



Exploring opportunities and challenges of using ChatGPT in English language teaching (ELT) in Morocco

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ABSTRACT

This article investigates the use of ChatGPT in English Language Teaching (ELT) in Morocco. It explores the opportunities and challenges associated with implementing it as a tool to enhance English language learning for Moroccan students, employing a mixed-methods approach. A questionnaire was administered to 62 ELT teachers in Morocco, and 12 interviews were conducted to validate and enrich the data. Findings shed light on the opportunities that ChatGPT offers in Moroccan ELT, including personalized learning, instant feedback, teachers' professional development enhancement, and access to authentic language resources. However, the study identified challenges such as concerns about accuracy, cultural appropriateness, and excessive reliance on technology. The study informs ELT instructors and educational stakeholders in Morocco about the potential advantages and limitations of incorporating AI-based conversational agents like ChatGPT into ELT practices and promotes informed decision-making and effective integration of technology in language learning contexts.

Keywords

ChatGPT,
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Introduction

Over time, computer and information communication technologies have progressed and evolved, resulting in the emergence of artificial intelligence. According to Coppin (2004), artificial intelligence refers to machines' capacity to adjust to new circumstances, manage emerging situations, solve problems, respond to different questions, create plans, and execute a set of functions that typically require human-like intelligence. In that, adopting and introducing technology, particularly artificial intelligence, in various sectors across academia has simplified the tasks of instructors, enabling them to fulfill their responsibilities with greater effectiveness and much efficiency (L. Chen et al., 2020). Indeed, these technological advancements have also extended their impact to other areas, such as language education, promoting effectiveness and efficiency (Guan et al., 2020). Very recently, the field of artificial intelligence has witnessed remarkable progress, leading to the emergence of

revolutionary technologies like OpenAI's ChatGPT. In fact, ChatGPT is a language model created by OpenAI that employs deep learning to produce responses resembling human-like conversations across a vast range of subjects and matters. Consequently, it has garnered significant attention due to its ability to communicate in numerous languages and its potential applications in various domains, including language education. Therefore, the global adoption of ChatGPT has rapidly gained momentum, according to Haleem et al. (2022). This research study aims to explore important findings and insights concerning ChatGPT's role in education while also examining some of the potential challenges and ethical concerns it presents. The study seeks to address the following research questions:

1. What are the Moroccan EFL teachers' perspectives on the use of ChatGPT in English Language Teaching (ELT)?
2. How can ChatGPT be beneficial for students and ELT practitioners according to Moroccan English language teachers?
3. What challenges are associated with the utilization of ChatGPT in education, namely ELT in the Moroccan context?

The current study tends to explore how Moroccan EFL teachers generally perceive the use of ChatGPT in ELT. The study also seeks to reveal the significance of using ChatGPT in ELT from Moroccan teachers' perspectives, considering that ChatGPT has been advocated as a useful tool to enhance language learning and teaching experiences due to its potential for providing personalized feedback, generating interactive conversations, and facilitating language practice, as claimed by some authors (e.g., Jeon & Lee, 2023; Kartal, 2023; Dos Santos et al., 2023; Kostka & Toncelli, 2023).

ChatGPT as an AI-based model can be beneficial for students, educators, and professionals in multiple ways. These benefits may include increased language production and fluency, enhanced engagement and motivation, personalized and adaptive learning experiences, convenient access to language assistance, and the potential for supporting language proficiency development and professional communication skills, according to a study conducted by Gill et al. (2024).

However, the use of ChatGPT in education, particularly in ELT in Morocco, may pose certain challenges. These challenges may include issues related to language accuracy and proficiency, potential overreliance on AI technology, ethical considerations regarding data privacy and security, possible cultural and contextual mismatches, and the need for appropriate training and pedagogical support for teachers to effectively integrate ChatGPT into their classroom practices. Therefore, part of this study is dedicated to unraveling the main challenges and concerns Moroccan EFL teachers encounter when using ChatGPT to design language activities. Before embarking on the task of disseminating the findings of the current study, we would like to provide a theoretical framework upon which the study is based, and which furnishes the groundwork for a better understanding of the technological model at hand.

Review of Literature

OpenAI's ChatGPT Model

ChatGPT is a variant of the GPT model developed by OpenAI, where GPT stands for "Generative Pre-trained Transformer." The system has been designed with the purpose of enhancing interactive and dynamic dialogues, with the goal of providing engaging and contextually appropriate responses (Roumeliotis & Tselikas, 2023). Its aim is to foster natural

and interactive interactions between users and the model. In order to achieve its human-like text generation capabilities, ChatGPT has been subjected to training using a vast collection of textual data obtained from various sources on the internet (Brown et al, 2020). The training procedure encompasses the task of predicting the subsequent word in a given sentence. This exercise facilitates the acquisition of diverse linguistic elements, including grammar, factual knowledge, reasoning capabilities, and even a certain degree of common sense by the model.

For these reasons, OpenAI has been committed to continuously refining and advancing its language models, including ChatGPT. These efforts have focused on enhancing the models' capabilities, mitigating biases, and addressing limitations. OpenAI incorporates user feedback and ongoing research to make updates and improvements to ChatGPT, although specific details about these updates might not be available beyond my knowledge cutoff date in September 2021 according to Thurzo et al. (2023).

ChatGPT, an offer by OpenAI, is a publicly accessible tool built on GPT technology. It serves as an advanced chatbot capable of fulfilling diverse text-based requests. Lund and Wang (2023) explored its functionalities which encompass basic question answering, as well as more complex tasks like generating thank-you letters and addressing productivity concerns. Impressively, ChatGPT can even compose entire scholarly essays by breaking down a main topic into subtopics and generating content for each section according to Atlas (2023). Consequently, the tool enables the creation of complete articles. With an extended version permitting longer responses, researchers can swiftly produce entire papers with minimal input. Indeed, the impact of ChatGPT extends beyond writing, with implications for various industries. Its natural language processing capabilities make it well-suited for dealing with basic customer service inquiries, such as the "ask me" feature on websites as reported by Lund and Wang (2023). Additionally, its capacity to analyze and interpret extensive amounts of text positions it as an asset in the field of education, potentially aiding in research and document preparation. Furthermore, ChatGPT's ability to assess written work could prove beneficial in education, as it could assist in grading and providing feedback on student assignments (Moqbel & Al-Kadi, 2023).

Potential benefits of ChatGPT

Deep learning stands out as a widely renowned example of artificial intelligence (AI). In this technology, algorithms undergo training on large datasets to make predictions based on the data. It encompasses various applications like language translation, voice recognition, and image recognition (Haleem et al., 2022).

AI systems that possess the ability to comprehend and generate human language are known as natural language processing (NLP), which includes tasks such as translation, text summarization, and sentiment analysis. In this direction, ChatGPT utilizes a diverse range of innovative AI models, employing unsupervised and semi-supervised machine learning approaches. This tool, according to Atlas (2023), serves as a writing collaborator, helping in generating written content. It also functions as an intellectual sparring partner, engaging in stimulating discussions. Additionally, it acts as a research assistant, efficiently accessing information and fulfilling requests through conversational interactions. Furthermore, it can assist in drafting reports and business letters, serving as an administrative assistant. Therefore, the author made a compelling argument for the integration of ChatGPT and similar language models into tertiary education as he highlighted the diverse applications of these models, such as providing assistance in writing, facilitating language learning, supporting research endeavors, and reducing administrative tasks and routines. In line with that, Sok (2023) claimed that ChatGPT can be used for a range of tasks. It can help with designing

assessments, generating essays, and translating languages. Additionally, it allows users to ask and answer questions, summarize texts, and interact with it as if they were talking to a peer.

Atlas (2023) also confirmed that ChatGPT has the potential to support educators in various aspects of their instructional design, including the creation of quizzes, exams, and syllabi. Additionally, it can facilitate the development of lesson plans, presentations, and other educational materials, while also offering the capability to assess students' academic performance. In a pilot test conducted by Zhai (2022), he used ChatGPT to write an academic paper on Artificial Intelligence for Education; the study suggests adjusting learning goals to focus on users' ability to utilize AI tools for subject-specific tasks, while emphasizing the development of creativity and critical thinking on the part of users be they teachers or students.

In higher and vocational education, AI model ChatGPT can be utilized in number of ways to facilitate language learning and delivery (Söğüt, 2024). It can help with writing, text summarization, research, translation, and analysis. In secondary education, it can help with assessment design, essay writing, language translation, and instructional design as ChatGPT can help teachers create quizzes, exams, syllabi, and assess student performance. In other words, ChatGPT can provide pedagogical assistance by implanting the tool to provide working teaching strategies, classroom management techniques, and assessment. Furthermore, Söğüt (2024) stressed the idea that AI tools including ChatGPT can promote equitable access to information and materials by serving as a bridge for reducing the digital divide among students if the use of those tools are authorized in educational institutions.

ChatGPT as a pedagogical guide

Providing teaching strategies and Resources

ChatGPT can provide EFL teachers with a range of teaching strategies to help them manage their daily teaching routines successfully. It can be consulted to generate tailored activities and suggest effective lesson planning with specific objectives and aims. Teachers can also engage in human-like conversations with ChatGPT to get guidance on implementing these strategies effectively in their specific classroom context. More interestingly, ChatGPT can share a wide range of resources, including teaching materials and activity ideas, that EFL teachers can use to manage their classrooms more effectively. Teachers can ask ChatGPT to suggest activities that align with their lesson objectives, students' needs, and learning styles, according to Koraiishi (2023). As a result, the incorporation of technology in language education has become essential in effectively addressing the varied requirements of English as a Foreign Language (EFL) learners and instructors. ChatGPT, an advanced language model, shows great potential for transforming English as a Foreign Language (EFL) education.

Classroom Management worries and Feedback

ChatGPT serves as a valuable tool for educators, not only in the realm of education but also in facilitating classroom management through the implementation of more efficient pedagogical strategies, as claimed by Harini (2023). These strategies may include tips on classroom arrangement and behavior management techniques. Furthermore, it aids students in acquiring knowledge at a pace that aligns with their individual learning styles and preferences. Thereby, EFL teachers can ask ChatGPT any classroom management questions, and the system can provide immediate and personalized answers. This can include how to direct specific classroom situations, address different student needs, and engage and motivate students. However, ChatGPT may not provide accurate information about personalized settings and

students' backgrounds, but at least it offers a bunch of ideas that might be worth trying to solve some classroom problems. Likewise, ChatGPT can also provide feedback to EFL teachers on their classroom management strategies. This feedback can be in the form of suggestions for improvement, workable recommendations, examples of successful implementation, and guidance on how to adapt strategies to different classroom contexts (Harini, 2023).

Using ChatGPT for student assessments

The use of ChatGPT for language assessment holds promise for providing innovative approaches to evaluating language proficiency and skills. By leveraging the capabilities of this AI tool, language assessment can be enhanced through the creation of interactive and dynamic assessment tasks that simulate real-life communication scenarios (Moqbel & Al-Kadi, 2023). Through conversational interactions with ChatGPT, students can demonstrate their language abilities in a more authentic context, allowing for a more accurate assessment of their writing skills. ChatGPT can also provide automated and immediate feedback on students' written responses, as reported by Halaweh (2023). By analyzing the content, grammar, vocabulary, and coherence of students' written output, ChatGPT can offer instant feedback, highlighting areas for improvement and aiding in the development of writing skills. Moreover, ChatGPT can facilitate adaptive assessments by tailoring the difficulty level and content of the tasks based on students' responses. The AI model can adjust the complexity of questions and prompts based on students' previous answers, ensuring a more personalized and targeted assessment experience. Additionally, the use of ChatGPT in language assessment can enhance the objectivity and reliability of evaluations. As an AI-based tool, ChatGPT can minimize human bias in scoring and provide consistent and standardized evaluations across different students and contexts. In this regard, Cotton et al. (2023) propose that emerging assessments should emphasize students' analytical, critical thinking, communication, and problem-solving skills. Additionally, a shift towards prioritizing formative assessment over summative assessment is recommended, achieved through the design of engaging activities that involve debates, group discussions, presentations, and teamwork (Cotton et al., 2023).

Potential risks of using ChatGPT

Despite achieving tremendous success, it is to be noted that ChatGPT has brought about new challenges and risks to the field of education. While being capable of providing specific answers to different user queries, the model can be exploited to complete written assignments and exams on behalf of students, which raises concerns about AI-enabled cheating. Consequently, this will likely push many students as well as teachers to rely heavily on this technology to do their work. (Dibble, 2023). In a review study where Mhlanga (2023) has explored the implications of ChatGPT in education, he revealed that educators have apprehensions about incorporating ChatGPT in educational settings. They worry that students might delegate their work to ChatGPT due to its rapid generation of acceptable texts. Thus, the significance of using ChatGPT has been underscored responsibly and ethically, according to Mhlanga (2023). These concerns emphasize the importance of education in equipping future individuals, including both teachers and students, with the necessary skills and abilities to thrive in a fast-paced and evolving society.

In a separate review by Sallam (2023), who examined 60 articles related to ChatGPT in healthcare, medical education, and academia, several concerns were identified across the studies, including plagiarism, incorrect responses, and inaccurate citations. According to OpenAI, ChatGPT has the potential to exhibit detrimental reactions to instructions or

demonstrate discriminatory behavior (OpenAI, 2022). Furthermore, it may occasionally generate responses that sound plausible but are factually incorrect or nonsensical (Haleem et al., 2022). Hence, it is crucial to promptly address the implications of ChatGPT-assisted learning to ensure that its advantages are maximized while its drawbacks are minimized.

Previous studies and reports, such as Baskara (2023) and Latif et al. (2023), claimed that ChatGPT has extraordinary abilities as a language model to provide answers to sophisticated questions, insight into numerous issues, and guidance across many different disciplines. However, every boon comes with a bane. Indeed, ChatGPT comes with a bunch of challenges. In this context, the article "The use of ChatGPT in the digital era: Perspectives on Chatbot Implementation" by Limna et al. (2023) examines the perspectives of Thai students and educators regarding ChatGPT in education. The study highlights the ability of the tool to offer immediate feedback, address inquiries, and assist students as valued by the participants; however, educators perceived it as a means of reducing their routine responsibilities (Limna et al., 2023). Concerns arose, however, regarding the accuracy of the chatbot, the possibility of providing offensive and biased content (Atlas, 2023; Rahman & Watanobe, 2023), the possibility of teacher-student real interaction being lost, and privacy and data security concerns (Zhuo et al., 2023). Besides, ChatGPT may not exhibit the same level of cultural awareness and proficiency in employing appropriate language as a human language instructor due to the absence of human nuance in ChatGPT (Susnjak, 2022). Yet, these concerns are not fully explored in the field of education, namely in English language teaching in Morocco. On this basis, the current study focuses on how ChatGPT is integrated into ELT practices, examining the potential benefits and challenges faced by Moroccan EFL teachers.

The incorporation of artificial intelligence (AI), namely ChatGPT, in the field of English language teaching (ELT), has the potential to fundamentally transform our methods and strategies in language education. This innovation ushers in a novel epoch of language learning that is tailored to individual needs, fosters active participation, and enhances accessibility. Consequently, learners are afforded unprecedented avenues to interact with the language, surpassing previous boundaries of imagination. The integration of artificial intelligence (AI) tools such as ChatGPT presents an opportunity for educators and learners to fully harness the transformative power of this technological revolution. This integration has the potential to enhance the effectiveness, engagement, and adaptability of English language teaching (ELT) by catering to the unique needs of individual learners. Therefore, this research article centers around the transformative journey that is driven by the dynamic interplay between artificial intelligence (AI) and English language teaching (ELT) by Moroccan ELT teachers who understand the tool and know its destructive features.

Method

This study employs a mixed-methods research design, integrating both quantitative and qualitative methodologies, to comprehensively explore the use of ChatGPT in English language teaching in Morocco. The research design allows for an in-depth exploration and understanding of the potential applications, benefits, and challenges of using ChatGPT in the English language teaching context, both in secondary and tertiary education. By incorporating both methods, this study seeks to capitalize on the strengths of each approach, triangulating data to enhance the validity and depth of the findings (Ivankova & Cresswell, 2009).

Table 1 shows that out of a total of 62 respondents, 41 individuals identified as male, constituting 66.1% of the total sample. On the other hand, 21 respondents identified as female, making up 33.9% of the total sample.

Participants

Table 1. Gender of Respondents and the level they teach

		What level do you teach?				Total
		Middle School	High school	University	Other	
Gender	Male	9	22	9	1	41
	Female	8	11	1	1	21
Total		17	33	10	2	62

As shown in the table above, the participants for this study consisted of 62 English language teachers from various educational institutions representing different levels (middle school, high school, university, and other vocational institutions). The crosstabulation table provides a descriptive analysis of the gender distribution among the respondents based on the level of education they teach. The data indicates that there is a higher number of male respondents (n=41) compared to female respondents (n=21). Additionally, most of the respondents teach at the high school level, followed by the middle school level (53.22%). 19.35% of the respondents are teaching at the university level and in other educational settings, such as vocational centers. It is worth mentioning that the participants were recruited through invitations distributed via email and online platforms. They were provided with detailed information about the study's purpose and procedures and were assured of the confidentiality and anonymity of their responses.

Table 2. Participants Demographics

	Participant ID	Gender	Age	Teaching position
01	PA	Male	24	Middle school teacher
02	PB	Male	26	High school teacher
03	PC	Female	36	High school teacher
04	PD	Male	41	High school teacher
05	PE	Female	28	Middle school teacher
06	PF	Male	30	High school teacher
07	PG	Male	42	University teacher
08	PH	Female	38	High school teacher
09	PI	Male	25	High school teacher
10	PJ	Male	37	High school teacher
11	PK	Female	26	Middle school teacher
12	PL	Female	34	University teacher

Note: Demographics of participants in the interviews

The participants in the interviews are identified by unique codes (participant ID) ranging from 01 to 12. The sample includes both male and female participants, providing a mix of perspectives from different genders. The participants' ages range from 24 to 42, with a diverse distribution of age groups, including 7 males and 5 females. Males constitute the majority of the sample (58.3%), while females make up the remaining 41.7%. It is worth mentioning that

the participants hold various teaching positions, including middle school teachers (3 participants, 25%), high school teachers (7 participants making 58.3% of the sample), and university teachers (2 participants, 16.7%).

Instruments

A structured mixed questionnaire was designed specifically for this study to collect data from the participants. The questionnaire consisted of both closed-ended and a few open-ended questions, covering various aspects related to the use of ChatGPT in English language teaching. The closed-ended questions provided participants with predetermined response options, while the open-ended questions allowed for more in-depth and qualitative responses. It is to be noted that the questionnaire was piloted with a small group of fellow English language teachers to ensure clarity and appropriateness of the questions. Based on the pilot test results, minor revisions were made to enhance the readability and comprehensibility of the questionnaire. Then, the final version of the questionnaire was administered to the participants via an online survey platform, ensuring ease of access and data collection efficiency. The questionnaire responses were recorded and stored securely for subsequent analysis.

In order to comprehensively navigate the research questions in the study on a deeper level, in-depth interviews were conducted with 12 teachers working in different locations for the sake of capturing a holistic understanding of the topic under study. Quantitative data were analyzed using SPSS and Excel, whereas qualitative data were analyzed using thematic analysis. Themes were created and coded to find common patterns in the collected data.

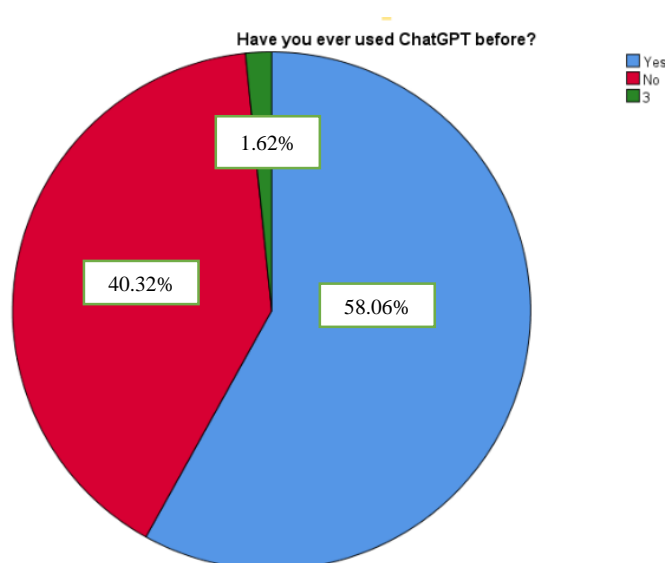
Results

Quantitative Data

Descriptive statistics

In the current study, 58% of the respondents indicated that they have experience using ChatGPT. On the other hand, 40% stated that they have not used ChatGPT, while almost 2% responded with "maybe" or uncertainty regarding their experience with ChatGPT.

Figure 1. Experience with using ChatGPT among respondents



This data suggests that most of the respondents have some level of familiarity or hands-on experience with ChatGPT. However, there is still a notable portion of respondents who have not yet utilized ChatGPT in their teaching practices. The uncertainty expressed by a small percentage of respondents indicates a potential interest or openness to exploring ChatGPT, but without definitive experience at the time of the survey. Generally speaking, teachers are still relatively reluctant to utilize ChatGPT as a pedagogical tool in their teaching practices.

Table 3. The degree of knowledge about using GPT technology in English Language Teaching (ELT)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very knowledgeable	6	9.7	9.7	9.7
	Somewhat knowledgeable	28	45.2	45.2	54.8
	Moderately	16	25.8	25.8	80.6
	Somewhat unfamiliar	4	6.5	6.5	87.1
	No knowledge at all	8	12.9	12.9	100.0
	Total	62	100.0	100.0	

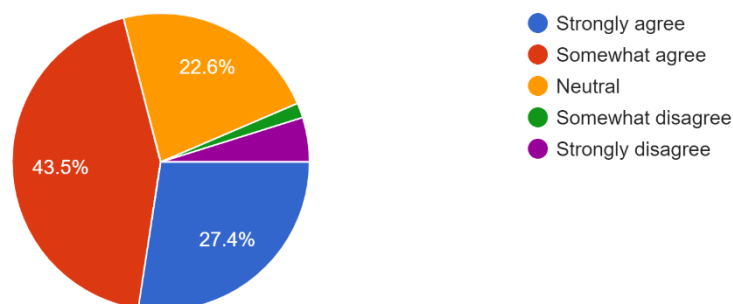
Regarding the level of knowledge pertaining to the utilization of ChatGPT in the context of English language teaching (ELT), the responses obtained from the participants reflect varying degrees of familiarity with using the ChatGPT tool, namely in language education. Among all the participants, six individuals reported being "very knowledgeable" about using ChatGPT in English language teaching. These respondents have a high level of expertise and confidence in utilizing ChatGPT effectively for language instruction. Additionally, 28 participants indicated that they are "quite knowledgeable" about ChatGPT. While not as extensive as the "very knowledgeable" group, these individuals still possess a substantial level of understanding and experience with ChatGPT in the context of English language teaching. However, a group of 16 respondents expressed a "neutral" position, suggesting that they have a moderate level of familiarity with ChatGPT. They may have some awareness of its applications but may not have substantial experience or in-depth knowledge about the application. Furthermore, 4 participants stated that they are "somewhat unfamiliar" with ChatGPT in English language teaching. These individuals have limited exposure to or experience with the tool and may require further training or exploration to fully comprehend its potential and implementation. Finally, 8 respondents admitted to having no knowledge about using ChatGPT in English language teaching. This group has not yet engaged with or acquired any information regarding the application of ChatGPT in language instruction.

The aforementioned distribution indicates that English teachers exhibit varying levels of awareness and familiarity with GPT technology. While a significant portion of the teachers demonstrate some degree of knowledge and familiarity with this technology, a small percentage appear to possess limited knowledge regarding GPT technology. This suggests that most teachers belonging to the English language community in Morocco are embarking on using technology-based tools in their teaching practices. However, we still do not know how those tools are being used, what advantages they provide, and what challenges they pose.

Figure 2. Teachers' perceptions about the use of ChatGPT in providing additional resources

Q10- To what extent do you believe that ChatGPT can be useful in providing language teachers with additional resources for professional development?

62 responses



These percentages above represent the distribution of responses among the participants. It indicates the level of agreement or disagreement with the statement about ChatGPT's usefulness for providing language teachers with additional resources for professional development. Most respondents (43.5%) somewhat agreed that ChatGPT can be useful in providing language teachers with additional resources for professional development. Additionally, 27.4% strongly agreed with this statement. On the other hand, 22.6% of respondents indicated a neutral stance, neither agreeing nor disagreeing with the statement. A smaller proportion of participants (4.8%) strongly disagreed with the statement, and only 1.6% somewhat disagreed.

It is worth noting that the data provides insights into the beliefs and opinions of the participants regarding ChatGPT's potential usefulness for language teachers' professional development. However, it does not provide information about the specific reasons behind their responses or the rationale for their beliefs. Further qualitative analysis or additional information would be needed to delve deeper into the participants' perspectives on the topic.

Table 4. The level of agreement with the statement about ChatGPT's usefulness in ELT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<i>Strongly agree</i>	17	27.9	27.9	27.9
	<i>Disagree</i>	26	42.6	42.6	70.5
	<i>Neutral</i>	14	23.0	23.0	93.4
	<i>Agree</i>	1	1.6	1.6	95.1
	<i>Strongly agree</i>	3	4.9	4.9	100.0
	<i>Total</i>	61	100.0	100.0	

These percentages above represent the distribution of responses among the participants. It indicates the level of agreement or disagreement with the statement about ChatGPT's usefulness for providing language teachers with additional resources for professional development. Most respondents (34.5%) somewhat agreed that ChatGPT can be useful in providing language teachers with additional resources for professional development. Additionally, 27.4% strongly agreed with this statement. On the other hand, 22.6% of

respondents indicated a neutral stance, neither agreeing nor disagreeing with the statement. A smaller proportion of participants (4.8%) strongly disagreed with the statement, and only 1.6% somewhat disagreed.

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Qualitative Data analysis

Moroccan ELT professionals' perspective on the utilization of ChatGPT in ELT

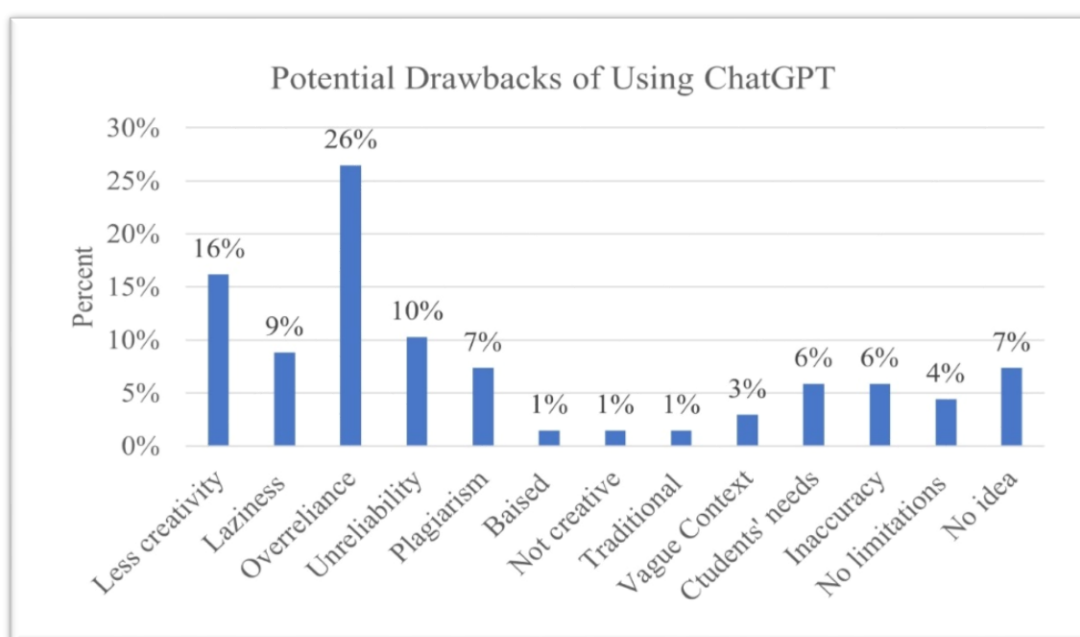
Moroccan EFL teachers may find value in using ChatGPT as a tool to enhance language practice for their students. According to PB in Table 2, students can engage in realistic and authentic English language practice. Additionally, AI language models like ChatGPT could adapt to individual learners' needs, offering personalized feedback and assistance through interactive conversations with the AI. This is highlighted in his words by saying, *"I have used ChatGPT in my classroom, and I find it super cool, especially when it comes to engaging students with authentic conversations with the Chat bot by role-playing. It was an exciting experience for students."* EFL teachers might be appreciative of this potential for personalized learning because they can use ChatGPT to offer tailored support in particular language areas where students might struggle while also providing immediate feedback. Moreover, ChatGPT can serve as a resource for language input, allowing teachers to expose students to authentic English language usage, as claimed by PD: *"I think ChatGPT is a powerful tool that can be used as a teaching aid... It can be used to create reading passages and even questions. It's indeed a time-saver."* So, by generating dialogues, writing prompts, and sample conversations reflecting real-world language patterns, vocabulary, and cultural contexts, ChatGPT can enrich students' language exposure *"mainly if its use is maximized outside the classroom. Students can converse with the tool and apply what they learn in class,"* as emphasized by PE.

Furthermore, as a supplementary teaching tool, ChatGPT can complement traditional classroom instruction, foster autonomous learning, and promote student engagement beyond the classroom. One of the perceptions that teachers have about ChatGPT is that it can help them refresh and boost their knowledge about ELT issues through conversations and inquiries. To quote PA, *"conversing with ChatGPT about ELT issues really refreshes my mind about methodology and pedagogy. Most of the time, it recommends interesting lesson plans and procedures for teaching a language."* Again, it is thought that ChatGPT can help in designing tests, quizzes, and comprehension passages for classroom practice. In addition to being a teaching tool, ChatGPT, according to PF, *"can foster and scaffold their (teachers) professional development. That's to say, they can refresh their memory about a method or teaching procedure in no time, just by asking the right questions and prompts."* The respondent sees ChatGPT as a tool that can "foster and scaffold" the professional development of teachers. This indicates that ChatGPT can contribute to continuous learning and skill enhancement for educators. Besides, this suggests that ChatGPT can provide quick and efficient access to information, potentially saving time for educators. However, Moroccan EFL teachers, according to the data provided, might also have concerns about the limitations of AI language models like ChatGPT. These models may not always grasp the context,

nuance, or cultural sensitivity required for effective language learning. Therefore, teachers might exercise caution in relying solely on AI models for language instruction, recognizing that human interaction and guidance are crucial for comprehensive language development.

Potential drawbacks and limitations of using ChatGPT

Figure 3. Potential drawbacks and limitations of using ChatGPT



In reaction to the question about potential drawbacks or limitations of using ChatGPT to generate language activities, 26% of respondents claim that one of the drawbacks includes over-reliance on the application of ChatGPT. In his words, PE claims that *“one of the scary things about using ChatGPT is the fact that both students and teachers will likely rely too much on it.”* This suggests that excessive reliance on ChatGPT could lead to a reduced focus on other crucial aspects of language learning, such as face-to-face communication, interactive activities, and authentic language practice. In the same vein, 16% of the subset hinted that using ChatGPT may reduce teachers’ creativity. PE expresses her *“fear and worries that ChatGPT may hinder creativity, pushing teachers and students to become lazy.”* These two major drawbacks bring other problems to the surface, such as laziness and plagiarism.

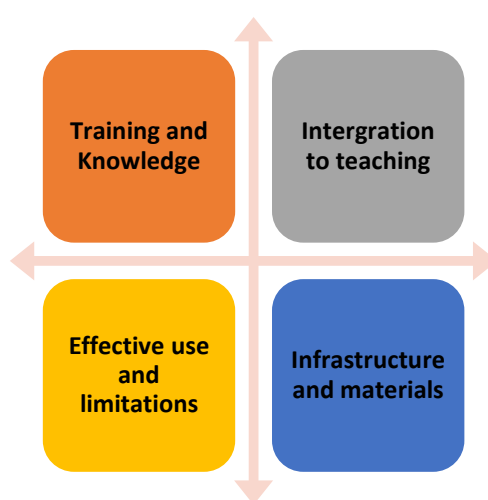
It is also to be noted that 6% of the respondents assert that using ChatGPT is useless due to a limited understanding of learners’ needs. This has been validated in an interview with RF, who claims that *“ChatGPT fails to do certain tasks, such as providing differentiated learning tasks and tailored activities according to students’ diversified needs.”* Therefore, ChatGPT may struggle to adapt to individual learner needs, such as different learning styles, levels of proficiency, or specific language goals. It may not be able to provide personalized feedback or address the unique challenges that learners face. Likewise, as expressed by a small portion of the ELT professionals, 6% of respondents claim that it is likely that ChatGPT-generated knowledge is *“inaccurate and unreliable as it provides wrong information, distorted facts, and fake references. So, using ChatGPT effectively entails being aware of its limitations,”* as stated by PI. Due to the limitations of natural language

processing, ChatGPT may misinterpret learner input, leading to inaccurate responses or misunderstandings. This can hinder effective communication and hinder language learning. However, 4% see no limitations so far as the application is witnessing gradual updates or that it is not fully explored in the field of ELT. Looking at the table of limitations and drawbacks, it seems that educators have apprehensions towards implementing ChatGPT in educational settings, according to Mhlanga (2023).

Types of Support needed for effective integration of ChatGPT in ELT

In the light of thematic analysis of data provided by respondents concerning types of support needed for effective use of ChatGPT in English language practices, the following themes are fully highlighted below.

Figure 4. Types of support needed for effective use of ChatGPT in English language practices



Training and Knowledge

Training and knowledge acquisition are essential components for effectively utilizing AI language models, particularly ChatGPT, in language teaching. It is crucial to provide comprehensive training programs that equip both teachers and students with the necessary skills and understanding. This includes training to use the software properly, ensuring proficiency in navigating the tool, and utilizing its features. Academic training is also important, offering theoretical knowledge and practical strategies for integrating ChatGPT into teaching practices. Instructional preparation is emphasized, with training on how to design tasks and prompts that optimize student engagement and learning outcomes. A gradual introduction of ChatGPT into English as a Foreign Language (EFL) classrooms is recommended, allowing teachers and students to familiarize themselves with the technology. Professional training and development opportunities should be provided to enhance educators' competence in incorporating ChatGPT into their instructional frameworks. Moreover, attention should be given to the provision of good infrastructure and digital skills and tools, ensuring reliable internet connectivity, access to devices, and digital literacy training. By addressing these training needs and supporting resources, language teachers can effectively harness the potential of ChatGPT to enhance language teaching practices.

Integration into Teaching

Integration of ChatGPT into language teaching requires careful consideration of various factors to ensure successful implementation. In this context, participants made the claim that it is essential to have well-equipped classrooms with devices like laptops, smart TVs, data shows, and reliable internet connectivity. For example, PJ claims:

.... AI technology is invading education and thereby we have to be equipped to embrace such technology and make the best use of it. So, for better implementation, the Ministry of Education should provide consistent training for teachers so that they can keep up with these technologies and how to use them effectively in their classrooms. Again, schools and universities should be well-equipped with digital gadgets and reliable connectivity to ensure the process of digital learning in the classroom.

This suggests that reliable internet access in classrooms is vital for uninterrupted usage of ChatGPT and real-time interaction with the tool, for it enables collaborative activities and access to online resources that complement ChatGPT's functionalities. More importantly, adequate technical and financial support is necessary to maintain equipment functionality and address any technical issues. That is to say, resources such as data projectors, Bluetooth speakers, and school printers that facilitate interactive learning experiences with ChatGPT must be at the disposal of schools.

It has also been highlighted that Moroccan teachers are in dire need of comprehensive training programs covering both technical aspects and pedagogical strategies for integrating ChatGPT into their instruction effectively. This training should enable teachers to adapt ChatGPT to different lesson plans and activities. Introducing ChatGPT gradually in EFL classrooms allows teachers and students to familiarize themselves with the technology and adjust their teaching and learning approaches accordingly. This approach facilitates a smoother transition and enables adaptations based on feedback. Teachers also need to develop technological skills to navigate the ChatGPT platform and website effectively. It is important for them to be familiar with the tool's functionalities and potential applications to successfully integrate it into their teaching since students get more motivated when incorporating AI technology in the classroom. This idea has been highlighted by PG, who says, "*Students know a lot more about ChatGPT than I do. Unsurprisingly, today's students are called digital natives. They know a lot about the software [ChatGPT] and other AI tools.*" Indeed, providing opportunities for professional development ensures that teachers are competent at effectively utilizing ChatGPT and keeping up with the digital generation of students. As a response, training sessions, workshops, and access to updated versions of the software should keep educators well-informed and up-to-date with best practices.

Effective Use and Limitations

Following the responses from ELT professionals, effective utilization of ChatGPT in language teaching requires pedagogical guidance and careful integration into existing teaching frameworks. For this purpose, teachers should receive support and training on how to effectively incorporate ChatGPT to design meaningful tasks, scaffold activities, and provide appropriate feedback to students, as highlighted by PL claiming that. While ChatGPT can be a valuable tool, it should not be relied upon as the sole source of knowledge. Therefore, teachers should continue to seek knowledge from books and articles to ensure the

effectiveness and reliability of their language teaching practices. Again, teachers can leverage ChatGPT for different types of assessments that promote critical thinking, problem-solving, and collaborative skills among students. By incorporating ChatGPT into assessment strategies, teachers can encourage students to think creatively and engage in collaborative learning experiences.

Having sufficient knowledge about ChatGPT and its impact on education is crucial. Teachers should stay informed about the capabilities, limitations, and ethical considerations associated with using ChatGPT in the classroom. This knowledge enables them to make informed decisions and use ChatGPT effectively to enhance learning outcomes. Furthermore, ChatGPT can be used as a "fun" activity in language teaching. By incorporating engaging and interactive tasks, teachers can leverage the interactive nature of ChatGPT to motivate students and promote their active participation in the learning process.

It has also been claimed by ELT respondents that demo lessons conducted by teachers who are well-versed in using ChatGPT can be effective ways to showcase its potential to other educators. These demonstrations provide practical insights and hands-on experience, allowing teachers to witness firsthand how ChatGPT can be integrated into language teaching effectively.

Furthermore, learning how to use ChatGPT properly and having access to modern technologies like laptops and the internet in schools are two important factors that make it easier for AI tools to be used effectively in education. In this regard, institutions should invest in training programs that equip teachers with the necessary skills and knowledge to utilize ChatGPT effectively. Additionally, raising awareness about the potential of new media, including AI language models like ChatGPT, promotes a culture of technological integration in language teaching. Teachers should focus on using ChatGPT to benefit from its capabilities rather than becoming overly dependent on it. Recognizing the positive aspects of using ChatGPT, such as enhancing student engagement and promoting interactive learning experiences, helps teachers strike a balance between leveraging the tool and maintaining the importance of traditional teaching methods.

Infrastructure and Resources

Themes addressing infrastructure and resource needs play a crucial role in effectively integrating ChatGPT into language teaching. Reliable internet connectivity is essential to ensure seamless access to ChatGPT and its functionalities. In addition, providing iPads or similar devices in classrooms promotes digital literacy among both educators and learners, enabling them to effectively navigate and utilize ChatGPT. Internet connectivity serves as the backbone for utilizing ChatGPT in the classroom. It ensures uninterrupted access to the tool, allowing teachers and students to fully engage with its features and capabilities. Access to a stable internet connection is crucial for real-time interactions and collaborative activities facilitated by ChatGPT.

In the same vein, teachers express a need to understand how they can use ChatGPT inside the classroom. This point is highlighted by PB, who states that "*teachers should be very careful about how to use ChatGPT in the classroom by following guidelines and staying mindful of its limitations.*" This highlights the importance of providing training and support to educators, equipping them with the knowledge and skills necessary to effectively incorporate ChatGPT into their instructional practices. Training programs should focus on demonstrating various ways ChatGPT can be utilized in the classroom, providing guidance on its integration, and offering practical examples and use cases.

It is also worth mentioning that motivation and engagement are key factors in successful language teaching. Another participant (PC) makes a good claim about encouraging "students to use it wisely, especially when they are preparing for an exam." Again, PK makes a compelling case for using ChatGPT with students, as it serves as a generator of prompts, stimulating students to think critically and learn collaboratively. In her words, PK claims that "*it is essential to train students to use ChatGPT wisely as it boosts critical thinking skills by asking HOTS,*" meaning asking questions pertaining to high order thinking skills. By providing thought-provoking prompts and encouraging active participation, ChatGPT can enhance student motivation and promote a cooperative learning environment. Indeed, the use of technology, including ChatGPT, can spark students' motivation and willingness to explore new educational tools. The interactive and engaging nature of ChatGPT can captivate students' interest and inspire them to delve deeper into language learning through technology.

Discussion

Based on the findings of the study, it seems that ChatGPT as a language model can be a promising tool that can be used to optimize a huge range of activities for classroom implementations, despite some of the challenges being voiced by participants in the study subset. Findings obtained from the study reveal that Moroccan teachers of English are open to using AI tools in education, mainly because of the practical concerns of pedagogy in the classroom, despite some of the ethical concerns raised by some of the participants. The study also highlights the importance of ChatGPT as a pedagogical guide for Moroccan teachers due to its capability of generating reading comprehension passages, tailored exams and quizzes, grammar and vocabulary activities, and designing lesson plans. It is also to be noted that few have used ChatGPT as a hands-on activity in the classroom. Most of the experiences with using ChatGPT for teaching purposes take place outside the classroom due to the technical factors mentioned in the analysis. That is to say, most teachers are still reluctant to utilize ChatGPT in the classroom due to a lack of material, digital gadgets, and access to the internet. Yet, they still use it as a starting point to generate language content, activities, and tailored exams and quizzes.

In addition, training sessions and workshops that address the use of AI technology in the English language classroom are not yet considered. Therefore, this research project has the potential to bring significant benefits to multiple parties involved in the education sector in Morocco. It will definitely make a valuable contribution to the expanding body of knowledge, theories, and empirical evidence related to the impact of AI on education. Scholars, professionals, and policymakers, including administrators and leaders in educational institutions and the broader education sector, stand to gain from this study as Morocco has been embracing a digital learning policy since COVID 19. In conformity with Atlas (2023), this study will facilitate evidence-based decision-making and enhance management and leadership practices in the sector, thereby providing valuable insights and guidance.

Indeed, the inevitable and widespread use of AI-assisted technology, including ChatGPT, will have a dominant presence in various fields, including education, as we have established in the literature review. However, according to responses obtained from ELT teachers in this study, there are valid concerns regarding the potential misuse of this technology, especially in education. To ensure the safe and responsible utilization of ChatGPT and other AI-based models, it is highly crucial to establish appropriate guidelines and regulations with the involvement of all stakeholders, as expressed by most respondents. For this reason, we have provided a list of recommendations that will help teachers,

supervisors, and superintendents successfully embark on the implementation of this new AI-based technology.

More importantly, all faculties, ELT partitioners, and education managers in Morocco should bear in mind that ChatGPT and other AI models are invading the educational sector, and thereby they should be embraced in a flexible and well-structured manner. In addition to that, it is strongly recommended to engage in a science-driven debate to thoroughly evaluate the advantages and disadvantages of ChatGPT, using experimental research, in order to weigh the potential benefits against the risks of misleading information and fraudulent results being generated. Based on the available evidence in the study, education professionals can be described as cautiously enthusiastic about the significant potential of ChatGPT and other models in enhancing English Language Teaching and Learning (ELTL). Recognizing the pivotal role that ChatGPT plays in revolutionizing educational practices, particularly in the realm of English as a Foreign Language (EFL), it becomes imperative to delve into the broader implications of its integration. As educators increasingly embrace the potential of this advanced language model to enhance language learning experiences, several key considerations come to the forefront. These implications span pedagogical methodologies, student engagement, and the evolving landscape of linguistic instruction. In light of what has been discussed above, we will explore these multifaceted implications, shedding light on both the opportunities and challenges that accompany the integration of ChatGPT in the dynamic field of EFL education.

Recommendations

Considering the potential risks associated with the use of ChatGPT, it is necessary to provide recommendations in light of what has been found in this study. In this regard, ethical considerations, transparency, and legal issues must be carefully addressed, and proactive acceptance of this technology can help mitigate future complications. Therefore, if handled properly, these technologies have the potential to expedite the language learning process and boost professional development for teachers, while also promoting educational research and refining pedagogy by overcoming language barriers.

As a starting point, it is highly important to recognize this prominent emerging AI tool's relevance in the realm of education. Teachers and students alike should be encouraged to explore and maximize the benefits derived from ChatGPT. Nevertheless, it is vital to exercise caution and ensure inclusive, equitable, transparent, and ethical utilization of ChatGPT. Besides, with regards to using ChatGPT for student assessments, collaboration between educational policymakers, educational leaders, and teachers is pivotal to revising assessment standards and preventing unfair evaluation of learning outcomes. In this regard, Cotton et al. (2023) propose that emerging assessments should emphasize students' analytical, critical thinking, communication, and problem-solving skills. Additionally, a shift towards prioritizing formative assessment over summative assessment is recommended, achieved through the design of engaging activities that involve debates, group discussions, presentations, and teamwork (Cotton et al., 2023).

In addition to that, educational institutions should develop training materials to ensure productive and accountable use of ChatGPT among both teachers and students while upholding academic integrity and ethical considerations. Instead of outright banning ChatGPT, providing training and guidance on how to effectively utilize this AI tool for educational and research purposes is crucial. Furthermore, in order to enhance the quality of education, action research should be conducted to further examine the effectiveness and efficiency of integrating ChatGPT into educational settings. Likewise, there should be increased availability of funding for research exploring the utilization of AI tools, such as

ChatGPT, for educational and research purposes. This would enable researchers to thoroughly investigate the maximum potential benefits of ChatGPT in education. Fifthly, while receiving assistance from ChatGPT, students should exercise vigilance. It is advisable for students to verify, analyze, and edit the responses generated by ChatGPT to ensure their accuracy. Students should familiarize themselves with the strengths and limitations of the tool while adhering to academic integrity guidelines and being aware of the consequences of academic dishonesty (Rudolph et al., 2023).

Finally, researchers are encouraged to utilize ChatGPT to gain a deeper understanding of its advantages and limitations within the academic domain. It is crucial to use this tool solely for brainstorming and outlining purposes rather than producing entire research articles in order to prevent intentional or unintentional academic misconduct. When using ChatGPT for idea generation, it is vital to verify the accuracy of the information by cross-checking and editing the responses, as well as seeking additional input through follow-up prompts. Failure to do so may lead to ChatGPT being more of a hindrance than a benefit, according to Atlas (2023) and Rahman and Watanobe (2023). This has been confirmed by one of the participants in the study, who claimed that *"ChatGPT is sometimes unreliable as it provides wrong information, distorted facts, and fake references. So, using ChatGPT effectively entails being aware of its limitations. So, teachers should double check what they get from ChatGPT."* Here comes the importance of training and raising awareness about its potential as well as its drawbacks.

Conclusion

The findings of the research shed light on the possibilities that ChatGPT offers in the context of Moroccan English Language Teaching (ELT), including individualized instruction, immediate feedback, opportunities for professional development for teachers, and access to authentic language resources. The study highlights a few of the challenges, such as concerns about correctness, cultural appropriateness, and over-reliance on technology. In addition, the study discusses the implications for teacher training, curriculum design, and pedagogical practices that are necessary to successfully implement ChatGPT in ELT classrooms and beyond.

In the end, the purpose of this research is to contribute to a better understanding of the potential benefits and challenges associated with the implementation of AI-based conversational agents such as ChatGPT in English language classrooms in Morocco. The findings are intended to provide information to educational stakeholders regarding the possibilities and limitations of incorporating such technologies into ELT practices, thereby facilitating the making of informed decisions and promoting the effective integration of technology in language learning contexts.

According to the findings of the study, the implementation of ChatGPT in educational settings demonstrates significant potential benefits for both students and teachers. These benefits include the creation of assessments, the enhancement of pedagogical practices, support for personalized learning, the generation of academic outlines, and the generation of themes for texts. On the other hand, certain restrictions, including risks to academic integrity, biased evaluations, factual inaccuracies, and an overreliance on AI, need to be appropriately addressed.

The following are some recommendations for the implementation of artificial intelligence language models in educational settings: encouraging exploration of ChatGPT while ensuring ethical use; revising assessment standards to emphasize critical thinking and formative assessment; providing training and guidance for productive utilization; conducting

action research to evaluate effectiveness; promoting student vigilance in verifying generated responses; and using ChatGPT for brainstorming rather than for complete articles. In order to minimize the risk of academic misconduct and make the most of ChatGPT, careful verification and editing as well as strict adherence to the guidelines for academic integrity are required.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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