



Exploring ChatGPT's Role in English Language Learning: Insights from Pre-Service Teachers

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Abstract

The proliferation of AI tools like ChatGPT is reshaping the traditional teaching-learning model, expanding the boundaries of classroom learning into new and innovative spaces. This study utilized a descriptive quantitative design using a validated survey questionnaire to explore pre-service teachers' perceptions of ChatGPT's influence on their engagement in English language learning activities. Participants included 451 pre-service teachers majoring in English from two higher education institutions in region 7. The findings indicate a predominantly positive perception of ChatGPT among pre-service teachers. They reported heightened interest, motivation, and active participation in language learning activities facilitated by ChatGPT. Additionally, participants perceived that ChatGPT supports improvements in their language proficiency and skills development. Nevertheless, concerns regarding potential over-reliance on AI writing tools, as highlighted in the literature, were noted. While pre-service teachers acknowledged ChatGPT's benefits, uncertainties were expressed about its potential impact on critical thinking and creativity. The results suggest that ChatGPT holds promise as a valuable tool for promoting classroom engagement and enriching language learning experiences. However, further research is needed to explore the impact of AI tools in enhancing students' macro skills and to identify the best integration strategies for maximizing the benefits of ChatGPT in language education.

Keywords: Artificial intelligence, ChatGPT, English language learning, Language teaching, Pre-service teachers

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1. Introduction

Chatbots have transcended classroom learning. The current teaching-learning model has been again challenged by the continuous development of artificial intelligence (AI) leading to ground-breaking tools like ChatGPT (Chat Generative Pretrained Transformer). AI involves machines performing tasks that were traditionally done by humans. They use simulated human thinking to solve complex problems, learn from mistakes, improve themselves, engage in creative tasks, and provide instant answers. The emergence of these various digital tools transformed how the world operates today [1].

Although AI-based tools have been used in education settings for the past years in creating for example personalized learning materials for students [2], the development of highly sophisticated chatbots that can converse in human-like ways and comprehend human language [3] has created a stir among educators. Consequently, AI tools have been utilized for various purposes like enhancing students' learning experiences or automating administrative tasks [4]. Likewise, students noted time-management advantages, 24/7 access to learning from anywhere, individualized learning programs tailored to each student's abilities and goals, and tutoring via AI chatbots [5] among others.

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ChatGPT is a conversational chatbot developed by OpenAI [6] built using a state-of-the-art language model and programmed using a large dataset [7] enabling it to create a logical, organized, and relevant response. It is a form of generative AI that produces human-like responses to questions in natural language using deep learning. CNN Business News reported that ChatGPT has passed university-level exams particularly law exams in four different courses at the University of Minnesota Law School [8]. Although it is not at the level of an A+ student, it still attained a passing grade in all these exams. This AI tool was released last November 2022 and since then has quickly penetrated learning environments.

What makes ChatGPT unique from other chatbots and AI tools used in education is its distinctive mix of a huge data set, personalization, and scalability which makes it a useful tool for both students and teachers in several educational contexts. It can assist teachers in constructing lesson designs and syllabi, constructing tests, summarizing complex content, providing translations, and designing more engaging classroom activities. Moreover, this tool helps students clarify and answer queries; provides personalized tutorial sessions; offers lecture summaries and explanations based on the prompts it received; and helps in language learning and practice speaking, writing, and comprehension [9]. Students describe it as a “know-it-all-companion”. The use of this AI technology in education has the potential to significantly improve learning and pedagogical experiences in a variety of ways [10].

Furthermore, in the context of language teaching, educators need to figure out how to best utilize technology to help students become more proficient communicators. The most efficient language learning approach is a blend of well-designed multimedia programs and coordinated classroom activities [11], and incorporation of multiple AI tools [12]. Language teaching applies to the teaching of

different skills like listening, speaking, reading, and writing, thus it demands a great deal of innovation and creativity [13]. On the other hand, [14] raises doubts about whether AI can exhibit creativity by examining its applications in visual arts, music, text, and musical theater. He outlines key factors in the creative process, such as introspection and problem discovery, and concludes that computers cannot match human creativity. On the contrary, [15] proposes that computational creativity does not have to mirror human creativity; instead, it can offer new processes and outcomes, contributing to a distinct form of creativity. According to Ward, the focus should be on recognizing the unique creative capabilities of machines, opening up intriguing possibilities for the evolution of teaching and learning in the AI era. Likewise, the notion of an “education meta-universe” has garnered global attention. This concept entails establishing a virtual environment wherein students can engage in learning and interact not only with each other but also with AI-driven virtual instructors. Through this approach, AI technologies hold the promise of revolutionizing conventional foreign language teaching approaches and introducing new opportunities for language acquisition. Recent literature on AI in education can be broadly organized into three thematic strands: (1) studies emphasizing AI-supported learner engagement and motivation, (2) research examining perceived language learning outcomes and academic support, and (3) critical discussions highlighting pedagogical, ethical, and cognitive concerns associated with AI use. While these strands provide valuable insights, they often focus on general student populations or classroom outcomes, leaving limited attention to the perspectives of pre-service language teachers.

Similarly, in light of the increased prevalence of digital writing environments in educational contexts and their continued expansion, language teaching should not shun AI technologies. Typically, AI writing tools are

designed to analyze written content and offer feedback on various aspects of writing, including grammar, vocabulary, syntax, content, and structure [16, 17]. This feedback is generated using machine-learning algorithms that compare the text with a large database of correct and incorrect writing examples. Essentially, these tools provide students with immediate and personalized feedback, aiding them in identifying and rectifying errors more efficiently. Additionally, real-time feedback can help students grasp fundamental writing concepts and guide them in improving their writing skills [18, 19, 20] assert that arranging ideas effectively is essential in L2 writing, with students frequently facing challenges in achieving coherence and logical flow in their texts. In this context, AI writing tools offer immediate feedback and recommendations for restructuring sentences and paragraphs, thereby assisting students in enhancing the organization of their writing [21].

Writing, artificial intelligence, and creativity are becoming core objectives for modern language education approaches. But language instructors are likewise worried about ChatGPT's use in language instruction. Concerns over cheating in particular, as well as the students' reliance on this chatbot for everything, could potentially impair students' cognitive abilities, such as their capacity to write and research. Essays are a key component of teaching reading, writing, and comprehension abilities; therefore, it is possible that children are not learning these important skills if they are utilizing a shortcut like ChatGPT. Students turn to ChatGPT for assignments and schoolwork much sooner than educators begin to understand them. Although ChatGPT and other AI tools have generated much discussion online about their potential to replace teachers and encourage cheating, other educators view these tools as opportunities. Further, [22] highlighted the absence of definitive, practical guidelines for education researchers and practitioners seeking quick

references on AI in education. The potential impact and effects of AI are boundless. It can significantly influence both the present and future of learners [23]. While numerous studies have examined ChatGPT's capabilities and limitations across various educational contexts, there remains limited empirical evidence on how pre-service teachers perceive its role specifically in English language learning. As future language educators, their perceptions matter because they directly influence classroom practices, openness to AI-assisted learning, and pedagogical adoption. Despite the growing research on ChatGPT in education, little is known about how pre-service teachers—future language educators—perceive its role in English language learning. Notably, there remains a lack of large-scale empirical studies that focus specifically on pre-service English teachers' perceptions of ChatGPT within localized higher education contexts, particularly in the Philippine setting. Understanding these perceptions is critical, as they can inform teacher education curricula, guide the development of responsible AI integration policies, and shape future classroom practices adopted by emerging language educators. Given these considerations, understanding pre-service teachers' perceptions is essential for informing responsible and effective AI integration in English language teaching.

1.1 Study Objectives

This study aims to explore ChatGPT's potential role in English language acquisition from the perspectives of pre-service teachers. Specifically, it seeks to answer the following questions,

1. What are pre-service teachers' initial impressions of using ChatGPT for English language instruction?
2. What are the pre-service teachers' perceptions of ChatGPT's support for their language proficiency and skills development?
3. What are their perceptions on ChatGPT's influence on their engagement in English language learning activities?

2. Methodology

2.1 Research Design

This study employed a descriptive quantitative design, utilizing a 4-point Likert scale to assess pre-service teachers' overall experience, learning outcomes, and perception of ChatGPT's impact on their engagement in English language learning activities. This allowed the researcher to collect accurate data and identify patterns that significantly led to a thorough understanding of the study.

2.2. Research Instrument

The study utilized a structured survey questionnaire comprising three sections, each containing 7 statements. The survey questionnaire underwent expert validation to establish content validity, and reliability was ensured through pilot testing, yielding an acceptable internal consistency coefficient. Participants were prompted to express their responses using a four-point Likert scale, ranging from Strongly Agree to Strongly Disagree. This method enabled a targeted and streamlined exploration of the study's goals. Moreover, the researcher incorporated an interview guide, validated by experts, to capture participants' narratives and corroborate their survey responses.

2.3 Research Participants

The participants of the study were the pre-service teachers in two higher education institutions in Region 7, Cebu and Bohol, Philippines. They are those officially enrolled in these two universities S.Y. 2023-2024 and from the 2nd to 4th levels with a field of specialization in English. Four hundred fifty-one (451) pre-service teachers majoring in English answered the survey stratified sampling ensured representation from year levels and the two different institutions. Meanwhile, 20 participated in the focus group discussion. The FGD was conducted to validate the quantitative responses of the participants.

2.4 Data Analysis

In the initial stage of data analysis, the survey responses were subjected to descriptive statistics, including computation of the mean and simple percentages. Descriptive statistics provide insights into different dimensions of the population under study. Qualitative data from

the focus group discussions were analyzed using thematic analysis, involving data familiarization, initial coding, and theme generation. These qualitative data served as a validation mechanism for the survey responses rather than as a separate explanatory analysis.

3. Results and Discussion

The results presented in this section reflect participants' self-reported perceptions of ChatGPT's influence on English language learning rather than objectively measured learning outcomes. While mean scores are used to describe overall trends, variability in responses suggests differences in individual experiences and levels of familiarity with AI-assisted learning tools.

3.1. Pre-service Teachers' Perceived Overall Experience with ChatGPT

The results in Table 1 show that pre-service teachers generally hold positive initial impressions of ChatGPT, particularly in terms of its ease of use, suitability for teaching, and potential to support English language instruction. High mean scores on statements highlighting ChatGPT's usefulness and promise indicate openness to adopting AI-assisted tools in future teaching practice.

Although most of the responses are positive, one statement got a mean score of 2.36 indicating disagreement. This statement says, "ChatGPT seems like a familiar tool for teaching English". Their response to this statement could be attributed to several factors. One possibility is that pre-service teachers may have limited prior exposure to or experience with natural language processing technology like ChatGPT specifically tailored for language instruction. Although there are research articles exploring the use of AI tools in the teaching of writing [24, 25, 26], the limited capacity of tools like ChatGPT to discern the distinctions and emotional undertones of language [27] may contribute to the hesitancy in adopting it as a familiar tool for teaching English.

The higher-order writing elements such as forming coherent arguments and structuring them logically require an in-depth understanding and critical analysis, which AI, at this point, might not effectively support [28]. Moreover, unlike more traditional teaching tools or methods that they may have encountered during their school

experiences, ChatGPT represents a newer and potentially less familiar approach to language instruction. Consequently, most students identified the primary reasons for using AI tools for research (44%), summarizing or synthesizing information (38%), and creating study guides or materials (33%) [29]. Among student respondents who reported studying for at least three hours per weeknight, 72% mentioned utilizing ChatGPT or similar AI

technologies. Additionally, the interface or functionality of ChatGPT might differ from other tools or platforms that students and their teachers typically use, contributing to a perception of novelty rather than familiarity. Thus, using artificial intelligence for language instruction could be relatively novel or unfamiliar to some pre-service teachers, leading them to perceive ChatGPT as less familiar initially.

Table 1. Overall experience with ChatGPT.

Statements	Mean	Description
I find ChatGPT not intimidating and challenging for English language instruction.	3.12	Agree
ChatGPT seems like a familiar tool for teaching English.	2.36	Disagree
ChatGPT shows potential for supporting language instruction effectively.	3.45	Strongly Agree
I find ChatGPT user-friendly and suitable for language teaching purposes.	3.16	Agree
I do not doubt the effectiveness of ChatGPT in facilitating language instruction.	3.17	Agree
ChatGPT offers promising possibilities for enhancing English teaching.	3.81	Strongly Agree
I am enthusiastic about incorporating ChatGPT into my language instruction.	3.35	Strongly Agree
Overall	3.20	Agree

Legend: 3.26 – 4.00: Strongly Agree; 2.51 – 3.25: Agree; 1.76 – 2.50: Disagree; 1.00 – 1.75: Strongly Disagree

Despite this lower rating, these soon-to-be teachers have acknowledged ChatGPT's potential for supporting language instruction effectively and deemed it user-friendly and suitable for educational purposes. Importantly, respondents did not doubt ChatGPT's effectiveness in facilitating language learning and expressed enthusiasm for its incorporation into their teaching practices. These findings indicate a readiness among pre-service teachers to embrace ChatGPT as a valuable resource for enhancing English teaching. However, while

these initial impressions are promising, further research is warranted to explore the actual implementation of ChatGPT in classroom settings and its long-term impact on language learning outcomes.

3.2. Perceived Support of ChatGPT for Language Proficiency and Skills Development

Table 2 shows the pre-service teachers' perceived effectiveness of ChatGPT in

enhancing their language proficiency and skills development.

Table 2. Learning outcomes.

Statements	Mean	Description
ChatGPT has noticeably improved my language proficiency or skills.	3.10	Agree
I have observed some improvement in my language abilities due to ChatGPT.	2.94	Agree
ChatGPT has helped enhance my language proficiency.	3.20	Agree
I feel my language skills have significantly developed with the use of ChatGPT.	2.88	Agree
ChatGPT does contribute significantly to my language learning.	3.60	Strongly Agree
I have experienced positive changes in my language abilities because of ChatGPT.	3.29	Strongly Agree
ChatGPT has greatly enhanced my language proficiency and skills.	3.21	Agree
Overall	3.17	Agree

Legend: 3.26 – 4.00: Strongly Agree; 2.51 – 3.25: Agree; 1.76 – 2.50: Disagree; 1.00 – 1.75: Strongly Disagree

Overall, the data indicate that students have a generally positive perception of ChatGPT's impact on language learning. It is also noted that the following statements had a moderate level of agreement as reflected by the mean scores "ChatGPT has noticeably improved my language proficiency or skills" (3.10) and "I have observed some improvement in my language abilities due to ChatGPT" (2.94). Other statements including "ChatGPT does contribute significantly to my language learning" (3.60) and "I have experienced positive changes in my language abilities because of ChatGPT" (3.29) got a higher agreement which means that they reflect a stronger perception of effectiveness. Likewise, the statement "ChatGPT has helped enhance my language proficiency" has a mean score of 3.20 further supporting the notion that pre-service teachers view ChatGPT as beneficial for language development. The results also revealed that a few students perceived that their language skills had significantly improved with the use of ChatGPT (2.88), while the majority agreed that ChatGPT has enhanced their language proficiency and skills (3.21). The overall mean score of 3.17 for the "Overall" statement suggests a consensus among pre-service teachers regarding the positive impact of ChatGPT on their language learning journey.

Studies in education have shown that the use of AI writing tools like ChatGPT may positively influence language learning. For instance [30] mentioned that students who received AI-assisted instruction have shown improvements in writing and have increased

their level of motivation. Teachers also have expressed that AI writing tools can help improve the clarity and logical flow of students' writing [31]. Likewise, students using ERNIE Bot, an AI bot like ChatGPT, as a supplementary tool show increased engagement and enthusiasm in writing their proposal writing process, leading to noticeable enhancements in the structural clarity and language precision of their written texts [32]. AI tools play a significant role in helping students develop their ideas and assisting them in overcoming obstacles to creativity [33].

Even with these positive notions, there were still apprehensions regarding the effect of AI tools on students. Students may develop an excessive dependency on these tools, letting AI think for them, thus hindering the development of their critical thinking and problem-solving skills [34]. AI technologies may diminish creative and critical thinking abilities among students thus hampering one's capability to independently evaluate writing quality.

Nevertheless, the responses of pre-service teachers demonstrate a generally favourable perception of ChatGPT's effectiveness in enhancing language proficiency and skills development. The majority of them believed that ChatGPT has contributed significantly to their language learning journey, with many reporting positive changes and improvements in their language abilities as a result of using the tool. Thus, it would be noteworthy to delve deeper into specific areas where ChatGPT has been most beneficial for language development. Also,

exploring the potential implementation of ChatGPT in various educational settings could provide further insights into its efficacy. Further research is suggested to not only validate this study's preliminary findings but also to identify best practices for effectively integrating ChatGPT and other AI tools into language learning curricula and instructional strategies. These results align with previous studies suggesting that AI tools are associated with perceived improvements in clarity, organization, and learner confidence in writing [30, 31]. However, the moderate mean scores also indicate that improvements may not be uniform, suggesting the need for more guided

integration of AI tools to maximize learning outcomes.

3.3. ChatGPT and its Perceived Effect on the Pre-service Teachers' Interaction and Communication

The survey results as presented in Table 3 shed light on the pre-service teachers' perceptions of ChatGPT's possible impact on their engagement in English language learning activities. Overall, the responses convey a positive outlook on ChatGPT's influence, with strong agreement across various statements indicating increased interest, motivation, and active participation in language learning tasks facilitated by ChatGPT.

Table 3. Interaction and communication.

Statements	Mean	Description
ChatGPT makes me more interested in English language learning activities.	3.13	Agree
I feel interested towards English language learning activities when using ChatGPT.	2.87	Agree
ChatGPT encourages me to engage more actively in English language learning activities.	3.79	Strongly Agree
I find myself more motivated to participate in language learning with ChatGPT.	3.61	Strongly Agree
ChatGPT has significantly impacted my engagement in language learning activities.	3.51	Strongly Agree
I feel more involved in language learning tasks because of ChatGPT.	3.74	Strongly Agree
ChatGPT encourages me to actively communicate and interact during language learning activities.	3.75	Strongly Agree
Overall	3.48	Strongly Agree

Legend: 3.26 – 4.00: Strongly Agree; 2.51 – 3.25: Agree; 1.76 – 2.50: Disagree; 1.00 – 1.75: Strongly Disagree

The findings above imply that the pre-service teachers regard ChatGPT as a valuable tool for enhancing their language engagement and providing a more immersive experience for them. It also indicated the they have recognized ChatGPT not only as a source of

information but also a catalyst of dialogue, exploration, and interactive learning. These quantitative findings were corroborated in the focus group discussions, where participants described ChatGPT as a convenient support tool that enhanced confidence and engagement,

while also expressing caution about over-dependence on AI for language tasks.

However, contrasting viewpoints have been presented in the literature. A study revealed that teachers have a growing inclination to incorporate a blend of AI tools to enrich the learning experience of their students which leads to improved academic performance, including writing skills [35]. Yet, [36] provided a critical stance, cautioning against the potential consequences of excessive reliance on AI writing tools. He argued that overreliance on these tools can diminish students critical thinking skills and hinder their ability to learn from their mistakes which can lead to impeding growth and development in writing. Students creativity and originality may also be restricted thus limiting their opportunities for individual expression and the development of unique writing styles and voices. Nevertheless, this study revealed that in the case of pre-service teachers, positive perception may carry significant implications for the integration of ChatGPT and other AI tools into the language learning curricula.

By enhancing engagement, ChatGPT can potentially contribute to perceived improvements in language learning experiences. Additionally, the enthusiasm expressed by respondents underscores the potential for ChatGPT to address common challenges in language instruction, such as maintaining student interest and motivation. However, educators must recognize the importance of balancing the use of ChatGPT with other pedagogical approaches to ensure a comprehensive and well-rounded learning experience. Moreover, further research could explore into specific strategies for maximizing the engagement-enhancing potential of ChatGPT and its long-term impact on language proficiency and skills development.

4. Conclusion and Recommendations

This study concludes that pre-service teachers generally hold positive attitudes toward ChatGPT's role in English language learning. They view it as a tool that enhances engagement, motivation, and interaction, and they perceived ChatGPT as a tool that supports improvements in their language proficiency and skills development. These insights are valuable because pre-service teachers will shape future classroom practices, and their openness to AI suggests strong potential for integrating AI-supported approaches in English instruction. The findings further suggest that perceptions of engagement, perceived learning support, and attitudes toward AI use are interconnected in teacher education contexts, with higher engagement often accompanying more favorable views of ChatGPT's instructional value.

However, concerns about over-reliance and reduced critical thinking remain, echoing wider debates in the literature. The study contributes to existing research by providing empirical evidence from pre-service teachers—an understudied but influential group. Future research should examine classroom-based implementation, long-term learning effects, and the impact of ChatGPT on specific macro skills such as writing, speaking, and reading comprehension. Developing clear guidelines on responsible and pedagogically sound integration of AI tools in language education is also recommended.

In educational settings, these findings imply that teacher education programs should intentionally integrate AI literacy and guided use of tools such as ChatGPT into English pedagogy courses to maximize learning benefits while minimizing risks. Embedding critical evaluation, ethical use, and reflective practice in AI-supported activities can help future teachers leverage technology without compromising students' higher-order thinking skills.

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