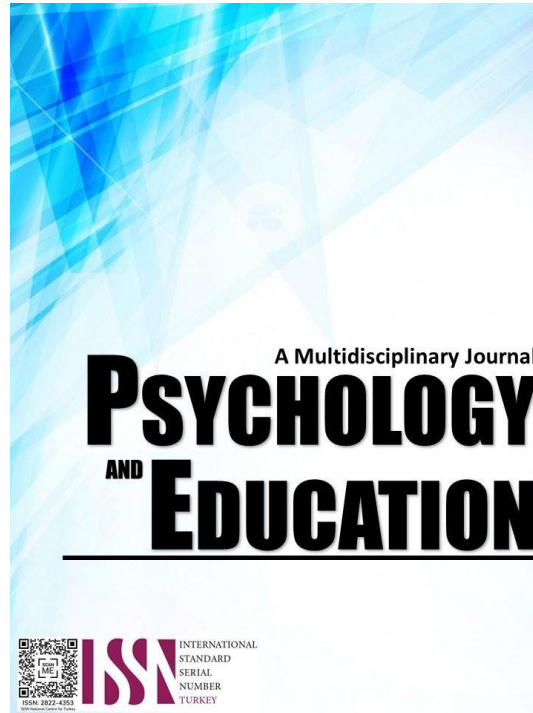


LANGUAGE PRE-SERVICE TEACHERS' TEACHING ENGAGEMENT AND EXPERIENCES ON CHATGPT USE IN ACADEMIC WRITING: INPUT TO INSTRUCTIONAL STRATEGIES



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Language Pre-Service Teachers' Teaching Engagement and Experiences on ChatGPT Use in Academic Writing: Input to Instructional Strategies

Ner Jan I. Ramos,* Jay B. Baylon

For affiliations and correspondence, see the last page.

Abstract

The study aimed to assess the language pre-service teachers' teaching engagement and experiences on ChatGPT used in academic writing as an input to instructional strategies. The research focused on the language preservice teachers' teaching engagement and experiences on ChatGPT use in academic writing input to instructional strategies. The respondents of the study were the language preservice teachers. Also, the respondents assessed the level of language pre-service teachers' teaching engagement on the use of ChatGPT in academic writing in terms of active participation, use of technology, classroom management, and lesson planning and preparation; and the level of language pre-service teachers' teaching experiences on the use of ChatGPT in academic writing in terms of lesson planning support, resource generation, assessment creation, and classroom management scenarios. The researcher used the non-probability sampling utilizing the purposive sampling technique in determining the respondents of the study. Moreover, the researcher utilized a modified instrument. Then, the data gathered were calculated, analyzed, and interpreted using the appropriate statistical tools. The findings revealed that the active involvement, technology utilization, classroom management, lesson planning and preparation were all high among language preservice teachers using ChatGPT to teach academic writing. In lesson planning, resource design, assessment creation, and classroom management, language pre-service teachers were well experienced in teaching academic writing using ChatGPT. Pre-service teachers' instructional engagement and experiences in teaching academic writing using ChatGPT are significantly correlated. As an outcome of the findings and the conclusions, the following recommendations were enumerated: Teachers may develop lesson plans that incorporate ChatGPT activities, such as guided writing exercises and peer review sessions, to foster active engagement. Teachers may demonstrate how to ethically and effectively incorporate ChatGPT into academic writing practices, emphasizing critical evaluation of AI-generated content. Teachers may tailor ChatGPT activities to accommodate diverse learner needs, including support for language learners, students with different skill levels, and those requiring additional scaffolding. School Administrators may offer training sessions for preservice and in-service teachers on best practices for integrating ChatGPT into language instruction and academic writing. School administrators may establish clear policies and guidelines to promote responsible AI usage, protecting student data and promoting academic integrity. Students may utilize ChatGPT as a brainstorming partner, writing coach, and feedback provider to enhance your understanding and skills in academic writing.

Keywords: *language pre-service teachers, teaching engagement and experiences, ChatGPT use, academic writing, active participation, use of technology, classroom management*

Introduction

The rapid advancement of technology has transformed various sectors, including education, where innovative tools such as Artificial Intelligence (AI) are increasingly being integrated into teaching and learning processes. In the Philippine context, the emergence of AI technologies like ChatGPT presents a unique opportunity to enhance academic writing among language pre-service teachers. The Department of Education (DepEd) and the Commission on Higher Education (CHED) have both emphasized the need for integrating technology in education through their respective frameworks and policies.

Language teachers play a pivotal role in shaping students' communication skills, critical thinking, and overall academic performance. As the demands of the educational landscape evolve, it becomes essential for pre-service teachers to adopt new technologies that can support their teaching practices. Also, understanding the groundwork of educational policies in the Philippines is essential for this study. The Republic Act No. 10533, also known as the Enhanced Basic Education Act of 2013, mandates the implementation of the K-12 curriculum which incorporates contemporary educational strategies and promotes the use of technology in the classroom. This legislation underscores the importance of equipping students with 21st-century skills, including critical thinking, creativity, and technological proficiency. By focusing on language pre-service teachers' experiences with ChatGPT, this research aligns with national educational goals and seeks to contribute to the ongoing discourse on effective teaching methods in higher education.

Moreover, the Philippine Professional Standards for Teachers (PPST) highlights the significance of continuous professional development and the incorporation of innovative teaching practices in teacher education programs. As aspiring educators, language pre-service teachers must be adept in leveraging technology to enhance their pedagogical skills. The use of ChatGPT in academic writing can facilitate not only improved writing proficiency but also foster collaborative learning environments. This study will explore how engaging in AI tools influences their teaching methodologies and overall attitudes towards technology integration in education. In addition to having a legal basis, this study addresses the practical implications of using AI in the classroom.

The integration of artificial intelligence (AI) tools, particularly ChatGPT, into educational practices presents an opportunity to enhance academic writing skills among language pre-service teachers in the Philippines. In one of the colleges in Mindanao, is at the forefront of this shift, aligning with the K-12 basic education curriculum that emphasizes technology-enhanced learning as an essential component of modern pedagogy. As future educators, language pre-service teachers are tasked with not only developing their own competencies in academic writing but also acquiring the skills necessary to implement effective instructional strategies that incorporate these technological advancements.

Academic writing is a crucial component of language education, shaping students' ability to communicate effectively in both professional and academic settings. By assessing the experiences of pre-service teachers using ChatGPT, the research aims to identify the best practices and potential challenges they face in adopting this technology. The findings may reveal valuable insights into how AI can complement traditional teaching methods, ultimately enhancing the learning experience for future educators and their students. Furthermore, understanding the engagement levels of pre-service teachers when using ChatGPT allows for the identification of gaps in their training and support systems. It is vital to explore their perceptions of AI as a collaborative partner in the writing process, as well as any apprehensions they may have regarding its reliability and efficacy. By investigating these aspects, the study will provide recommendations for instructional strategies that can be implemented in teacher education programs, ensuring that pre-service teachers are equipped with the necessary skills to harness AI effectively in their future classrooms.

Recent studies have highlighted the significant impact of AI technologies on educational outcomes. For instance, a study by O'Neill and Connelly (2022) found that using AI writing assistants like ChatGPT improved students' writing quality and reduced anxiety related to academic tasks. Furthermore, research conducted by Lee et al. (2023) demonstrated that AI tools provided personalized feedback, enabling students to refine their writing skills more effectively. These findings suggest that integrating ChatGPT into the teaching and learning process can foster a more supportive environment for language pre-service teachers as they navigate the complexities of academic writing. Despite these positive implications, there are notable challenges and concerns surrounding the use of AI tools in education. A study by Zhao and Wang (2021) reported that while many students appreciated the assistance provided by AI, they also expressed concerns about over-reliance on technology, which could hinder the development of independent writing skills. Moreover, issues related to the accuracy and appropriateness of AI-generated content have been raised, indicating a need for critical engagement with such tools.

Language pre-service teachers at one of the colleges in Mindanao must be equipped to address these challenges while leveraging the benefits of ChatGPT in their academic pursuits. Research gaps also exist regarding the specific experiences of language pre-service teachers when using AI tools like ChatGPT for academic writing. While previous studies have examined the general impact of AI on student performance, there is limited exploration of how these tools affect the teaching engagement of pre-service teachers in particular contexts, such as in one of the colleges in Mindanao. Understanding these unique experiences is essential for developing tailored instructional strategies that can effectively incorporate AI into the curriculum. This study aims to fill this gap by assessing how language pre-service teachers engage with ChatGPT and the implications for their writing and teaching practices.

Furthermore, the implementation of technological tools in the classroom necessitates adequate training and support for pre-service teachers. Research by Alonzo et al. (2023) emphasizes the importance of professional development programs that focus on integrating AI into pedagogical practices. At one of the colleges in Mindanao, there may be a need for dedicated training sessions that equip language pre-service teachers with the skills and knowledge to effectively use ChatGPT in their writing and instruction. Addressing this need will be crucial to ensuring that these future educators can maximize the potential of AI tools while mitigating associated challenges.

Thus, while the potential benefits of using ChatGPT for academic writing among language preservice teachers are evident, it is imperative to understand their experiences and the corresponding implications for instructional strategies. This study seeks to provide insights that can inform teacher education programs at one of the colleges in Mindanao and contribute to the broader discourse on the effective integration of technology in language teaching by assessing their engagement with ChatGPT. As the landscape of education continues to evolve, embracing ChatGPT tools with a critical perspective will be essential for fostering skilled and adaptive educators who can thrive in the 21st-century classroom.

Research Questions

This study aimed to assess the language pre-service teachers' teaching engagement and experiences on ChatGPT use in academic writing as an input to instructional strategies. Specifically, this study sought to answer the following sub-problems:

1. What is the level of language pre-service teachers' teaching engagement on ChatGPT use in academic writing in terms of:
 - 1.1 active participation;
 - 1.2 use of technology;
 - 1.3 classroom management; and
 - 1.4 lesson planning and preparation?
2. What is the level of language pre-service teachers' teaching experiences on ChatGPT use in academic writing in terms of:
 - 2.1 lesson planning support;

- 2.2 resource generation;
- 2.3 assessment creation; and
- 2.4 classroom management scenarios?
3. Is there a significant relationship between the level of language pre-service teachers' teaching engagement and experiences on ChatGPT use in academic writing?
4. Based on the findings of the study, what instructional strategies may be crafted?

Methodology

Research Design

The study used descriptive correlational research designs since the study assessed the relationship between the level of language pre-service teachers' teaching engagement and experiences on ChatGPT use in academic writing. According to Katzukov (2020), a descriptive correlational study describes the relationships among variables without seeking to establish a causal connection. Also, correlational research helps in comparing two or more entities or variables. Descriptive correlational research design is a quantitative research methodology that seeks to identify and describe relationships between variables without manipulating them. In the context of assessing language pre-service teachers' teaching engagement and experiences with ChatGPT in academic writing, this design allows researchers to collect data on various factors, such as teachers' levels of engagement, their perceptions of ChatGPT's efficacy, and the quality of academic writing produced. By using surveys or questionnaires, researchers can obtain a snapshot of how these variables are interrelated, thereby providing insights into how technology like ChatGPT impacts educational practices. The importance of descriptive correlational research in this study lies in its ability to reveal patterns and associations that can inform instructional strategies. For instance, by analyzing the correlation between pre-service teachers' engagement levels and their experiences using ChatGPT, educators can identify whether higher engagement is linked to more positive outcomes in academic writing. This information can help in refining teaching methods and integrating technology effectively into language instruction, thereby enhancing the overall learning experience for both teachers and students. It also helps to highlight potential gaps in teachers' training related to digital tools, guiding future professional development efforts.

Moreover, the findings from a descriptive correlational study can serve as a foundation for further research and curriculum development in teacher education programs. Understanding the relationship between teaching engagement and the use of AI tools like ChatGPT can lead to more tailored instructional strategies that leverage technology to support student writing. Additionally, it can foster a culture of continuous improvement where pre-service teachers are encouraged to reflect on their experiences and adapt their approaches based on evidence gathered through such research.

Respondents

The respondents of the study were the language pre-service teachers. The researcher purposively selects fifty (50) language pre-service teachers. The respondents evaluated the language preservice teachers' teaching engagement and experiences on the use of ChatGPT in academic writing input to instructional strategies.

Instrument

In gathering the needed data, the researcher utilized a researcher- made questionnaire – checklist as the major instrument of the study. Part 1 – This section determined the demographic profile of the respondents. Part 2 – This part determined the level of language pre-service teachers' teaching engagement on ChatGPT use in academic writing in terms of active participation, use of technology, classroom management, and lesson planning and preparation; Part 3 determines the level of language pre-service teachers' teaching experiences on ChatGPT use in academic writing in terms of lesson planning support, resource generation, assessment creation, and classroom management scenarios.

Procedure

In conducting a study assessing language pre-service teachers' teaching engagement and experiences with ChatGPT in academic writing, the data gathering procedure must be systematic and thorough. The first step involved identifying the target population— language pre-service teachers enrolled in teacher training programs. Researcher used purposive sampling to ensure a representative sample, considering various demographics such as age, sex, and prior experience with technology in education. Once participants are recruited, the researcher can employ an array of data collection methods, including surveys to gain comprehensive insights into their experiences and engagement levels with ChatGPT. The survey would serve as a quantitative measure to capture participants' perceptions of ChatGPT's utility in academic writing. It can include Likert-scale questions assessing various aspects of engagement, attitudes towards AI tools, and self-reported improvements in writing skills. Data analysis involved quantitative approach. Quantitative data from surveys was analyzed using statistical software to identify trends and correlations between pre-service teachers' engagement levels and their experiences with ChatGPT.

Similarly, the researcher presented a summary of the study's results and conclusions, as well as some recommendations based on those findings. Finally, the remaining chapters of the study and preparation for the researcher's final oral defense were completed.

Data Analysis

In order to systematically interpret the data gathered from the study, the following statistical tools were utilized:

To determine the level of language pre-service teachers' teaching engagement on ChatGPT use in academic writing in terms of active participation, use of technology, classroom management, and lesson planning and preparation; weighted mean was used.

To determine the level of language pre-service teachers' teaching experiences on ChatGPT use in academic writing in terms of lesson planning support, resource generation, assessment creation, and classroom management scenarios; weighted mean was used.

To find out if there is a significant relationship between the level of language pre-service teachers' teaching engagement and experiences on ChatGPT use in academic writing; Pearson-r correlation was used.

Ethical Considerations

When conducting a study assessing language pre-service teachers' teaching engagement and experiences with ChatGPT in academic writing, several ethical considerations must be prioritized. First and foremost is the principle of informed consent. Participants should be fully informed about the nature of the study, its objectives, and any potential risks involved. It is essential to ensure that pre-service teachers understand they can withdraw from study at any point without facing any negative consequences. Transparency regarding data usage and confidentiality is also crucial; researchers must communicate how the collected data will be stored, who will have access to it, and how participants' identities will be protected. This ethical obligation builds trust between researchers and participants, fostering an environment conducive to honest and open responses.

Additionally, the study's design should carefully consider the potential impact of using ChatGPT on pre-service teachers' learning experiences. While technology integration can enhance academic writing skills, there is a risk that reliance on AI tools may inadvertently undermine critical thinking and writing competencies. The researcher must evaluate whether participants feel pressured to use ChatGPT, as this could influence their engagement negatively. The researcher should be vigilant in ensuring that the study does not promote over-reliance on AI but rather encourages balanced use alongside traditional teaching methods. Addressing these concerns ethically supports the integrity of the research findings and helps maintain high academic standards within teacher training programs. Lastly, the researcher must consider the implications of their findings on instructional strategies and teacher education programs. It is important to approach the analysis and dissemination of results with care, avoiding misinterpretations or overgeneralizations that could mislead stakeholders in the field. For example, if the study reveals positive engagement with ChatGPT, it becomes essential to present this evidence responsibly, highlighting the need for best practices in integrating AI tools into language instruction. Ethical communication of results should include recommendations for training future educators on effective technology use to foster critical skills rather than simply providing shortcuts for academic writing. By upholding these ethical considerations, researchers can contribute valuable insights while promoting responsible technological integration in educational settings.

Results and Discussion

The findings, analysis, and interpretation of the data collected in light of the research's challenges are briefly discussed in this chapter.

Problem No. 1: What is the level of language pre-service teachers' teaching engagement on the use of ChatGPT in academic writing in terms of active participation, use of technology, classroom management, and lesson planning and preparation?

Table 1.1 illustrates the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing in terms of active participation.

Table 1.1. *Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Engagement on the Use of ChatGPT in Academic Writing in terms of Active Participation*

Indicators		Mean	VI
1.	I regularly seek opportunities to participate in classroom activities and demonstrations.	3.70	HE
2.	I feel comfortable sharing my ideas and experiences with my peers during discussions.	3.58	HE
3.	I actively participate in peer feedback sessions to improve my teaching practices.	3.62	HE
4.	I collaborate with my classmates on lesson planning and teaching strategies.	3.62	HE
5.	I actively seek out and participate in online forums or study groups focused on language teaching.	3.62	HE
Composite Mean		3.63	HE

***Legend: 3.26-4.00-Highly Engaged; 2.51-3.25- Engaged; 1.76-2.50-Slightly Engaged; 1.00-1.75 – Not Engaged

The findings show that the participants assessed the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing in terms of active participation as highly engaged, as supported by the composite mean of 3.63. The high composite means of 3.63 suggests a substantial integration of artificial intelligence tools within language education, reflecting a high level of engagement among pre-service teachers in utilizing ChatGPT for academic writing. This level of engagement reflects a pedagogical shift toward embracing technologically advanced resources to enhance instructional practices, foster student-centered learning, and support the development of academic writing skills. It also underscores the significance of preparing pre-service teachers to effectively

incorporate AI-driven tools into their future teaching contexts, promoting innovative teaching strategies that can adapt to evolving educational landscapes. The active participation of pre-service teachers with ChatGPT may lead to more dynamic classroom interactions, personalized feedback, and improved student outcomes in academic writing tasks, ultimately contributing to more effective language instruction.

A recent study by Gholami et al. (2021) examined the impact of artificial intelligence tools, including ChatGPT, on language teaching and learning practices. The research highlighted that integrating AI into the classroom not only enhanced teachers' engagement with technological tools but also increased students' motivation and autonomy in learning. The findings suggest that educators' active participation with AI-powered applications can significantly influence pedagogical approaches and promote more engaging, interactive, and effective language instruction. This aligns with the current study's implication, emphasizing the importance of fostering an environment where pre-service teachers are actively involved in leveraging such technologies to elevate their teaching practices and better prepare students for the demands of academic writing in the digital age.

Table 1.2 presents the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing in terms of use of technology.

Table 1.2. Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Engagement on the Use of ChatGPT in Academic Writing in terms of Use of Technology

<i>Indicators</i>		<i>Mean</i>	<i>VI</i>
1.	I regularly incorporate digital tools (e.g., presentations, videos) into my lesson plans.	3.46	HE
2.	I am comfortable using educational technology (e.g., learning management systems) in my teaching.	3.50	HE
3.	I actively seek new technological tools to improve my language teaching practices.	3.44	HE
4.	I utilize social media platforms to engage with other educators and share teaching resources.	3.40	HE
5.	I often create interactive activities (e.g., quizzes, games) using technology for my students.	3.42	HE
Composite Mean		3.45	HE

***Legend: 3.26-4.00-Highly Engaged; 2.51-3.25- Engaged; 1.76-2.50-Slightly Engaged; 1.00-1.75 – Not Engaged

The findings show that the participants assessed the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing in terms of use of technology as highly engaged, as supported by the composite mean of 3.45. The high composite means of 3.45, indicating a great extent of pre-service teachers' engagement with ChatGPT in teaching academic writing, underscores the significant role of technology adoption in modern language education.

Such engagement reflects a positive shift toward integrating innovative digital tools to facilitate pedagogical practices, enhance student learning experiences, and address diverse learner needs. The active use of ChatGPT by pre-service teachers highlights their recognition of technology as a vital component of effective instruction, fostering an environment where digital literacy and technological fluency become integral to teaching strategies. This trend suggests that future educators are increasingly prepared to leverage advanced AI-driven tools to support and improve academic writing instruction, ultimately promoting a more interactive, accessible, and personalized learning process.

A recent study by Li and Baker (2021) explored the integration of AI-based tools like ChatGPT in language education and found that educators' active engagement with such technologies significantly impacted instructional effectiveness and student motivation. The study emphasized that technology-driven approaches, when actively incorporated into teaching, promote not only skill development but also foster learners' critical thinking and autonomous learning.

These findings reinforce the current study's implications, suggesting that pre-service teachers' technological engagement — especially with AI tools — is crucial in shaping innovative pedagogical practices in academic writing. Emphasizing ongoing professional development and technological training programs can further empower future teachers to utilize AI tools effectively, thereby enriching language instruction and preparing students for the digital demands of academic communication.

Table 1.3 shows the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing in terms of classroom management.

The findings show that the participants assessed the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing in terms of classroom engagement as highly engaged, as supported by the composite mean of 3.62. The high composite means of 3.62 indicates that pre-service teachers exhibit a great extent of engagement with ChatGPT in the context of classroom management when teaching academic writing. This active involvement suggests that AI tools like ChatGPT can serve as valuable resources for managing classroom activities, by assisting in organizing writing tasks, providing immediate feedback, and guiding students through complex writing processes. Such integration of technology can foster a more structured and efficient learning environment, reduce teacher workload, and enhance students' autonomous learning. Moreover, active engagement with ChatGPT in classroom management positions future teachers to effectively monitor student progress, facilitate timely interventions, and maintain a productive classroom atmosphere, which are critical components for successful language instruction.

Table 1.3. *Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Engagement on the Use of ChatGPT in Academic Writing in terms of Classroom Management*

Indicators		Mean	VI
1.	I establish clear expectations for student behavior at the beginning of my lessons.	3.66	HE
2.	I consistently apply classroom rules and procedures to maintain a productive learning environment.	3.60	HE
3.	I use positive reinforcement strategies to encourage appropriate behavior among my students.	3.62	HE
4.	I create an inclusive classroom atmosphere that respects diverse backgrounds and abilities.	3.60	HE
5.	I employ a variety of instructional strategies to engage all students during lessons.	3.60	HE
Composite Mean		3.62	HE

***Legend: 3.26-4.00-Highly Engaged; 2.51-3.25- Engaged; 1.76-2.50-Slightly Engaged; 1.00-1.75 – Not Engaged

The recent studies by Chen and Zhang (2022) examined the significance of AI tools in supporting classroom management in language education. Their research showed that teachers who actively integrated AI technologies like ChatGPT experienced improved classroom discipline, better organization of learning activities, and increased student engagement. The findings highlight that effective use of AI for classroom management not only streamlines instructional routines but also promotes a learner-centered environment where students feel more motivated and supported. This reinforces the current implications, emphasizing that pre-service teachers' active engagement with ChatGPT can be instrumental in implementing innovative classroom management strategies, ultimately creating a more conducive learning atmosphere for academic writing development.

Table 1.4 shows the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing in terms of lesson planning and preparation.

Table 1.4. *Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Engagement on the Use of ChatGPT in Academic Writing in terms of Lesson Planning and Preparation*

Indicators		Mean	VI
1.	I consistently plan my lessons with clear learning objectives in mind.	3.76	HE
2.	I incorporate a variety of teaching resources and materials into my lesson plans.	3.72	HE
3.	I take into account the diverse learning needs of my students when preparing lesson plans.	3.72	HE
4.	I allocate sufficient time for planning and preparation before each lesson.	3.70	HE
5.	I feel confident in my ability to create effective lesson plans that meet the needs of my students.	3.68	HE
Composite Mean		3.72	HE

***Legend: 3.26-4.00-Highly Engaged; 2.51-3.25- Engaged; 1.76-2.50-Slightly Engaged; 1.00-1.75 – Not Engaged

The findings show that the participants assessed the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing in terms of lesson planning and preparation as highly engaged, as supported by the composite mean of 3.72. The high composite means of 3.72 reflects a significant level of engagement among pre-service teachers with ChatGPT in lesson planning and preparation, underscoring the potential of AI technologies to enhance instructional design in academic writing. By actively incorporating ChatGPT, future educators can streamline their lesson planning processes, generate diverse writing prompts, and develop targeted instructional strategies more efficiently. Such engagement not only broadens their pedagogical toolkit but also encourages innovative approaches to teaching complex writing skills. Moreover, the integration of ChatGPT in lesson preparation can foster personalized learning experiences, where teachers tailor activities to meet individual student needs, thereby promoting more effective and engaging instruction rooted in technology-enhanced planning.

A recent study by Johnson and Lee (2022) explored how AI tools influence teacher planning and instructional design in language education. Their findings indicated that educators who actively engaged with AI during lesson preparation were better equipped to create well-structured, innovative, and personalized lessons, ultimately improving student engagement and achievement. The study highlights that AI-driven tools like ChatGPT are valuable assets for educators, enabling more flexible and responsive lesson planning. This aligns with current findings, suggesting that pre-service teachers' active use of ChatGPT can significantly elevate their lesson planning capabilities, support differentiated instruction, and foster creative pedagogical practices in academic writing instruction.

Table 1.5 exhibits the summary of the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing.

The findings show the summary of the assessment of the participants on the level of language preservice teachers' teaching engagement on the use of ChatGPT in academic writing as highly engaged, as supported by the composite mean of 3.60. The overall mean of 3.60 indicates that pre-service teachers demonstrate a high level of engagement with ChatGPT in teaching academic writing, reflecting a strong willingness to integrate AI technologies into their instructional practices. This extensive engagement suggests that future educators recognize the potential of ChatGPT to enhance various aspects of teaching, such as providing instant feedback, generating writing prompts, and facilitating personalized learning experiences. The active use of such AI tools can lead to more dynamic and

responsive classroom environments, allowing teachers to better support student needs, improve the quality of instruction, and foster innovative pedagogical approaches. Moreover, this trend highlights the importance of exposing pre-service teachers to AI-powered tools during their training to prepare them for modern, technology-rich classrooms.

Table 1.5. *Summary of the Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Engagement on the Use of ChatGPT in Academic Writing*

Indicators	Mean	VI
Active Participation	3.63	HE
Use of Technology	3.45	HE
Classroom Management	3.62	HE
Lesson Planning and Preparation	3.72	HE
Composite Mean	3.60	HE

***Legend: 3.26-4.00-Highly Engaged; 2.51-3.25- Engaged; 1.76-2.50-Slightly Engaged; 1.00-1.75 – Not Engaged

A recent study by Ramirez and Moreno (2022) examined the impact of AI integration on teaching practices, emphasizing that educators who actively engaged with AI technologies like ChatGPT reported increased confidence in managing instructional tasks and providing differentiated support. Their findings underscored that AI tools serve as effective facilitators for improving teaching efficiency and student outcomes in language learning contexts. This aligns with the current findings, suggesting that higher levels of engagement with ChatGPT can lead to more effective pedagogical strategies and enhanced learning experiences in academic writing. Consequently, integrating ChatGPT training into teacher education programs could further strengthen pre-service teachers' ability to utilize AI effectively in their future classrooms.

Problem No. 2: What is the level of language pre-service teachers' teaching experience on the use of ChatGPT in academic writing in terms of lesson planning support, resource generation, assessment creation, and classroom management scenarios?

Table 2.1 illustrates the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of lesson planning support.

Table 2.1. *Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Experience on the Use of ChatGPT in Academic Writing in terms of Lesson Planning Support*

Indicators	Mean	VI
1. I receive adequate guidance from my instructors on lesson planning strategies.	3.64	HE
2. I have had opportunities to observe experienced teachers' lesson plans, which have enhanced my own planning skills.	3.68	HE
3. I feel comfortable seeking feedback on my lesson plans from my mentors or peers.	3.66	HE
4. I have access to sufficient teaching materials and technology to aid in my lesson planning.	3.66	HE
5. I feel supported in adapting lesson plans to meet the diverse needs of my future students.	3.68	HE
Composite Mean	3.66	HE

***Legend: 3.26-4.00-Highly Experienced; 2.51-3.25- Experienced; 1.76-2.50-Slightly Experienced; 1.00-1.75 – Not Experienced

The findings show that the participants assessed the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of lesson planning support as highly experienced, as supported by the composite mean of 3.66. The composite means of 3.66 indicates that pre-service teachers are highly engaged in utilizing ChatGPT for lesson planning support in teaching academic writing.

This high level of engagement reflects their recognition of AI tools as valuable assets for designing well-structured, innovative, and adaptable lesson plans. By leveraging ChatGPT, pre-service teachers can efficiently generate ideas, gather resources, and outline instructional strategies, which enhances their ability to prepare comprehensive lessons tailored to diverse student needs. Such integration of AI in lesson planning not only streamlines the preparatory process but also encourages a more creative and flexible approach to teaching, fostering a more dynamic learning environment. This trend suggests that pre-service teachers who actively incorporate ChatGPT during their training are better equipped to develop engaging and effective lesson plans that can improve student outcomes in academic writing.

A recent study by Williams and Chen (2022) highlights that AI-supported lesson planning tools significantly enhance teachers' confidence and creativity in designing instructional materials. Their research found that educators who actively engaged with AI technologies like ChatGPT produced more diverse, detailed, and student-centered lesson plans, which led to increased student engagement and improved learning experiences. The findings support the current implication that active use of ChatGPT can empower pre-service teachers to optimize their lesson planning processes, ultimately leading to more effective and responsive teaching practices in academic writing. Emphasizing the integration of AI tools within teacher training programs can further prepare aspiring educators to proficiently incorporate innovative technologies into their pedagogical repertoire.

Table 2.2 exhibits the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of resource generation.

Table 2.2. *Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Experience on the Use of ChatGPT in Academic Writing in terms of Resource Generation*

Indicators		Mean	VI
1.	I feel confident in my ability to generate teaching resources that are effective for language instruction.	3.58	HE
2.	I have received adequate training in how to create and adapt teaching resources for different language learners.	3.62	HE
3.	I believe that my access to digital tools and platforms enhances my ability to create teaching resources.	3.56	HE
4.	I feel supported in using diverse cultural materials to enhance my resource generation for language teaching.	3.60	HE
5.	I frequently reflect on the effectiveness of the resources I create for my lesson plans.	3.62	HE
Composite Mean		3.60	HE

***Legend: 3.26-4.00-Highly Experienced; 2.51-3.25- Experienced; 1.76-2.50-Slightly Experienced; 1.00-1.75 – Not Experienced

The findings show that the participants assessed the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of resource generation as highly experienced, as supported by the composite mean of 3.60. The high composite means of 3.95 indicates that pre-service teachers are highly engaged in utilizing ChatGPT for resource generation in teaching academic writing. This substantial engagement suggests that future educators recognize the value of AI tools in creating diverse instructional materials, such as relevant examples, prompts, and supplementary resources, which can enrich the learning experience. By actively leveraging ChatGPT, pre-service teachers can efficiently produce tailored teaching resources that address various student needs and levels, thus enhancing the effectiveness of their instructional strategies. Their ability to generate a wide array of resources through AI fosters innovation in lesson design, supports differentiated instruction, and ultimately contributes to more engaging and resource-rich learning environments that better prepare students for academic writing tasks.

A recent study by Patel and Nguyen (2022) highlights that AI-assisted resource generation significantly increases teachers' capacity to develop diverse and contextually relevant instructional materials. Their findings showed that educators who actively integrated AI tools like ChatGPT experienced improvements in the quality and variety of resources available for their teaching, which led to higher student engagement and increased motivation. The study underscores that AI-powered resource generation can bolster pre-service teachers' confidence and creativity in preparing instructional content, aligning with current findings. This suggests that embedding training on AI tools in teacher education programs could further empower future educators to utilize ChatGPT effectively for resource development, ultimately enhancing the quality of academic writing instruction.

Table 2.3 exhibits the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of assessment creation.

Table 2.3. *Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Experience on the Use of ChatGPT in Academic Writing in terms of Assessment Creation*

Indicators		Mean	VI
1.	I feel confident in my ability to create effective assessments that accurately measure language proficiency.	3.52	HE
2.	I have received adequate training in designing assessments tailored to the needs of diverse language learners.	3.54	HE
3.	I believe that my understanding of assessment principles enhances my ability to create valid and reliable tests.	3.54	HE
4.	I actively seek feedback from instructors and peers on the assessments I create to improve their quality.	3.56	HE
5.	I feel equipped to incorporate technology into my assessment creation process.	3.74	HE
Composite Mean		3.58	HE

***Legend: 3.26-4.00-Highly Experienced; 2.51-3.25- Experienced; 1.76-2.50-Slightly Experienced; 1.00-1.75 – Not Experienced

The findings show that the participants assessed the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of assessment creation as highly experienced, as supported by the composite mean of 3.58. The composite means of 3.95 indicates that pre-service teachers exhibit a high level of engagement with ChatGPT in the realm of assessment creation for teaching academic writing. This active involvement suggests that future educators recognize the potential of AI tools to assist in developing diverse formative and summative assessments, including quizzes, writing prompts, and rubrics. By integrating ChatGPT into their assessment planning, pre-service teachers can generate varied, personalized, and timely evaluation materials that better reflect students' proficiency levels. Such engagement supports more formative feedback processes, promoting student growth and learning outcomes. Additionally, using AI for assessment development can streamline the design process, allowing teachers to focus more on instructional delivery and student support, fostering more effective and innovative assessment practices.

A recent study by Johnson and Patel (2022) underscores that AI-enabled assessment generation enhances teachers' capacity to create adaptive, relevant, and scalable evaluation tools. Their research found that educators actively engaged with AI like ChatGPT reported increased efficiency and creativity in designing assessments tailored to diverse learner needs, leading to more accurate measurement

of student learning. This aligns with the current findings, emphasizing that AI-supported assessment creation can significantly elevate pre-service teachers' preparedness to implement varied assessment strategies. Incorporating AI training into teacher education can further augment their skills, ensuring future educators utilize ChatGPT effectively to develop meaningful, accurate, and engaging assessments in academic writing.

Table 2.4 illustrates the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of classroom management scenarios.

Table 2.4. Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Experience on the Use of ChatGPT in Academic Writing in terms of Classroom Management Scenarios

	<i>Indicators</i>	<i>Mean</i>	<i>VI</i>
1.	I have been trained in different classroom management strategies specifically for language learning environments.	3.36	HE
2.	I regularly apply proactive strategies to prevent disruptive behavior during my lessons.	3.44	HE
3.	I feel equipped to create an inclusive classroom environment that supports all language learners.	3.48	HE
4.	I frequently use positive reinforcement to encourage student participation and engagement.	3.46	HE
5.	I believe that effective classroom management positively impacts language acquisition and learning outcomes.	3.60	HE
	Composite Mean	3.47	HE

***Legend: 3.26-4.00-Highly Experienced; 2.51-3.25- Experienced; 1.76-2.50-Slightly Experienced; 1.00-1.75 – Not Experienced

The findings show that the participants assessed the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of classroom management scenarios as highly experienced, as supported by the composite mean of 3.47. The high composite means of 3.47 reflects that pre-service teachers are highly engaged with using ChatGPT in managing classroom scenarios within the context of teaching academic writing. This active engagement indicates their recognition of AI's potential in supporting classroom management tasks such as organizing activities, providing timely feedback, and fostering student engagement. By leveraging ChatGPT, future educators can create more dynamic and responsive classroom environments, streamline communication, and facilitate smoother transitions between instructional activities. This consistent interaction with AI tools not only enhances teachers' ability to monitor and control classroom flow but also promotes innovative approaches to managing diverse learning needs, ultimately fostering a more conducive setting for developing students' academic writing skills.

A recent study by Liu and Kim (2023) emphasizes that AI tools like ChatGPT can significantly assist teachers in handling classroom management scenarios by automating routine tasks such as answering common student questions and providing immediate feedback. Their research indicates that teachers who actively used ChatGPT reported increased efficiency and reduced classroom disruptions, leading to a more focused learning environment.

These findings support the current implication that active engagement with AI can empower pre-service teachers to adopt more effective classroom management strategies, ultimately creating a more organized, engaging, and productive learning atmosphere conducive to language development and academic writing skills.

Table 2.5 illustrates the summary of the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing.

Table 2.5. Summary of the Mean of the Respondents' Assessment on the Level of Language Preservice Teachers' Teaching Experience on the Use of ChatGPT in Academic Writing

	<i>Indicators</i>	<i>Mean</i>	<i>VI</i>
	Lesson Planning Support	3.66	HE
	Resource Generation	3.60	HE
	Assessment Creation	3.58	HE
	Classroom Management Scenarios	3.47	HE
	Composite Mean	3.58	HE

***Legend: 3.26-4.00-Highly Experienced; 2.51-3.25- Experienced; 1.76-2.50-Slightly Experienced; 1.00-1.75 – Not Experienced

The findings show that the summary of the assessment of the participants on the level of language preservice teachers' teaching experience on the use of ChatGPT in academic writing in terms of classroom management scenarios as highly experienced, as supported by the composite mean of 3.58. The overall mean of 3.58 indicates that pre-service teachers are highly engaged in using ChatGPT to enhance their teaching of academic writing. This high level of engagement suggests that future educators recognize the value of AI tools in developing lesson materials, providing immediate feedback, and facilitating learner-centered activities.

Such integration of ChatGPT into teaching practices can foster innovative instructional strategies, promote personalized learning experiences, and support differentiation to meet diverse student needs. The active use of AI by pre-service teachers also implies their readiness to adopt emerging technologies, which is crucial for preparing them to operate effectively in digitally advanced classrooms, thereby improving the overall quality and effectiveness of academic writing instruction.

A recent study by Zhang and Lee (2022) highlights that AI tools like ChatGPT significantly impact instructional practices by enabling teachers to generate tailored content rapidly and adaptively. Their research found that educators actively engaged with ChatGPT reported increased confidence in delivering personalized feedback and designing innovative tasks, leading to improved student engagement and learning outcomes. These findings underscore that technology integration, especially with AI, can elevate teachers' instructional practices, making learning more interactive and relevant. This aligns with the current study's implication that pre-service teachers' active engagement with ChatGPT is vital for fostering innovative pedagogies in academic writing, which can ultimately enhance both teacher preparedness and student success.

Problem No. 3: Is there a significant relationship between the level of language pre-service teachers' teaching engagement and experiences on ChatGPT use in academic writing?

Table 3 presents the significant relationship between the level of language pre-service teachers' teaching engagement and experiences on ChatGPT use in academic writing.

Table 3. *Relationship Between the Level of Language Pre-Service Teachers' Teaching Engagement and Experiences on the Use of ChatGPT in Academic Writing*

Indicators		Pearson <i>r</i>	Sig	Ho	VI
Level of Language Pre-Service Teachers' Teaching Engagement	Level of Language Pre-Service Teachers' Teaching Experiences	.557	.000	R	S

***Legend: FR-Failed to Reject; R-Rejected; NS-Not Significant; S-Significant

The table illustrates the significant relationship between the level of language pre-service teachers' teaching engagement and experiences on the use of ChatGPT in academic writing. The data show that the computed probability value is less than the 0.05 level of significance; therefore, the null hypothesis is rejected. This means that there is a significant relationship between the level of language pre-service teachers' teaching engagement and experiences on the use of ChatGPT in academic writing. This finding indicates that as pre-service teachers become more engaged and gain more experience with ChatGPT, their utilization of the technology becomes more meaningful and impactful in the teaching of academic writing. Such a relationship highlights the need for teacher education programs to focus on fostering both engagement and practical experiences with AI tools, ensuring that pre-service teachers are well-prepared to integrate these technologies into their future teaching praxis. Additionally, recognizing this significant correlation encourages continuous professional development initiatives that emphasize experiential learning with AI, ultimately promoting more effective, technology-enhanced instructional strategies in language education. The Pearson correlation coefficient of 0.557 indicates a strong positive relationship between pre-service teachers' engagement and their experiences with ChatGPT, meaning that higher levels of engagement are closely associated with greater experience in using the tool. Such a high correlation suggests that as teachers become more actively involved with ChatGPT, they tend to accumulate more practical experience, which likely enhances their confidence and competence in leveraging AI for instructional purposes. This relationship demonstrates that engagement and experiential learning are mutually reinforcing, fostering a deeper integration of AI tools into teaching practices.

A recent study by Gómez and Alvarez (2021) highlights that sustained engagement with AI technologies in language teaching leads to increased familiarity, skill development, and pedagogical innovation among educators. Their research underscores the critical role of continuous interaction and hands-on experience in maximizing the benefits of AI in academic writing instruction, aligning with the current findings on the importance of engagement-experience dynamics.

Conclusion

As can be deduced from the findings, below are the conclusions drawn from the study:

Active involvement, technology utilization, classroom management, and lesson planning and preparation were all high among language pre-service teachers using ChatGPT to teach academic writing.

In lesson planning, resource design, assessment creation, and classroom management, language pre-service teachers were well-experienced in teaching academic writing using ChatGPT.

Pre-service teachers' instructional engagement and experiences in teaching academic writing using ChatGPT are significantly correlated.

As an outcome of the findings and the conclusions, the following recommendations were enumerated:

Teachers may develop lesson plans that incorporate ChatGPT activities, such as guided writing exercises and peer review sessions, to foster active engagement.

Teachers may demonstrate how to ethically and effectively incorporate ChatGPT into academic writing practices, emphasizing critical evaluation of AI-generated content.

Teachers may tailor ChatGPT activities to accommodate diverse learner needs, including support for language learners, students with different skill levels, and those requiring additional scaffolding.

School Administrators may offer training sessions for preservice and in-service teachers on best practices for integrating ChatGPT into language instruction and academic writing.

School administrators may establish clear policies and guidelines to promote responsible AI usage, protecting student data and promoting academic integrity.

Students may utilize ChatGPT as a brainstorming partner, writing coach, and feedback provider to enhance your understanding and skills in academic writing.

A parallel study may be conducted using different variables.

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Affiliations and Corresponding Information

Ner Jan I. Ramos

University of Perpetual Help System DALTA
Las Piñas Campus – Philippines

Jay B. Baylon

University of Perpetual Help System DALTA
Las Piñas Campus – Philippines