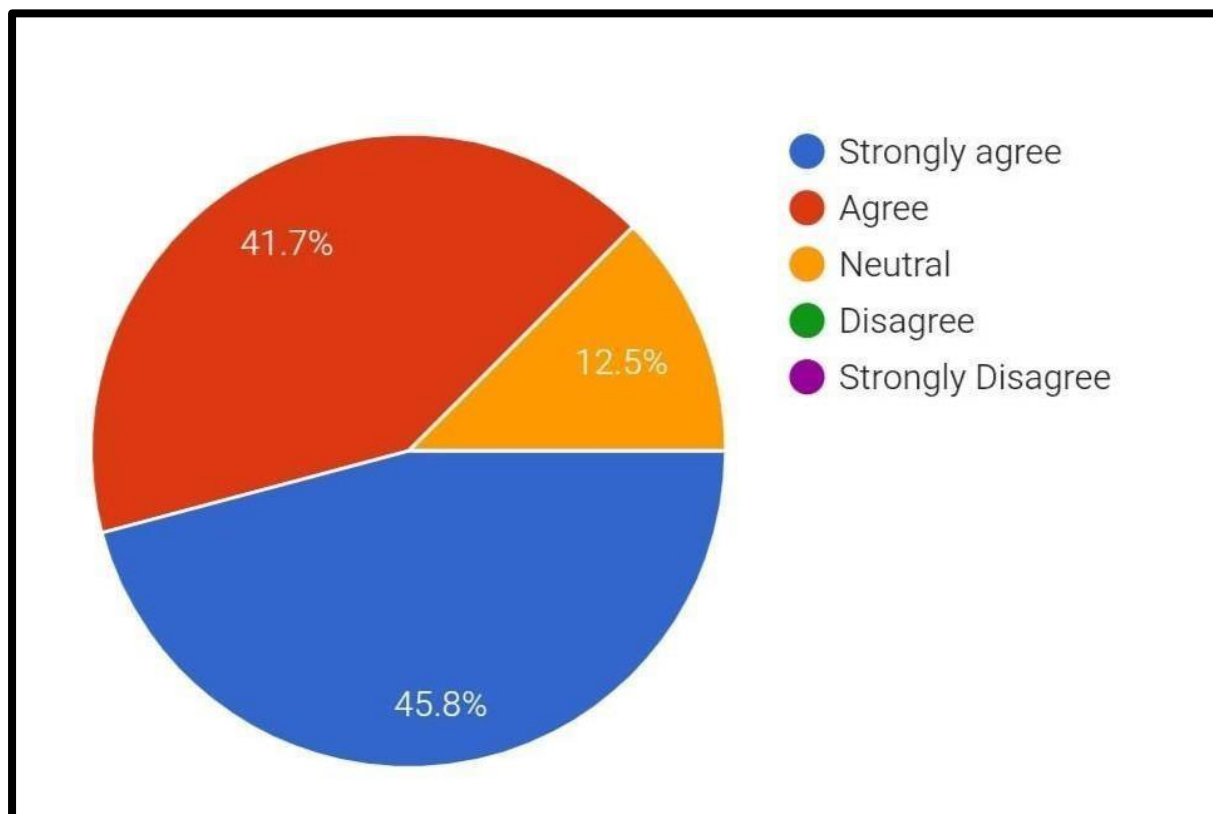
agreed with the statement, while 32% agreed, indicating a generally positive attitude toward the use of AI tools in enhancing learners' engagement. On the other hand, a small proportion of students (4%) remained neutral, whereas 8% disagreed, and no participants (0%) strongly disagreed.

Students who strongly agreed stated that AI tools are always available and easily accessible, making learning more flexible and engaging. They also emphasized that AI provides useful learning resources such as visual aids, feedback, and examples that help them understand English more effectively. In addition, some learners mentioned that AI tools improve vocabulary, writing skills, and motivation, while allowing them to practice English anytime without restrictions.

Similarly, students who agreed explained that AI tools are useful in supporting English learning, particularly in grammar and writing practice. However, they also pointed out that AI tools should not replace human interaction, as communication with teachers and classmates remains important for effective learning. They further noted that AI tools help them review lessons and practice English outside the classroom, although teacher guidance is still necessary. On the other hand, a small number of students remained neutral, indicating that AI tools can sometimes be helpful but may also be distracting depending on how they are used. In contrast, a few students disagreed with the statement, arguing that AI tools may provide easy access to information without always ensuring deep learning, which could lead to dependency rather than understanding. Overall, the findings indicate that students generally hold a positive perception of AI tools in enhancing engagement in English learning.

Question 3 .I benefit from the immediate feedback that AI tools provide.why?

Figure 3.Students' Perceptions of the Immediate Feedback Provided by AI Tools



As clearly manifested through the students' responses, the majority of participants (45.8%) strongly agreed that they benefit from the immediate feedback provided by AI tools, while 41.7% agreed. Meanwhile, 12.5% selected the neutral option, which may reflect that some learners do not always find AI-generated feedback consistently clear or useful. On the other hand, none of the participants disagreed or strongly disagreed, indicating an overall positive perception of the role of immediate AI feedback in English learning.

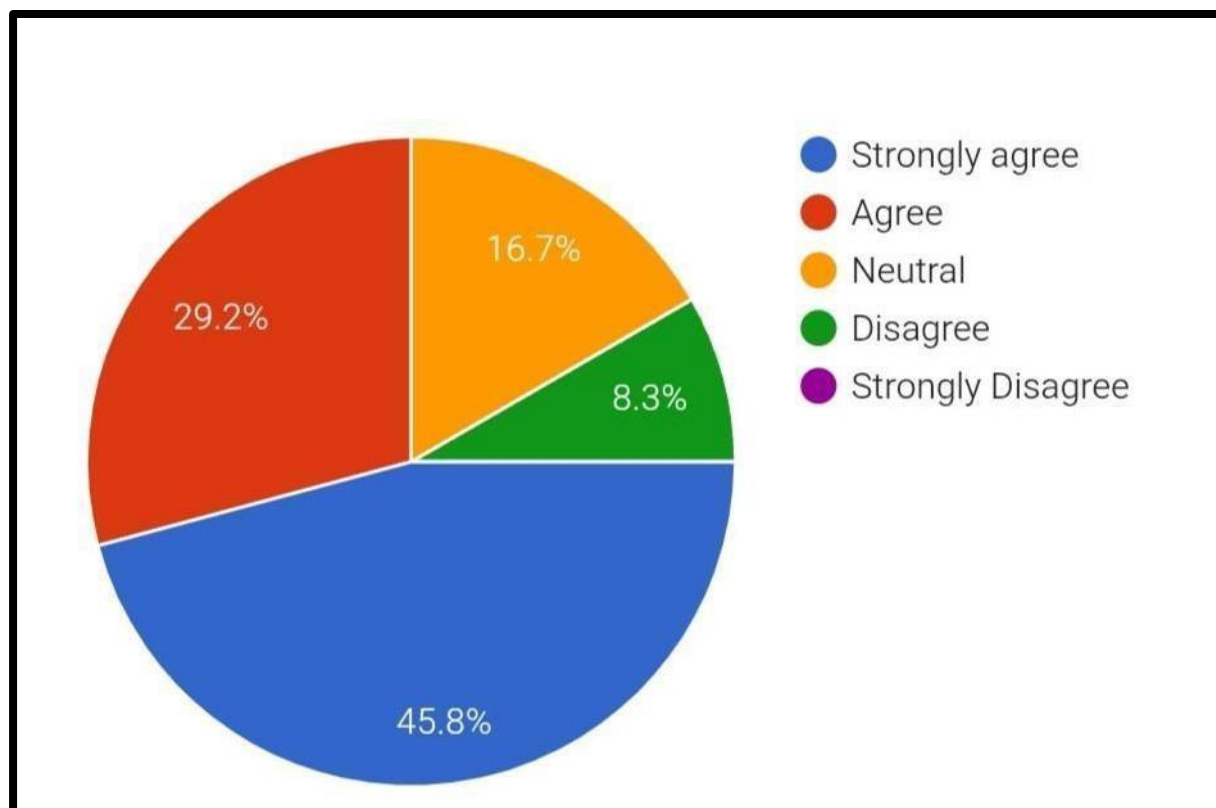
Students who strongly agreed explained that immediate feedback is quick, effective, and accurate. They emphasized that AI tools help them identify mistakes instantly without waiting for the teacher, which supports faster learning and better understanding. Some learners also noted that immediate feedback allows them to check their work independently, learn from their mistakes, and feel more confident in their learning process.

Similarly, students who agreed stated that AI feedback provides faster responses and helps them become more independent and responsible for their work. They highlighted that AI tools can save time, provide solutions to complex questions, and improve their language skills through continuous correction and guidance. In addition, some learners mentioned that AI tools help them complete tasks more efficiently and reduce time spent searching for answers.

Meanwhile, students who remained neutral indicated that AI feedback is sometimes useful, but not always reliable or clear. Some explained that feedback can occasionally be too general, repetitive, or similar to copied responses, which may reduce its effectiveness.

Question 4. I can practice English independently using AI tools.why?

Figure 4. Students' Perceptions of Practicing English Independently Using AI Tools



As indicated by the participants' responses, the majority of students perceived AI tools as effective in helping them practice English independently. (45.8%) strongly agreed that they can practice English independently using AI tools, while 29.2% agreed. Meanwhile, 16.7% selected the neutral option, which may indicate that some learners find AI useful in certain situations but still need additional support. On the other hand, 8.3% disagreed, whereas none of the participants strongly disagreed.

Students who strongly agreed explained that AI tools allow them to practice English anytime and anywhere without depending on a teacher or a classroom schedule. They emphasized that AI makes learning flexible and convenient, as they can repeat exercises, practice at different times of the day, and receive immediate correction of grammar and pronunciation. Some learners also noted that this independence helps them improve at their own pace.

Similarly, students who agreed stated that AI tools allow them to learn different topics beyond classroom content. They highlighted that AI provides simple explanations, useful examples, and opportunities to practice various language skills such as reading, writing, speaking, and listening. In addition, some learners mentioned that AI reduces feelings of shyness and helps

them practice more confidently.

On the other hand, students who remained neutral indicated that AI tools are helpful in some aspects, especially writing and vocabulary, but they may still require human explanation or feedback in certain cases. In contrast, a few students disagreed, arguing that language learning is a social process that requires human interaction. They also pointed out that AI tools may sometimes provide inaccurate answers, which can reduce trust in their effectiveness. Overall, the findings indicate that students generally perceive AI tools as useful in supporting independent English learning, while still recognizing the importance of human interaction in language development.

Question 5. Which AI tool do you use most in learning English? Why?

When asked about the AI tools they use most in learning English, students' responses revealed that ChatGPT was the most frequently used tool among participants. The majority of students explained that they prefer ChatGPT because it is easy to use, fast, efficient, and provides quick answers to their questions. Many learners also stated that it helps them practice English, improve writing skills, correct mistakes, and access information easily. Some students highlighted that ChatGPT is interactive and enjoyable because it works in a conversational way. In addition to ChatGPT, some participants mentioned Gemini as another useful AI tool, mainly because it provides different information and supports learning in various ways. Other students reported using Duolingo, which was appreciated for making language learning simple, enjoyable, and helpful for vocabulary development and pronunciation improvement.

Furthermore, Grammarly was identified as a useful tool for improving grammar accuracy and writing skills, while Google Translate and other translation tools were mainly used to understand difficult words, sentences, pronunciation, and different English accents. However, a few participants noted some limitations of AI tools. For example, one student mentioned that ChatGPT can sometimes provide confusing or inaccurate answers, which may reduce trust in its effectiveness.

Question 6. In what ways do AI tools help you improve your English language skills? Why?

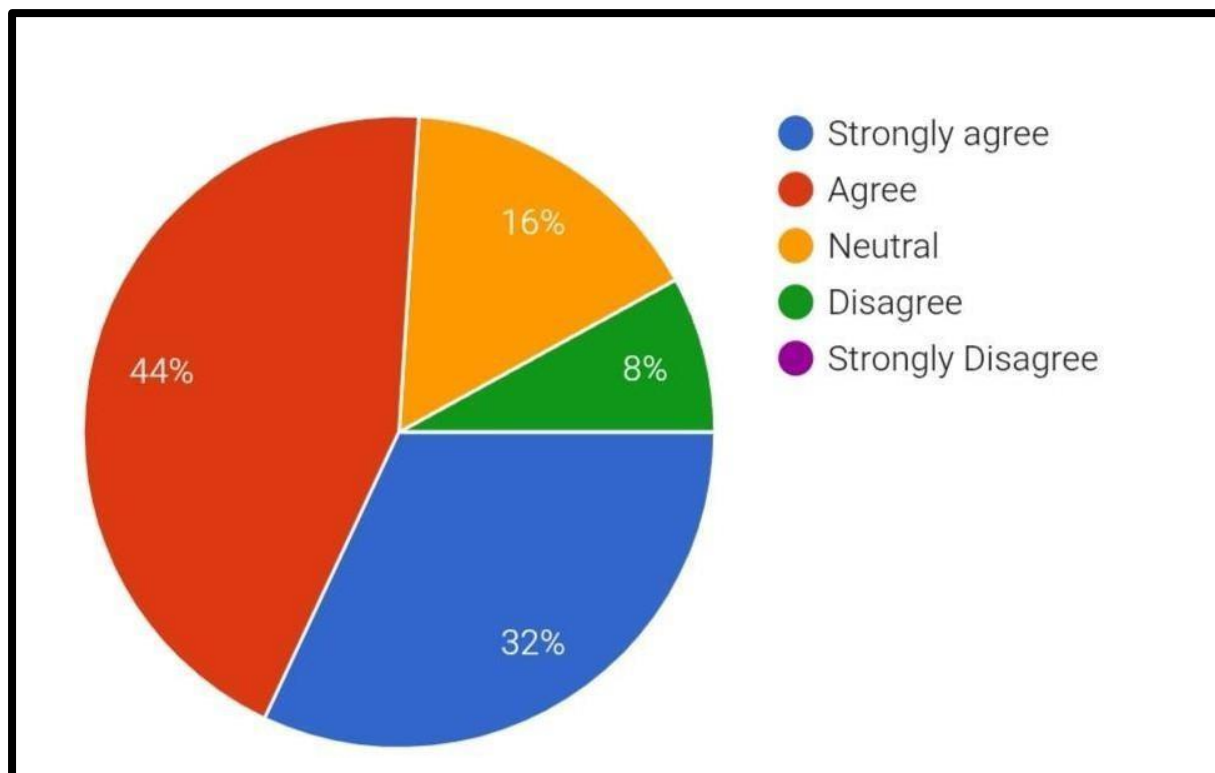
In exploring the main ways AI tools help improve English language skills, participants' views highlighted several common benefits. The majority of participants explained that AI tools mainly help them improve grammar, vocabulary, speaking, pronunciation, and writing skills. Many learners stated that AI tools correct grammar and spelling mistakes instantly, which helps them learn from errors and improve writing accuracy. Others mentioned that AI tools suggest better words and expressions, which supports vocabulary development and makes communication more natural.

In addition, several students highlighted that AI tools improve speaking and pronunciation by allowing them to practice English regularly, listen to correct speech, and simulate real conversations. Some learners also explained that these tools enhance listening skills through videos, conversations, and interactive activities. Furthermore, AI tools were seen as helpful in reducing fear of making mistakes, increasing confidence, and encouraging independent practice. Moreover, a few participants noted that AI tools support creativity by providing ideas and helping learners solve communication difficulties, such as finding appropriate words or improving sentence structure. However, one student pointed out that AI tools may sometimes provide incorrect grammar or vocabulary, which can create confusion for learners.

Section three : AI, Global English Varieties, and Intercultural Competence

Question 7.AI tools help me understand that English has many varieties.why?

Figure 5.Students' Perceptions of AI Tools in Understanding the Varieties of English



Based on the figure above, the participants expressed generally positive views regarding the role of AI tools in helping them understand that English has many varieties. Specifically, 32% of the participants strongly agreed with this statement, while 44% agreed. A smaller proportion (16%) remained neutral, whereas only 8% disagreed. No participants strongly disagreed.

Students who strongly agreed explained that AI tools help them develop their English knowledge while exposing them to other cultures and language differences. Some learners mentioned that AI introduces them to new words from different countries and provides real examples of how English is used across cultures. Others emphasized that AI helps them compare varieties such as American and British English.

Similarly, students who agreed stated that AI tools make it easier to understand that English changes depending on geographical regions. They highlighted that AI helps them identify differences in spelling, vocabulary, and language use, such as “colour” and “color” or “lift” and “elevator.” Some participants also explained that AI provides simple explanations that make these variations easier to understand.

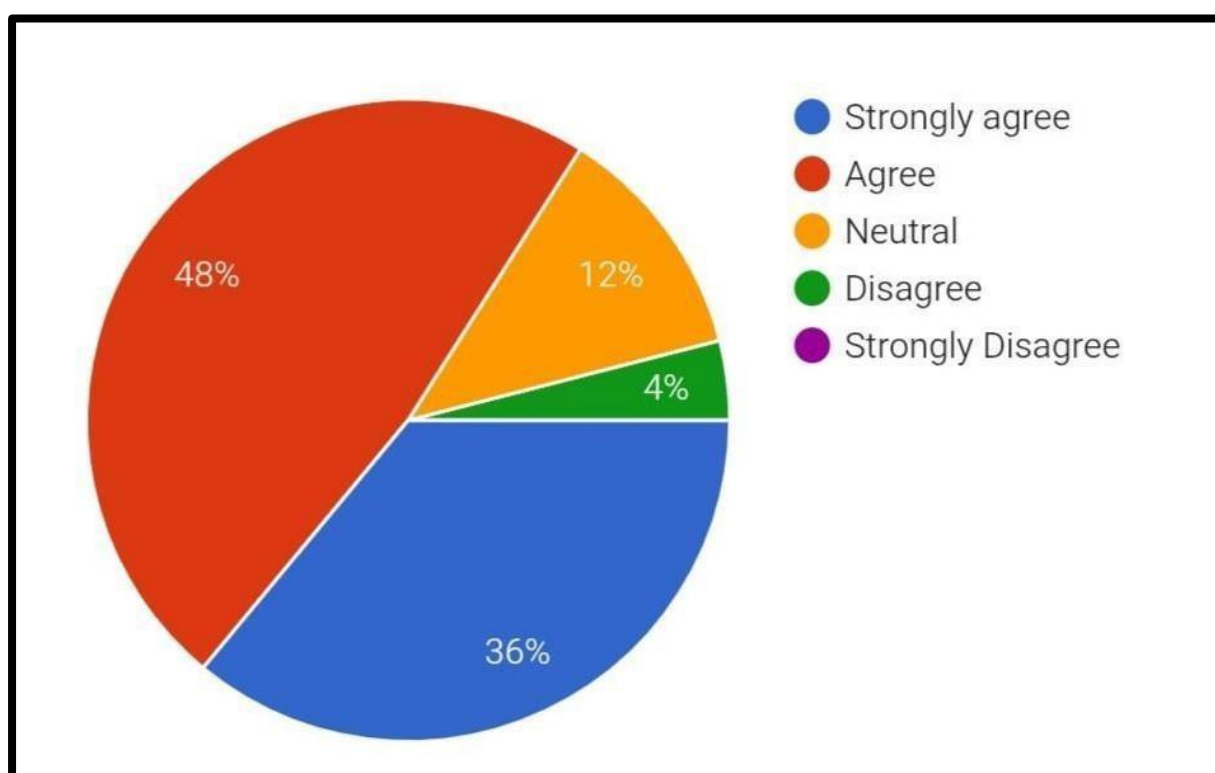
However, students who remained neutral indicated that AI does not always show English varieties unless specifically asked. Some also mentioned that they had already learned about

these differences from teachers rather than AI tools. In contrast, a few students disagreed, arguing that many AI tools mainly rely on standard academic English and that books and teachers also play an important role in understanding language varieties.

Overall, the findings indicate that AI tools are generally perceived as useful in helping students recognize global English varieties, while some learners still consider traditional learning sources important for broader understanding.

Question 8. I improve my ability to communicate with people from different cultures through AI tools.why?

Figure 6. Students' Perceptions of AI Tools in Improving Intercultural Communication Skills



From the students' answers, it can be noticed that the vast majority of participants perceive AI tools as helpful in improving their ability to communicate with people from different cultures. Specifically, 36% of the participants strongly agreed with this statement, while 48% agreed. A smaller proportion (12%) remained neutral, whereas only 4% disagreed. No participants strongly disagreed.

Students who strongly agreed explained that AI tools help them easily access information about cultural differences and appropriate communication styles. Some learners mentioned that AI

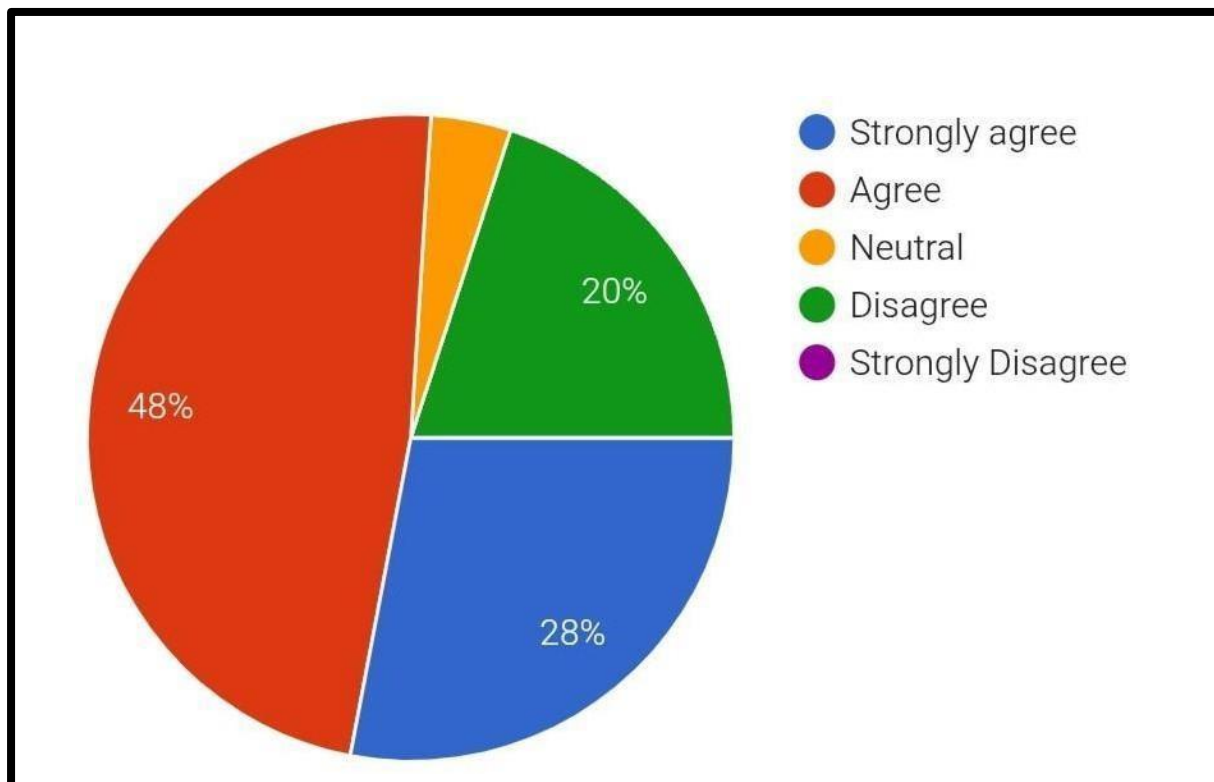
teaches them polite expressions, greetings, and what is considered acceptable or inappropriate when interacting with people from different cultures. Others emphasized that AI helps them understand cultural differences before engaging in real communication. Similarly, students who agreed stated that AI tools increase their confidence in communicating with others from different cultural backgrounds. They highlighted that AI helps them learn about traditions, holidays, food, vocabulary, and common expressions used in other cultures. Some participants also explained that practicing conversations with AI prepares them before interacting with real people from other countries.

In comparison, students who remained neutral indicated that although AI provides useful information, real communication depends on context and situations that may vary. They explained that understanding cultural facts through AI does not always guarantee effective communication in real-life interactions. In contrast, a few students disagreed, mainly because they had not personally used AI tools for this purpose.

Overall, the findings indicate that AI tools are generally perceived as supportive in developing intercultural communication skills, particularly by increasing cultural awareness, confidence, and preparation for real-life interaction.

Question 9. I understand English beyond British and American varieties because of AI tools. why?

Figure 7. Students' Perceptions of AI Tools in Understanding English Beyond British and American Varieties.



It is evident from the figure above that the majority of students (76%) agreed that AI tools help them understand English beyond British and American varieties. In particular, 28% of the participants strongly agreed, while 48% agreed with this statement. A smaller proportion (4%) remained neutral, whereas 20% disagreed. No participants strongly disagreed.

Students who strongly agreed explained that AI tools exposed them to English varieties spoken in countries such as India, Nigeria, Singapore, Australia, Canada, Ireland, South Africa, and Jamaica. Some learners mentioned that AI helps them understand different accents, vocabulary, and pronunciation patterns used in these regions. Others emphasized that without AI, their knowledge would mostly remain limited to British and American English.

Similarly, students who agreed stated that AI tools help them compare pronunciation differences and recognize that English is spoken differently across many dialects. Some participants highlighted that AI provides explanations and examples that make these differences easier to understand.

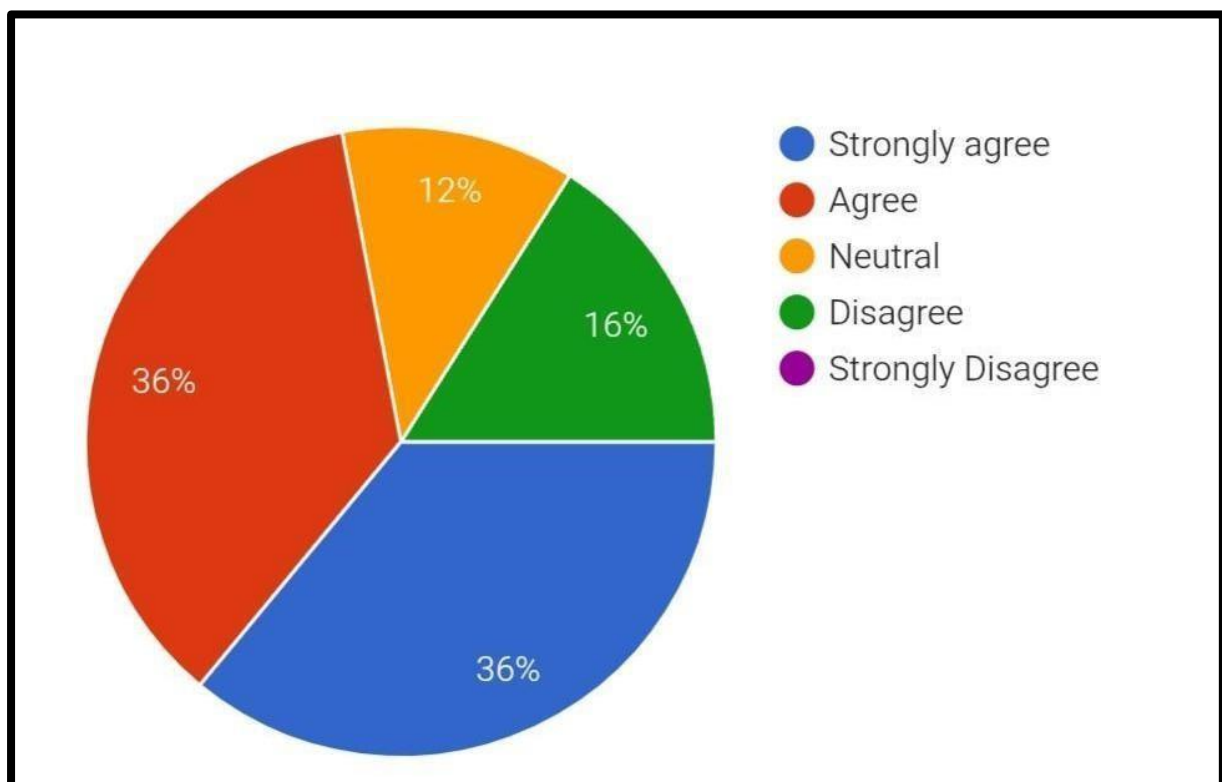
On the other hand, students who remained neutral indicated that although AI sometimes introduces other English varieties, it still mainly focuses on British and American English. Some also explained that they learn more about language differences through other sources

such as YouTube or real-life interactions. In contrast, a number of students disagreed, arguing that they had learned these differences through movies, podcasts, apps, or direct exposure rather than AI tools. Others stated that understanding accents and dialects does not necessarily depend on AI.

Overall, the findings indicate that AI tools are generally perceived as supportive in expanding learners' understanding of English beyond British and American varieties, although some students still rely on other resources for broader exposure.

Question 10. AI tools expose me to different ways of using English around the world.why?

Figure 8. Students' Perceptions of AI Tools in Exposing them to different ways of using English Around the World



As revealed by the collected data, a majority of the students perceived AI tools as exposing them to different ways of using English around the world. More specifically, the percentages of students who strongly agreed and agreed were equal, accounting for 36% each. A smaller proportion (12%) remained neutral, whereas 16% disagreed. No participants strongly disagreed.

Students who strongly agreed explained that AI tools expose them to various forms of English used around the world. Some learners mentioned that AI helps them understand slang,

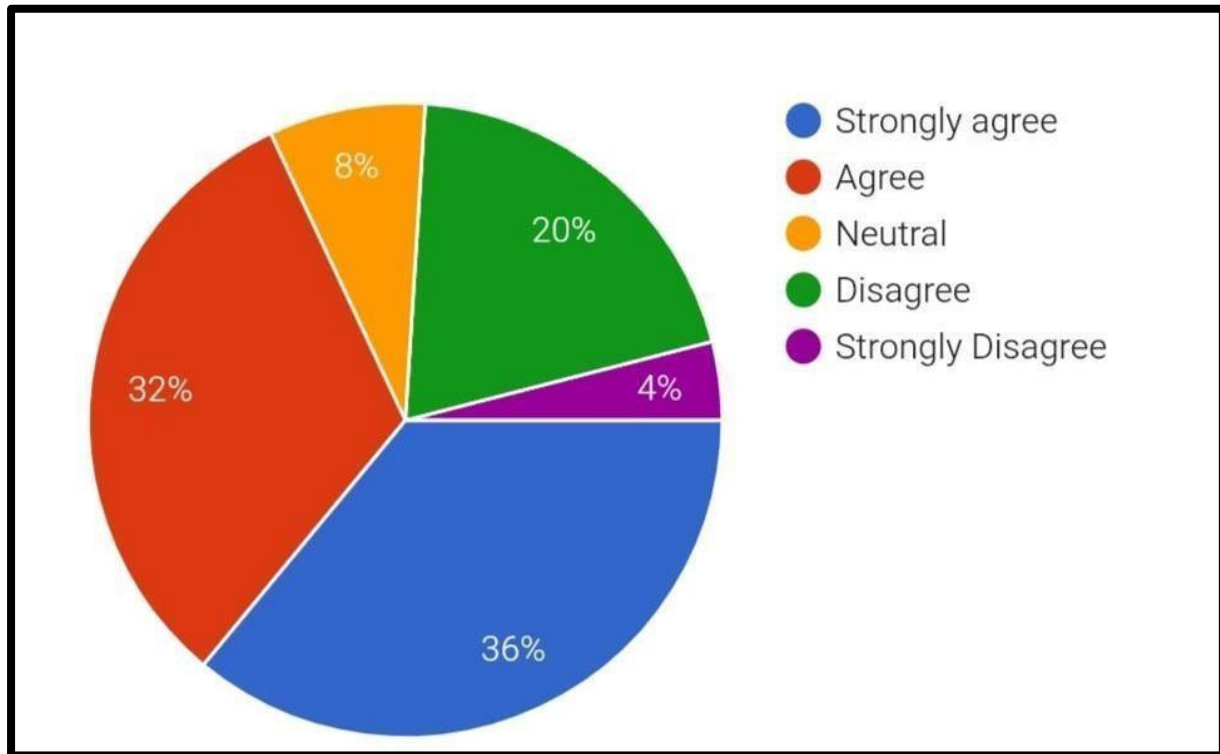
social media language, and common expressions used in different English-speaking countries. Others highlighted that AI introduces them to vocabulary and language patterns from regions such as Africa, Asia, and the Caribbean, while also helping them compare usage differences between countries like the US and the UK. Similarly, students who agreed stated that AI tools help them use English in different contexts, such as academic, social, and daily communication. They emphasized that AI supports their understanding of cultural expressions, greetings, formal and informal language, and diverse communication styles. Some participants also noted that AI makes them feel more confident when using English in different situations.

In contrast, students who remained neutral indicated that AI sometimes provides examples of language variation, but not always enough to fully understand global differences. A number of students disagreed, explaining that many AI tools mainly depend on standard academic English and that platforms such as TikTok and YouTube expose them more effectively to real-world English varieties.

Overall, the findings indicate that AI tools are generally perceived as supportive in helping students recognize different ways of using English globally, although some learners still rely on other digital sources for broader exposure.

Question 11. AI tools increase my awareness of cultural differences in communication. why?

Figure 9. Students' Perceptions of AI Tools in Increasing Awareness of Cultural Differences in Communication



From the students' answers, it can be noticed that the majority of participants perceived AI tools as helpful in increasing their awareness of cultural differences in communication. Specifically, 36% of the participants strongly agreed, while 32% agreed with this statement. A smaller proportion (8%) remained neutral, whereas 20% disagreed and 4% strongly disagreed. Students in the strongly agreed category explained that AI tools help them understand cultural differences in communication. They highlighted that AI provides guidance on what is considered polite or impolite in different contexts, such as greetings, expressions, and social behavior. Some learners also mentioned that AI helps them learn about non-verbal communication aspects like body language, eye contact, and personal space, which are important in intercultural interaction. Similarly, students who agreed stated that AI tools help them compare their own culture with other cultures, especially when they provide contextual information based on nationality. They emphasized that AI improves their communication by making them more aware of cultural differences and helping them use more respectful and appropriate language when interacting with people from different backgrounds.

In contrast, students who remained neutral indicated that AI sometimes provides useful cultural tips, but real-life interaction with people is more effective for developing cultural

understanding. A number of students who disagreed argued that AI offers only general or surface-level information about culture and that real learning comes from travel or direct communication. A few students strongly disagreed, stating that AI mainly focuses on grammar and vocabulary rather than cultural aspects. Overall, the findings suggest that AI tools are generally perceived as beneficial in raising cultural awareness in communication, although some learners still consider real-world interaction a more reliable source of intercultural understanding.

Question 12. How do AI tools help you understand different English varieties or accents? why ?

In exploring the main ways AI tools help students understand different English varieties or accents, the collected responses revealed varied perspectives. A considerable number of participants stated that AI tools improve their understanding of different English accents through listening practice, pronunciation comparison, repetition features, and exposure to various varieties such as British, American, Indian, and Australian English. Many students explained that AI helps them recognize pronunciation differences, slow down speech, repeat audio, and compare unfamiliar accents with more familiar ones, which enhances their listening comprehension. In addition, some respondents highlighted that AI provides clear explanations and practical examples that make distinguishing between accents easier. Conversely, a few participants expressed negative views, arguing that AI tools are not always accurate in pronunciation and often focus mainly on standard varieties such as British or American English, which limits broader exposure. Others believed that real-life interaction remains more effective for understanding authentic pronunciation and accent variation. Overall, the responses suggest that AI tools can contribute to students' awareness of English varieties and accents, although their effectiveness may vary depending on accuracy, exposure, and individual learning preferences.

Question 13 .In your opinion, how can AI tools improve students' intercultural competence? Why?

When asking students about how AI tools can improve intercultural competence, the collected responses reflected generally positive perspectives, with some critical views. A

considerable number of participants stated that AI tools enhance intercultural competence by exposing students to different cultures, traditions, lifestyles, and communication styles from around the world. Many respondents explained that AI helps learners understand customs, values, greetings, non-verbal cues, and cultural differences, which can reduce misunderstandings and promote respect, tolerance, and open-mindedness when interacting with people from diverse backgrounds. In addition, some participants highlighted that AI provides access to global content, real-life examples, and simulated conversations, making intercultural learning more practical, accessible, and engaging. Conversely, a few respondents pointed out certain limitations, arguing that AI may provide stereotypical, repeated, or limited cultural information and cannot fully replace authentic interaction and real-life communication with people from different cultures. Others believed that overreliance on AI tools might reduce opportunities for direct cultural experiences. Overall, the responses suggest that AI tools can play an important role in improving students' intercultural competence by broadening cultural awareness and encouraging respectful communication, although their effectiveness may depend on balanced use alongside real-world interaction.

Analysis of the interview

In order to explore teachers' perceptions of the role of AI tools in exposing EFL learners to global English varieties and developing their intercultural competence, an interview consisting of eleven questions was conducted with four EFL teachers at the University of Chadli Bendjedid, El Tarf. The data obtained from the interview was analyzed following the principles of Braun and Clarke's (2006) thematic analysis.

After transcribing the collected data, the researchers began the process of coding by identifying and highlighting key ideas emerging from the participants' responses. According to Tuckett (2005), coding refers to the process of organizing data into meaningful categories or groups. Accordingly, the researchers generated a set of codes based on the interview responses, which were then organized into broader themes reflecting the main patterns in the data. To ensure clarity and traceability, tables were used to present and classify the codes under each interview question.

Section One: Teacher's Background

1. How long have you been teaching English as a foreign language?

Regarding teachers' teaching experience, the collected data revealed that the majority of teachers had extensive experience in teaching English as a foreign language. More specifically, three out of four teachers reported having more than 10 years of teaching experience, while only one teacher had less than 2 years of experience. This variation in teaching experience provided both experienced and less experienced perspectives, which enriched the interview data and offered broader insights into the topic under investigation.

2. What level do you currently teach?

Regarding the teaching levels, the results show that teachers were teaching different academic levels. Specifically, two teachers reported teaching Master's level, while one teacher taught first-year students and one teacher taught third-year students. This variation in teaching levels indicates that the participants were engaged with learners at different stages of university education, which provides diverse perspectives on the use of AI tools in English language teaching.

3. Have you ever used AI tools in your teaching practice?

The results concerning the use of AI tools in teaching practice show that the majority of teachers have already integrated AI tools into their teaching. Specifically, three teachers

reported that they use AI tools in their teaching practice, while one teacher stated that they have not yet used AI tools but plans to do so in the future. These results indicate a generally positive familiarity with AI tools among the participants, which may reflect their openness to integrating technology into English language teaching.

Section Two: Teachers' Perceptions of AI and Intercultural Competence

Question 4. In your opinion, do AI tools (e.g., ChatGPT, DeepL, and ELSA Speak) expose students to different English accents and varieties? Why or why not?

Table 1

Generating Codes from Teachers' Responses to Q4

Interview extract	Codes
- Teacher 1: Absolutely , it does so , as they are exposed to such open source potentials and various audio-visual academic content	-Exposure to audiovisual and academic content.
- Teacher 2: As mentioned in question 7 . These AI tools mentioned do prepare and reinforce EFL students to be familiar with other cultures.	-Intercultural and cultural familiarization through AI.
- Teacher 3: yes they do because they provide multiple accents and opportunities.	-Provision of multiple English accents
-Teacher 4: Yes, AI tools expose students to different English accents and varieties through audio materials and interactive conversations. They help learners discover that English is spoken differently around the world.	-Exposure to global English varieties through audio-visual interaction.

Question 5. Have you observed any changes in your students' awareness of global English varieties after using AI tools?

Table 2

Generating Codes from Teachers' Responses to Q5

Interview extract	Codes
- Teacher 1: Indeed. AI tools have improved students' outcomes in different accents . - Teacher 2: Changes were actually positive! Students become equipped and opened about other cultures (Lingua franca) - Teacher 3: Not yet - Teacher 4: Yes, AI tools expose students to different English accents and varieties through audio materials and interactive conversations. They help learners discover that English is spoken differently around the world.	- Improved awareness of English accents - Enhanced intercultural openness - Lack of observable changes - Audio-based and interactive learning exposure

Question 6. Do you think AI tools can help students understand cultural differences beyond British and American cultures? How?

Table 3***Generating Codes from Teachers' Responses to Q6***

Interview extract	Codes
-Teacher 1: AI tools can do so. students are exposed to various cultural awareness around the globe due to easiness and free -Teacher 2 : Yes! It gives them a thorough comparison to understand the culture of both . -Teacher 3 : Yes I do because they expose different cultures that help learner effectively -Teacher 4 : Yes, AI tools provide learners with access to different cultures through texts, conversations, and real-life examples. This helps students develop intercultural understanding and openness.	- Exposure to global cultural awareness - Comparative understanding of cultures - Exposure to diverse cultures for effective learning - Development of intercultural understanding and openness

Question 7. Do you think AI tools help students become more familiar with non-native English pronunciation patterns? Why or why not?

Table 4

Generating Codes from Teachers' Responses to Q7

Interview extract	Codes
-Teacher 1: Yes, some AI tools are of Indian or Russian origins , so students are aware of Indian or Russian English varieties. -Teacher 2: Yes I do -Teacher 3 : Agree, Yes ! Especially the ELSA speak . It gives an affordance to EFL learners to practice speaking like a native. -Teacher 4 : Yes, AI tools expose students to speakers from different linguistic backgrounds. This helps them improve listening comprehension and communication with international speakers.	- Awareness of non-native English varieties - Positive perception of AI support - Speaking practice through AI tools - Exposure to diverse linguistic backgrounds

Question 8. In your experience, can AI tools reinforce or reduce cultural stereotypes among learners? Please explain.

Table 5

Generating Codes from Teachers' Responses to Q8

Interview extract	Codes
-Teacher 1: AI knows no differences or boundaries when it comes to cultural stereotypes among learners. The focus is on enriching. -Teacher 2: AI tools rather reinforce cultural stereotypes . This is by making them more aware of other cultural competence. -Teacher 3 : Yes they can reduce cultural stereotypes because they provide a space to share different cultures. -Teacher 4 : It can reduce stereotypes when learners are exposed to diverse perspectives and cultures. However, without guidance, some biased information may reinforce stereotypes.	- Promotion of cultural enrichment beyond stereotypes - Reinforcement of cultural awareness through AI - Reduction of stereotypes through cultural sharing - Diverse cultural perspectives with potential bias

Question 9.What are the potential limitations of using AI tools to develop students' intercultural competence?

Table 6

Generating Codes from Teachers' Responses to Q9

Interview extract	Codes
-Teacher 1: AI tools can lead to passiveness as learners are used to using emojis instead of suitable language for example. -Teacher 2: I personally cannot see any limitations as the awareness of different stereotypes . -Teacher 3 : The blind dependence on such tools misguides learners -Teacher 4 : It may provide inaccurate or culturally biased information. In addition, overreliance on technology may reduce real human interaction.	- Learner passiveness in communication - Perceived absence of AI limitations - Overdependence on AI tools - Inaccurate and culturally biased information

Question 10. Would you recommend integrating AI tools into EFL classrooms to enhance students' intercultural competence? Why or why not

Table 7
Generating Codes from Teachers' Responses to Q10

Interview extract	Codes
-Teacher 1: Sure ,integrating AI tools or VR can boost students 'intercultural competence. It is open-source , easy to access , free , no time consuming -Teacher 2: Definitely , integrating AI tools to enhance IC would be an effective way to reinforce students' awareness about cultural and intercultural. -Teacher 3 : Yes , I recommend that in order to facilitate learning and motivate learners . -Teacher 4 : Yes, I would recommend that because they create engaging and culturally rich learning experiences and help students become more open to cultural diversity.	- Accessibility and ease of use of AI tools - Enhancement of intercultural awareness through AI integration - Facilitation of learning and learner motivation - Promotion of engaging and culturally diverse learning experiences

Question 11. Do you have any additional comments or suggestions regarding AI and intercultural learning?

Table 8
Generating Codes from Teachers' Responses to Q11

Interview extract	Codes
-Teacher 1: AI must be given primacy by educators. It is recommended to not devote only lectures on how to use it or the ethical perspectives of it , but to render it a must for obtaining a diploma. -Teacher 2: I think teachers should incorporate its use among EFL classrooms -Teacher 3 : It may enhance intercultural competences but it should be used smartly in classrooms. -Teacher 4 : Teachers should guide students on how to use AI tools critically and effectively. AI can be useful if it is integrated responsibly into language learning.	- Integration of AI as a core component in education - Encouragement of AI use in EFL classrooms - appropriate use of AI tools in learning - Critical and responsible use of AI in language learning

Searching for Themes

After coding the interview data, the researchers identified the most recurrent ideas related to the role of AI tools in exposing EFL learners to global English varieties and enhancing their intercultural competence. These codes were then organized into broader themes according to similarities and common patterns found in the teachers' responses. Braun and Clarke (2006) explained that searching for themes involves "collecting codes into potential themes, gathering all data relevant to each potential theme" (p. 35). They also suggested using visual representations such as tables or thematic maps to facilitate the organization of codes into meaningful themes. Therefore, in the present study, tables were used to classify and group similar codes into broader themes reflecting teachers' perceptions of AI tools, global English varieties, and intercultural learning. As a result, several major themes emerged from the interview analysis.

Table 9

Generating Themes from the Main Codes

Codes	Themes
-Exposure to audiovisual and academic content. -Intercultural and cultural familiarization through AI. -Provision of multiple English accents -Exposure to global English varieties through audio-visual interaction.	Exposure to Global English Varieties and Cultural Diversity through AI Tools.
-Improved awareness of English accents -Enhanced intercultural openness -Lack of observable changes -Audio-based and interactive learning exposure	Impact of AI Tools on Students' Awareness of Global English Varieties and Cultures
-Exposure to global cultural awareness -Comparative understanding of cultures -Exposure to diverse cultures for effective learning -Development of intercultural understanding and openness	AI Tools as a Means of Developing Global Cultural Understanding
-Awareness of non-native English varieties	

-Positive perception of AI support -Speaking practice through AI tools -Exposure to diverse linguistic backgrounds	AI-Supported Access to Non-Native English Varieties and Pronunciation Patterns
-Promotion of cultural enrichment beyond stereotypes -Reinforcement of cultural awareness through AI -Reduction of stereotypes through cultural sharing -Diverse cultural perspectives with potential bias	The Role of AI Tools in Shaping Cultural Awareness and Stereotypes
-Learner passiveness in communication -Perceived absence of AI limitations -Overdependence on AI tools -Inaccurate and culturally biased information	Potential Limitations of AI Tools in Developing Intercultural Competence
-Accessibility and ease of use of AI tools -Enhancement of intercultural awareness through AI integration -Facilitation of learning and learner motivation -Promotion of engaging and culturally diverse	Integration of AI Tools for Enhancing Intercultural Competence
-Integration of AI as a core component in education -Encouragement of AI use in EFL classrooms -appropriate use of AI tools in learning -Critical and responsible use of AI in language learning	Suggestions and Recommendations for AI Integration in Intercultural Learning

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Defining and Naming Themes

According to Braun and Clarke (2006), this phase begins once a satisfactory thematic map of the data has been developed (p. 22). They explain that defining themes involves identifying and describing the essence of each theme, as well as determining the specific aspect of the data that each theme captures. Naming themes, on the other hand, refers to assigning clear and concise labels that accurately reflect the content of each theme in the final analysis. In the present study, the names of the themes were not modified in the final analysis, as the researchers considered that the selected labels were concise, clear, and immediately conveyed the meaning of each theme (Braun & Clarke, 2006, p. 23). Therefore, a table was used to clearly present and define each theme in relation to the interview data.

Table 10

Defining and Naming Themes

Themes	Description
Exposure to Global English Varieties and Cultural Diversity through AI Tools.	This theme involves the role of AI tools in exposing learners to different English accents, varieties, and authentic audio-visual content from around the world.
Impact of AI Tools on Students' Awareness of Global English Varieties and Cultures.	This theme refers to the influence of AI tools on students' awareness of English varieties and their openness to different cultures.
AI Tools as a Means of Developing Global Cultural Understanding	This theme focuses on how AI tools help learners understand cultural differences and develop greater awareness of diverse cultures worldwide.
AI-Supported Access to Non-Native English Varieties and Pronunciation Patterns	This theme highlights the contribution of AI tools to familiarizing learners with non-native English varieties, pronunciation patterns, and diverse linguistic backgrounds.
The Role of AI Tools in Shaping Cultural Awareness and Stereotypes	This theme explores how AI tools can influence learners' cultural awareness and contribute to either reducing or reinforcing cultural stereotypes.
Potential Limitations of AI Tools in Developing Intercultural	This theme addresses the potential limitations associated with the use of AI tools in developing

Competence	intercultural competence, including overreliance on technology, biased information, and reduced human interaction.
Integration of AI Tools for Enhancing Intercultural Competence	This theme focuses on the educational benefits of AI tools in promoting intercultural learning, learner motivation, and engagement.
Suggestions and Recommendations for AI Integration in Intercultural Learning	This theme presents suggestions and recommendations regarding the effective and responsible integration of AI tools in intercultural learning.

Producing the Report

Question 4: Exposure to Global English Varieties Through AI Tools

The aim of this interview question was to explore teachers' perceptions of the role of AI tools in exposing EFL learners to global English varieties and different cultural contexts. The emerging theme for this question is Exposure to Global English Varieties and Cultural Diversity through AI Tools. Based on the analysis of the teachers' responses, four main codes were identified: Exposure to audiovisual and academic content, Intercultural and cultural familiarization through AI, Provision of multiple English accents, and Exposure to global English varieties through audio-visual interaction.

Teachers provided various insights into how AI tools contribute to exposing learners to diverse English varieties. Teacher 1 stated, "Absolutely, it does so, as they are exposed to such open source potentials and various audio-visual academic content". Similarly, Teacher 2 affirmed, "As mentioned in question 7. These AI tools mentioned do prepare and reinforce EFL students to be familiar with other cultures." These responses highlight the role of AI in providing rich and accessible input that goes beyond traditional classroom materials.

Teacher 3 stated, "yes they do because they provide multiple accents and opportunities." This indicates that AI tools allow learners to encounter different spoken forms of English, which contributes to their linguistic awareness. Likewise, Teacher 4 explained, "Yes, AI tools expose students to different English accents and varieties through audio materials and interactive conversations. They help learners discover that English is spoken differently around the world." This emphasizes the importance of authentic exposure to global English varieties in developing learners' understanding of language diversity.

Mainly, these responses suggest that AI tools play an important role in broadening learners' exposure to global English varieties and supporting their cultural awareness. This aligns with Kachru's (1985) model of World Englishes, which highlights the existence of multiple legitimate English varieties across the world. It also supports Matsuda (2012), who argues that exposure to diverse English varieties improves learners' comprehension and prepares them for real-world communication in global contexts.

Question 5: Changes in Students' Awareness of Global English Varieties After Using AI Tools

This interview question sought to explore teachers' perceptions of changes in students' awareness of global English varieties and cultural understanding after using AI tools. The emerging theme for this question is Impact of AI Tools on Students' Awareness of Global English Varieties and Cultures. Based on the analysis of the teachers' responses, four main codes were identified: Improved awareness of English accents, Enhanced intercultural openness, Lack of observable changes, and Audio-based and interactive learning exposure.

Teachers' responses reveal mixed perceptions regarding the impact of AI tools. Teacher 1 stated, "Indeed. AI tools have improved students' outcomes in different accents," indicating a positive effect on learners' ability to recognize and understand various English accents. Similarly, Teacher 2 reported that changes were "actually positive," explaining that students become "equipped and opened about other cultures (Lingua franca)," which reflects increased intercultural openness and awareness of English as a global language.

However, Teacher 3 stated, "Not yet," suggesting that no noticeable changes have been observed in some learning contexts. In contrast, Teacher 4 explained, "Yes, AI tools expose students to different English accents and varieties through audio materials and interactive conversations. They help learners discover that English is spoken differently around the world," emphasizing the role of AI in providing authentic exposure to global English varieties. The data obtained indicate that AI tools can contribute to improving students' awareness of English accents and promoting intercultural openness, although the impact may vary depending on classroom practices and exposure levels. These results are consistent with Matsuda (2012), who emphasizes that exposure to multiple English varieties enhances learners' listening comprehension and prepares them for real-life global communication. They also align with Kachru's (1985) concept of World Englishes, which highlights that all English varieties are legitimate and should be valued equally, rather than being judged against a single "standard" form of English.

Question 6: Understanding Cultural Differences Beyond British and American Cultures Through AI Tools

The purpose of this interview question was to explore teachers' perceptions of whether AI tools help students understand cultural differences beyond British and American cultures. The emerging theme for this question is AI Tools as a Means of Developing Global Cultural Understanding. Based on the analysis of the teachers' responses, four main codes were identified: Exposure to global cultural awareness, Comparative understanding of cultures, Exposure to diverse cultures for effective learning, and Development of intercultural understanding and openness.

Teachers provided various insights into the role of AI tools in supporting cultural understanding. Teacher 1 stated, "AI tools can do so. students are exposed to various cultural awareness around the globe due to easiness and free." Similarly, Teacher 2 explained, "Yes! It gives them a thorough comparison to understand the culture of both ." These responses suggest that AI tools facilitate learners' access to diverse cultural information and allow them to compare different cultural contexts. Teacher 3 stated, "Yes I do because they expose different cultures that help learners effectively." Likewise, Teacher 4 stated, "Yes, AI tools provide learners with access to different cultures through texts, conversations, and real-life examples. This helps students develop intercultural understanding and openness." These responses highlight the role of AI in promoting exposure to diverse cultural materials and supporting learners' intercultural development.

Thus, the findings indicate that AI tools contribute to enhancing learners' understanding of global cultures and promoting intercultural awareness. This is consistent with Byram (1997), who explains that intercultural competence includes understanding different cultural practices and values, and not only learning the language itself. It also aligns with Deardorff (2006), who stresses that openness to other cultures and the ability to understand and respect differences are essential for effective intercultural communication.

Question 7: AI-Supported Access to Non-Native English Varieties and Pronunciation Patterns

The objective of this interview question was to understand teachers' perceptions of whether AI tools help students become more familiar with non-native English varieties and pronunciation patterns. The emerging theme for this question is AI-Supported Access to Non-

Native English Varieties and Pronunciation Patterns. Based on the analysis of the teachers' responses, four main codes were identified: Awareness of non-native English varieties, Positive perception of AI support, Speaking practice through AI tools, and Exposure to diverse linguistic backgrounds.

Teachers highlighted the role of AI tools in exposing learners to different English varieties. Teacher 1 stated, "Yes, some AI tools are of Indian or Russian origins , so students are aware of Indian or Russian English varieties." This indicates that learners are exposed to global forms of English beyond native-speaker norms. This idea aligns with Kachru's (1985) World Englishes model, which recognizes the legitimacy of multiple English varieties across different regions. Teacher 2 stated, "Yes I do." This reflects a general agreement among teachers regarding the positive role of AI tools in increasing learners' awareness of linguistic diversity. Teacher 3 explained, "Agree, Yes ! Especially the ELSA speak . It gives an affordance to EFL learners to practice speaking like a native." This suggests that AI tools provide opportunities for speaking practice and pronunciation improvement, supporting oral fluency development. This is consistent with Matsuda (2012), who emphasizes that exposure to diverse English input enhances learners' communicative readiness. Teacher 4 added, "Yes, AI tools expose students to speakers from different linguistic backgrounds. This helps them improve listening comprehension and communication with international speakers." This highlights the role of AI in improving listening skills and preparing learners for real-world intercultural communication.

These findings suggest that AI tools help learners develop awareness of global English varieties and pronunciation patterns through exposure to diverse linguistic inputs and interactive speaking practice. This reinforces the idea that English is a pluricentric language with multiple valid forms, as explained in Kachru's (1985) World Englishes framework.

Question 8: The Role of AI Tools in Shaping Cultural Awareness and Stereotypes

This interview question aimed to explore teachers' perceptions of whether AI tools can reinforce or reduce cultural stereotypes among learners. The emerging theme for this question is The Role of AI Tools in Shaping Cultural Awareness and Stereotypes. Based on the analysis of teachers' responses, four main codes were identified: Promotion of cultural enrichment beyond stereotypes, Reinforcement of cultural awareness through AI, Reduction of stereotypes through cultural sharing, and Diverse cultural perspectives with potential bias.

Teachers' responses reveal different perspectives regarding the role of AI tools in shaping cultural awareness and stereotypes. Teacher 1 stated: "AI knows no differences or boundaries

when it comes to cultural stereotypes among learners. The focus is on enriching.” Teacher 2 explained: “AI tools rather reinforce cultural stereotypes . This is by making them more aware of other cultural competence.” In contrast, Teacher 3 stated: “Yes they can reduce cultural stereotypes because they provide a space to share different cultures.” Similarly, Teacher 4 noted: “It can reduce stereotypes when learners are exposed to diverse perspectives and cultures. However, without guidance, some biased information may reinforce stereotypes.”

The outcomes indicate that AI tools can play a significant role in shaping learners’ cultural awareness, as they may both reduce and reinforce cultural stereotypes depending on how they are used and the type of content they provide. While AI can promote cultural enrichment and exposure to diverse perspectives, it may also expose learners to biased information if not properly guided. These results are consistent with Byram (1997), who emphasizes the importance of developing critical cultural awareness in order to evaluate cultural practices objectively and avoid stereotypical thinking. They also align with Deardorff (2006), who highlights that intercultural competence is built through openness and respect toward cultural differences. In addition, Kramsch (1993) explains that language and culture are closely connected, meaning that learners’ cultural perceptions can be shaped by the language content they are exposed to. Furthermore, Lupoli (2025) warns that AI systems may reproduce cultural biases present in their training data, which explains the risk of reinforcing stereotypes. Finally, Masoudi (2025) supports the positive impact of AI tools in enhancing intercultural competence through exposure to diverse cultural contexts.

Question 9: Potential Limitations of AI Tools in Developing Intercultural Competence

This interview question aimed to explore teachers’ perceptions of the potential limitations of using AI tools in developing students’ intercultural competence. The emerging theme for this question is Potential Limitations of AI Tools in Developing Intercultural Competence. Based on the analysis of teachers’ responses, four main codes were identified: Learner passiveness in communication, Perceived absence of AI limitations, Overdependence on AI tools, and Inaccurate and culturally biased information.

Teachers’ responses show different perspectives regarding the limitations of AI tools. Teacher 1 stated: “AI tools can lead to passiveness as learners are used to using emojis instead of suitable language for example,” which highlights a reduction in active communication. Teacher 2 stated: “I personally cannot see any limitations as the awareness of different stereotypes,” reflecting the absence of perceived limitations. Teacher 3 explained: “The blind dependence on such tools misguides learners,” showing concerns about overreliance. Teacher

4 noted: “It may provide inaccurate or culturally biased information. In addition, overreliance on technology may reduce real human interaction,” emphasizing both misinformation and reduced human contact.

The present findings can be interpreted in relation to previous studies. The issue of learner passiveness highlighted by Teacher 1 is supported by Cotton et al. (2024), who explain that excessive use of AI tools can reduce learners’ active participation in communication tasks and make them rely on simplified digital expressions rather than meaningful language production. The perspective of Teacher 3 regarding blind dependence on AI tools is aligned with Kasap and Babayigit (2026), who state that overreliance on AI may lead to compulsive use and weaken learners’ independent thinking and decision-making abilities. Teacher 4’s concern about inaccurate and culturally biased information corresponds to Lupoli (2025), who emphasizes that AI systems may generate incorrect or culturally biased outputs due to limitations in their training data, which can mislead learners.

Finally, the idea expressed by Teacher 4 about reduced human interaction is supported by Alshammari and Alhamazany (2026), who argue that AI cannot replace real human communication, emotional engagement, and contextual understanding, which are essential for developing intercultural competence.

Question 10: Integration of AI Tools for Enhancing Intercultural Competence

This question was designed to explore teachers’ perceptions of the integration of AI tools in enhancing students’ intercultural competence. The emerging theme for this question is Integration of AI Tools for Enhancing Intercultural Competence. Based on the analysis of teachers’ responses, four main codes were identified: Accessibility and ease of use of AI tools, Enhancement of intercultural awareness through AI integration, Facilitation of learning and learner motivation, and Promotion of engaging and culturally diverse learning experiences.

Teachers’ responses show a generally positive attitude toward integrating AI tools in intercultural learning. Teacher 1 stated: “Sure ,integrating AI tools or VR can boost students ‘intercultural competence. It is open-source , easy to access , free , no time consuming,” highlighting the accessibility and ease of use of AI tools in education. Similarly, Teacher 2

stated: “Definitely , integrating AI tools to enhance IC would be an effective way to reinforce students' awareness about cultural and intercultural,” emphasizing the role of AI in improving intercultural awareness. Teacher 3 explained: “Yes , I recommend that in order to facilitate learning and motivate learners,” which reflects the motivational and facilitative role of AI in the learning process. Likewise, Teacher 4 noted: “Yes, I would recommend that because they create engaging and culturally rich learning experiences and help students become more open to cultural diversity,” highlighting the contribution of AI tools in creating engaging and culturally diverse learning environments.

These results align with previous research, teacher 1’s view on accessibility is supported by Hwang and Chen (2023), who highlight that AI tools are flexible and easily accessible for learning beyond the classroom. Teacher 2’s idea about intercultural awareness aligns with Masoudi (2025), who found that AI exposure enhances learners’ intercultural understanding. Teacher 3’s emphasis on motivation corresponds to Deardorff (2006), who stresses that intercultural competence develops through active engagement and openness. Finally, Teacher 4’s point about culturally rich learning experiences is consistent with Kramsch (1993), who links language learning with cultural exposure and awareness.

Question 11: Suggestions and Recommendations for AI Integration in Intercultural Learning

This item was used to investigate teachers’ suggestions and recommendations regarding the integration of AI tools in intercultural learning. The emerging theme for this question is Suggestions and Recommendations for AI Integration in Intercultural Learning. Based on the analysis of teachers’ responses, four main codes were identified: Integration of AI as a core component in education, Encouragement of AI use in EFL classrooms, Appropriate use of AI tools in learning, and Critical and responsible use of AI in language learning.

Teachers’ responses show a strong tendency toward supporting the integration of AI tools in education. Teacher 1 stated: “AI must be given primacy by educators. It is recommended to not devote only lectures on how to use it or the ethical perspectives of it , but to render it a must for obtaining a diploma,” emphasizing the importance of making AI an essential part of

education. Similarly, Teacher 2 stated: “I think teachers should incorporate its use among EFL classrooms,” highlighting the need for AI integration in language teaching contexts.

Teacher 3 explained: “It may enhance intercultural competences but it should be used smartly in classrooms,” which reflects the importance of appropriate and effective use of AI tools. Likewise, Teacher 4 noted: “Teachers should guide students on how to use AI tools critically and effectively. AI can be useful if it is integrated responsibly into language learning,” emphasizing the need for critical and responsible use of AI.

The current results are supported by Hwang and Chen (2023), who highlight that successful integration of AI in education requires thoughtful pedagogical design and proper classroom implementation. They also align with Deardorff (2006), who emphasizes that intercultural competence develops through guided interaction and reflective practice, which supports Teacher 4’s view on critical use. In addition, Kramsch (1993) argues that meaningful language learning requires culturally aware teaching practices, which corresponds to Teacher 3’s emphasis on smart use of AI. Finally, Masoudi (2025) confirms that AI tools can enhance intercultural competence when integrated effectively into learning environments.

Conclusion

This chapter presented the results obtained from the questionnaire answered by third-year EFL students and the interviews conducted with teachers at the Department of English at Chadli Bendjedid University. Data were collected to explore their perceptions regarding the role of AI tools in exposing learners to global English varieties and developing their intercultural competence. According to the findings, it is concluded that both EFL teachers and students recognize the potential of AI tools in increasing learners' awareness of different English accents, cultural perspectives, and ways of communication. The findings will be further discussed and interpreted in detail in the following chapter.

Chapter Five

Discussion

Introduction

This chapter focuses on exploring the significance of AI tools in promoting students' intercultural competence and awareness of global English varieties in the EFL classroom. It discusses how this AI technology can provide valuable exposure to diverse English accents and cultural contexts, enhance learners' understanding of linguistic diversity, and increase their motivation to communicate across cultures. The chapter aims to answer the research questions and verify the hypotheses regarding AI tools' effectiveness as a language learning tool. Furthermore, it highlights both the benefits and challenges of integrating AI tools into intercultural language teaching, while providing an overview of the chapter's structure including implications, limitations, and recommendations.

Discussion of Teachers' Perceptions of AI Tools in Enhancing Intercultural Competence and Global English Varieties

The interview findings revealed a generally positive perception among EFL teachers regarding the role of AI tools in enhancing students' intercultural competence and exposure to global English varieties. Several recurrent themes emerged from their responses, including exposure to diverse English varieties, development of intercultural awareness, understanding of cultural differences beyond British and American English, awareness of non-native pronunciation patterns, the influence of AI on stereotypes, limitations of AI tools, and the importance of pedagogical integration.

Teachers consistently highlighted that AI tools expose learners to a wide range of English varieties from different parts of the world. They explained that students are no longer limited

to British or American English, but are also exposed to varieties such as Indian, Nigerian, Australian, and other global forms of English. This exposure helps learners understand that English exists in multiple legitimate forms and is used differently depending on cultural and geographical contexts. This view aligns with Kachru (1985), who emphasizes the concept of World Englishes and the existence of multiple concentric circles of English use. It is also supported by Matsuda (2012), who argues that exposure to diverse English varieties improves learners' comprehension and prepares them for real-life global communication.

In addition, teachers emphasized that AI tools contribute to the development of intercultural awareness by exposing learners to different cultures, traditions, and communication styles. They noted that students become more open-minded and more aware of cultural differences in communication, including greetings, politeness strategies, and social behavior. These findings are consistent with Byram (1997), who defines intercultural competence as the ability to understand and relate to different cultures, and Deardorff (2006), who highlights openness and respect as essential components of intercultural development.

Furthermore, teachers reported that AI tools help learners understand English beyond British and American varieties by providing access to global cultural and linguistic contexts. They explained that students become aware that English is used differently across countries and communities, which helps them move beyond the idea of a single "standard" English. This supports the notion of English as a global lingua franca, as described by McArthur (2001), where English serves as a common language among speakers from diverse linguistic backgrounds. Teachers also highlighted that AI tools expose learners to different pronunciation patterns and non-native English varieties. They explained that students can listen to different accents and practice speaking with AI tools, which improves their listening comprehension and pronunciation awareness. This aligns with Kachru's (1985) model of World Englishes and Matsuda (2012), who emphasize the importance of exposure to diverse spoken forms of English in developing communicative competence.

However, despite these positive perceptions, teachers also pointed out several limitations. They noted that AI tools may sometimes provide limited, repetitive, or culturally biased information, and that learners may become overly dependent on them. In some cases, students may use AI passively without developing independent thinking or communication skills. These concerns are in line with Lupoli (2025), who highlights the risk of bias in AI outputs, and Kasap and Babayigit (2026), who warn against over-reliance on AI tools that may reduce learner autonomy and critical thinking. Teachers also stressed that AI cannot fully replace real human interaction in intercultural learning. They explained that while AI can simulate communication

and provide information, it cannot replicate emotional, social, and contextual aspects of real-life interaction. This supports Alshammari and Alhamazany (2026), who argue that human interaction remains essential for developing authentic intercultural communicative competence.

Finally, teachers strongly recommended the integration of AI tools in EFL classrooms, but in a guided and responsible way. They emphasized that AI should be used as a supportive pedagogical tool rather than a replacement for teaching. Teachers highlighted the importance of teacher guidance to ensure critical and effective use of AI tools in language learning. This is consistent with Hwang and Chen (2023), who stress that successful AI integration requires structured pedagogical planning, and with Kramsch (1993), who links language learning with cultural awareness and reflective teaching practices.

In conclusion, the interview findings confirm that EFL teachers at Chadli Bendjedid University generally perceive AI tools as valuable in enhancing intercultural competence and exposing learners to global English varieties. Despite certain limitations, teachers emphasized their positive role in broadening cultural awareness, improving understanding of English diversity, and preparing learners for global communication. These findings support the second hypothesis, which posits that teachers have a positive perception of the role of AI tools in developing students' intercultural competence.

Discussion of Students' Perceptions of AI Tools in Enhancing Intercultural Competence and Global English Awareness

The second research question aimed to explore students' perceptions of the role of AI tools in enhancing their intercultural competence and awareness of global English varieties. Based on the analysis of the questionnaire responses, it is evident that the majority of EFL students at Chadli Bendjedid University have positive perceptions toward AI tools in supporting their understanding of linguistic and cultural diversity.

The findings revealed that most students believe AI tools help them recognize that English is not limited to British and American varieties. Participants explained that AI exposes them to different accents, vocabulary, and ways of using English around the world. This indicates that learners are developing a broader understanding of English as an international language rather than viewing one variety as the only correct form. This finding supports Kachru's (1985) concept of World Englishes, which explains that English includes multiple varieties developed in different cultural and social contexts. It also agrees with Sayer and Stefano (2025), who argued that AI tools can be used to introduce learners to diverse forms of Global Englishes and

encourage reflection on language variation. Furthermore, students reported that AI tools increase their awareness of cultural differences in communication. They explained that AI helps them learn about cultural practices, appropriate expressions, and different communication styles. This reflects Byram's (1997) view of Intercultural Communicative Competence, which emphasizes that effective communication requires not only language ability but also knowledge, openness, and the ability to understand other cultures. Similarly, Deardorff (2006) highlights that intercultural competence involves communicating appropriately and effectively with people from different cultural backgrounds.

The questionnaire results also showed that AI tools help students reduce fear of making mistakes and feel more confident when using English in different situations. Many participants indicated that AI provides cultural information and examples that prepare them for intercultural interactions. This finding is consistent with Masoudi (2025), whose review showed that AI platforms can support intercultural competence by providing learners with access to diverse cultural contexts and personalized learning opportunities. Moreover, students' responses indicated that AI tools help them move beyond British and American English by introducing them to other varieties spoken worldwide. Learners mentioned exposure to accents and language use from different regions, which contributes to their understanding of English diversity. This result is supported by Qu and Chen (2026), who found that AI-based interaction improved learners' intercultural communicative competence by providing opportunities for communication and cultural feedback.

However, despite these positive perceptions, some students expressed limitations regarding AI exposure. Some participants explained that AI tools may focus mainly on standard varieties and do not always provide global English exposure unless requested. Others stated that direct communication and authentic resources are still important. These views are related to Abdelhadi (2025), who noted that although AI has potential in cultural learning, its implementation in Algerian EFL contexts is still developing and requires appropriate guidance. Overall, the findings indicate that students perceive AI tools as valuable resources for enhancing intercultural competence and awareness of global English varieties. These results support the hypothesis that AI tools contribute positively to learners' understanding of cultural diversity and different forms of English used worldwide.

Discussion of the Extent of AI Tools' Contribution to Global English Varieties and Intercultural Competence

The third research question aimed to examine the extent to which AI tools contribute to exposing third-year EFL students at Chadli Bendjedid University to Global English varieties and developing their intercultural competence. Based on the analysis of both questionnaire and interview data, the findings indicate a high level of perceived contribution among the majority of participants, although a minority (approximately 20-24%) remained neutral or disagreed.

From the questionnaire results, a significant proportion of students reported that AI tools help them recognize the diversity of English worldwide. Specifically, 76% of students agreed or strongly agreed that AI tools expose them to English beyond British and American varieties. Students explained that AI introduces them to different accents, vocabulary, and pronunciation patterns from various regions such as Asia, Africa, and the Caribbean, which supports the view of English as a global and pluricentric language. This finding aligns with Kachru's (1985) World Englishes model, which highlights that English exists in multiple legitimate forms across different sociolinguistic contexts. However, around 24% of students remained neutral or disagreed, suggesting that not all learners benefit equally from AI-based exposure. Some participants indicated that AI does not always systematically present global varieties unless specifically prompted, while others relied more on teachers or media sources for such exposure. This indicates that AI tools function as a supportive but not exclusive source of linguistic diversity.

In addition, the results show that 68% of students agreed or strongly agreed that AI tools increase their awareness of cultural differences in communication. Learners reported that AI helps them understand cultural norms, expressions, and communication styles used in different contexts, including greetings, politeness strategies, and non-verbal cues such as body language and eye contact. This reflects the development of intercultural awareness, which is a key component of intercultural communicative competence as described by Byram (1997) and Deardorff (2006). Moreover, 72% of students agreed or strongly agreed that AI tools expose them to different ways of using English across contexts, including formal, informal, and social communication. This suggests that learners are gradually developing an understanding of English variation depending on usage and context, supporting the concept of English as a global lingua franca (McArthur, 2001).

The interview findings also support these results, as teachers confirmed that students are increasingly exposed to global English varieties and cultural diversity through AI tools. Teachers reported observing improvements in learners' awareness of different accents and communication styles. However, they also emphasized that this contribution depends on how

AI is used in learning, as students may not fully benefit from this exposure without pedagogical guidance.

Finally, these findings highlight that while AI tools play an important role in enhancing exposure to Global English varieties and intercultural competence, their effectiveness is not automatic and depends on learner engagement and instructional support. Therefore, the third hypothesis (H3) is accepted, as the results confirm that AI tools significantly contribute to exposing students to Global English varieties and enhancing intercultural competence, although this contribution is mediated by usage conditions and teacher guidance.

Implications of the Study

The findings of this study suggest that the integration of artificial intelligence tools, particularly applications such as ChatGPT and Gemini, into EFL education has introduced meaningful changes in the development of intercultural competence and global English awareness. These technologies provide learners with increased opportunities to encounter diverse English varieties and cultural contexts, which contributes to a broader understanding of English as a global and pluricentric language rather than being limited to British or American norms. Through AI-supported interaction, students become more familiar with different accents, communication styles, and cultural practices, while teachers benefit from supplementary tools that can extend intercultural learning beyond classroom boundaries. The results also indicate that the development of intercultural competence remains a complex process that cannot be achieved automatically through technology alone. Students may still face difficulties in understanding cultural differences, interpreting non-native pronunciation patterns, and communicating appropriately in intercultural situations. Likewise, teachers may encounter challenges in ensuring consistent exposure to global English varieties and providing detailed cultural guidance for individual learners. In this regard, AI tools appear to partially address these limitations by offering real-time explanations, simulated communicative contexts, and personalized exposure to linguistic and cultural diversity. At the same time, the findings highlight the growing relevance of digital integration in Algerian higher education, where both teachers and students show increasing openness to using AI tools as complementary learning resources in EFL contexts.

However, effective use of these tools requires structured pedagogical support. Teachers need appropriate training to integrate AI meaningfully into language instruction, particularly in guiding students to critically engage with different English varieties and cultural content generated by AI systems. Similarly, students should be encouraged to use these tools in a

reflective and active manner rather than relying on them passively. Without clear pedagogical direction, there is a risk of overdependence, which may limit rather than enhance the development of intercultural competence.

Finally, further research is recommended to explore the factors behind neutral or skeptical attitudes toward AI integration in intercultural language learning. Investigating these factors whether technological, pedagogical, or contextual would provide deeper insight into the challenges of implementation and help improve the effective use of AI tools in the Algerian EFL setting.

Limitations of the Study

While conducting this research, several limitations emerged that must be acknowledged. First, although the questionnaire was administered directly and in paper format to third-year EFL students at Chadli Bendjedid University, a few participants were not fully cooperative. Some students left multiple items unanswered, particularly the open-ended questions, despite the clarity of the instructions. This affected the richness of the data, especially regarding individual reflections on how AI tools expose them to global English varieties and cultural differences. Another notable limitation was related to the varying degrees of familiarity students had with AI tools. Although most participants had previous experience with AI tools, their level of familiarity and frequency of use varied considerably. While many expressed positive perceptions about AI's role in developing intercultural competence, others either had limited experience with these tools or used them for purposes unrelated to language learning. This variation may have influenced their responses and reduced the consistency of the data. As a result, some students appeared hesitant or uncertain when answering questions about English accents and cultural awareness, which made it difficult to interpret their overall attitudes with full clarity.

Furthermore, another limitation concerns the scarcity of academic references and published books that specifically address the role of AI tools in exposing EFL learners to global English varieties and developing intercultural competence, particularly within the Algerian context. This shortage of previous research made it difficult to establish a robust theoretical comparison and limited the availability of established frameworks directly applicable to the present study.

On the teachers' side, the number of participants was limited to four instructors from the Department of English at Chadli Bendjedid University, El Tarf. Although the data collected

through the interviews was rich and insightful, the small sample size restricts the generalizability of the findings. Some teachers declined participation due to time constraints, exam duties, and research supervision responsibilities, which limited the diversity of perspectives. Additionally, not all participating teachers had extensive experience using AI tools for intercultural or global English instruction. A few admitted to using them only occasionally or for purposes other than exposing students to global English varieties, which may have narrowed the depth of responses in certain themes, such as cultural awareness or accent recognition.

Finally, the novelty of AI tools such as ChatGPT and Gemini as classroom resources presented a limitation in itself. As these platforms are still relatively new in the Algerian EFL context, students and teachers may not yet have explored their full potential for enhancing intercultural competence and global English awareness. Consequently, participants' perceptions may evolve as they gain more experience with AI-supported language learning in the future.

Recommendations for the Research Findings

On the basis of the study results regarding the use of AI tools to enhance EFL students' intercultural competence and expose them to global English varieties, the following recommendations are suggested for EFL teachers, learners, curriculum designers, and policymakers:

- Having discovered that AI tools have a positive impact on enhancing students' awareness of global English varieties and intercultural competence, EFL teachers and students should integrate these tools into their teaching practices and learning strategies to expose learners to diverse accents, communication styles, and cultural contexts.
- In order to guarantee effective use of AI tools, their application should be accompanied by human assistance, especially teacher guidance, to avoid over-reliance and ensure meaningful engagement with different English varieties and cultural content.

- Teachers should raise students' awareness of how to use AI tools wisely and critically, emphasizing active participation, comparison of different English varieties (e.g., British, American, Indian, Nigerian, Australian), and critical evaluation of AI-generated cultural information.
- Teachers should foster positive and informed attitudes towards the use of AI tools in intercultural language learning to encourage student motivation, curiosity, and openness towards other cultures.
- It is recommended that learners should not use AI tools as the sole medium for learning about global English varieties and intercultural communication, but rather as a supporting tool alongside authentic materials, real-life interactions, and teacher-led discussions to avoid dependency.
- Learners ought to verify the accuracy of the responses offered by AI tools regarding English accents, vocabulary, and cultural practices by cross-checking with reliable sources, comparing multiple AI outputs, and reflecting on the feedback received.
- Training sessions and professional development programs should be provided for both teachers and learners to develop their competencies and skills concerning the successful integration of AI tools in intercultural English instruction and exposure to global English varieties.
- It is recommended to address technical challenges, such as internet accessibility and limited access to certain AI platforms, by advocating for institutional support, improved digital infrastructure, and the use of freely available AI tools.
- AI developers should consider incorporating features such as real-time pronunciation feedback, voice interaction with different accents (e.g., Indian, Nigerian, Australian), and context-aware cultural guidance to better support intercultural competence and awareness of global English diversity.

Suggestions for Further Studies

Since the integration of AI tools in promoting intercultural competence and awareness of global English varieties is still an emerging area of research, further studies are needed to deepen understanding and optimize educational practices. Therefore, the following suggestions are proposed:

- An experimental study is recommended to examine how the use of AI tools affects EFL students' intercultural competence, awareness of global English varieties, and openness to other cultures over a longer period. This study could also assess teachers' competence and attitudes toward incorporating AI tools in intercultural language teaching.
- Replicating this study across different Algerian universities or other EFL contexts is recommended to compare results and generalize findings regarding the effectiveness of AI tools in promoting intercultural awareness and exposure to global English varieties.
- Future research should explore the technical and pedagogical challenges faced by both teachers and learners when integrating AI tools into intercultural learning, including issues related to accessibility, digital literacy, and teacher guidance.
- Further studies are recommended to investigate the impact of overreliance on AI tools and the accuracy of AI-generated cultural information in language learning. Particular attention should be given to how learners can use these tools critically and responsibly while developing their intercultural competence.
- Further research could analyze how multimodal AI features, such as voice recognition and pronunciation feedback, influence learners' intercultural awareness and their ability to recognize different English accents, varieties, and communication styles.
- Future studies could investigate why some students remain neutral or skeptical about the role of AI tools in exposing them to global English varieties and enhancing intercultural competence. Such research may explore factors such as limited familiarity with AI tools, insufficient pedagogical guidance, or preferences for traditional learning methods.

Conclusion

Throughout this chapter, the results are discussed and interpreted to answer the research questions and verify the hypotheses. Moreover, based on the findings and at the end of the chapter, implications of the study are provided along with the limitations faced by the researchers while conducting this study. In addition, a number of recommendations for both

teachers and students about the use of AI tools in enhancing intercultural competence and exposing learners to global English varieties, as well as suggestions for future research, are highlighted.

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Appendices

Appendices

Appendix A Students Questionnaire

Title: AI and Intercultural Competence: Exploring how AI tools expose learners to Global English Varieties

Dear student,

This questionnaire aims to investigate the role of Artificial Intelligence (AI) tools in exposing EFL learners to global English varieties and developing their intercultural competence. Your responses will be used only for academic research purposes and will remain confidential. Please answer the following questions honestly.

Section One: General Information

1. Have you ever used AI-based tools to learn English?

☐ Yes

☐ No

Please indicate your level of agreement with the following statements:

Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree

Section two :Use of AI Tools in Language Learning

2. I find that AI tools make English learning more engaging.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Why?

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3. I benefit from the immediate feedback that AI tools provide.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Why?

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4. I can practice English independently using AI tools.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Why?

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5. Which AI tool do you use most in learning English? Why?

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6. In what ways do AI tools help you improve your English language skills? Why?

Section three : AI, Global English Varieties, and Intercultural Competence

7. AI tools help me understand that English has many varieties.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Why?

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8. I improve my ability to communicate with people from different cultures through AI tools.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Why?

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9. I understand English beyond British and American varieties because of AI tools.

☐ Strongly Agree

☐ Agree

- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Why?

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10. AI tools expose me to different ways of using English around the world.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Why?

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.....

11. AI tools increase my awareness of cultural differences in communication.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Why?

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Open-ended Questions

12. How do AI tools help you understand different English varieties or accents? why?

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13. In your opinion, how can AI tools improve students' intercultural competence? Why?

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Appendix B

Teachers Interview

Title: AI and Intercultural Competence: Exploring How AI Tools Expose Learners to Global English Varieties

Dear teachers,

This interview aims to explore teachers' perceptions of the role of AI tools in exposing EFL students to global English varieties and in developing their intercultural competence. All responses will be used for academic research purposes only and will remain anonymous.

Section One: Teacher's Background

1. How long have you been teaching English as a foreign language?

- ☐ Less than 2 years
- ☐ 2–5 years
- ☐ 6–10 years
- ☐ More than 10 years

2. What level do you currently teach?

- ☐ First year
- ☐ Second year
- ☐ Third year
- ☐ Master

3. Have you ever used AI tools in your teaching practice?

- ☐ Yes
- ☐ No

☐ Not yet, but I plan to

Section Two: Teachers' Perceptions of AI and Intercultural Competence

4. In your opinion, do AI tools (e.g., ChatGPT, DeepL, and ELSA Speak) expose students to different English accents and varieties? Why or why not?

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5. Have you observed any changes in your students' awareness of global English varieties after using AI tools?

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6. Do you think AI tools can help students understand cultural differences beyond British and American cultures? How?

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7. Do you think AI tools help students become more familiar with non-native English pronunciation patterns? Why or why not?

.....

8. In your experience, can AI tools reinforce or reduce cultural stereotypes among learners? Please explain.

.....

9. What are the potential limitations of using AI tools to develop students' intercultural competence?

.....

10. Would you recommend integrating AI tools into EFL classrooms to enhance students' intercultural competence? Why or why not?

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11. Do you have any additional comments or suggestions regarding AI and intercultural learning?

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Thank you for your valuable participation.

