



Department of Digital Business

Journal of Artificial Intelligence and Digital Business (RIGGS)

Homepage: <https://journal.ilmudata.co.id/index.php/RIGGS>

Vol. 5 No. 1 (2026) pp: 2716-2725

P-ISSN: 2963-9298, e-ISSN: 2963-914X

Perceptions of Pre-Service English Teachers on Using ChatGPT for Lesson Planning

Salsa Rahmatullah Sukmadana¹, Abdul Halim², Khunul Khatimah³

¹Universitas Muhammadiyah Kalimantan Timur, Indonesia

salsarahmatullah505@gmail.com

Abstract

This study examines Indonesian pre-service English teachers' perceptions of using ChatGPT as a support tool for lesson planning. While generative artificial intelligence has gained increasing attention in education, empirical evidence from EFL teacher education contexts in Indonesia remains limited. Employing an explanatory sequential mixed-methods design, this study collected quantitative data through a structured questionnaire administered to 30 pre-service English teachers enrolled in an English Education program at a private university in Indonesia. Descriptive statistics were used to identify general perception patterns. To further explain the survey results, qualitative data were obtained through semi-structured interviews with three selected participants and analyzed using thematic analysis. The findings indicate that most participants perceive ChatGPT as beneficial for generating lesson ideas, structuring lesson components, and saving preparation time. ChatGPT was also reported to support confidence and professional learning, particularly for pre-service teachers with limited teaching experience. However, the results simultaneously reveal critical concerns, including repetitive outputs, limited contextual suitability, potential inaccuracies, and the need for substantial revision of AI-generated lesson plans. Importantly, participants consistently emphasized that ChatGPT should function as a supportive assistant rather than a replacement for teachers' professional judgment. This study contributes to the growing body of research on generative AI in teacher education by providing context-specific insights from the Indonesian EFL setting. The findings highlight the importance of integrating AI literacy into pre-service teacher education to promote critical, ethical, and pedagogically sound use of generative AI tools.

Keywords: ChatGPT, Lesson Planning, Pre-Service Teachers

1. Introduction

Pre-service teachers often struggle to develop coherent lesson plans, as crafting clear learning objectives and aligning activities with assessment is a complex skill that novices must acquire. Research indicates that inexperienced teachers commonly write poorly defined instructional goals and fail to integrate the main elements of a lesson plan (learning objectives, activities, assessment) into a cohesive whole. For example, Sebulen (2023) found that many trainee teachers lacked clarity in goals and connections among lesson components, undermining lesson effectiveness. In Indonesian EFL contexts, similar challenges have been observed: one study of Indonesian pre-service English teachers reported that designing a lesson plan posed “a big challenge” due to limited best-practice models, particularly in choosing teaching methods and managing time constraints (Nofiyanti & Ali, 2022). These findings suggest that pre-service teachers often need more pedagogical support and clearer exemplars to master lesson planning.

Generative AI tools like ChatGPT have recently emerged as potential aids in education, but they also raise debate. ChatGPT (OpenAI's language model) can synthesize large volumes of text and generate content in natural language, making it useful for drafting materials such as lesson outlines or prompts. Scholars note that ChatGPT's “tremendous uptake” since its late 2022 release is due to its ability to quickly produce written outputs, which has made it “a popular choice for teaching and learning” tasks. Its reported affordances include enabling personalized learning, assisting with content creation, generating feedback, and even reducing teachers' cognitive load by handling routine task (Ebrahimi et al., 2025; Memarian & Doleck, 2023). At the same time, critics warn of significant concerns. Studies of generative AI in education repeatedly highlight risks to academic integrity, such as plagiarism and misinformation, as well as broader ethical issues like bias and accountability (Cotton et al., 2023; Stahl & Eke, 2024). For instance, Cotton et al. (2023) caution that while GPT-3-based chatbots can increase engagement and accessibility, they “raise a number of challenges” particularly around honesty and plagiarism. Stahl & Eke (2024) similarly note that ChatGPT's powerful benefits come with “significant ethical concerns” involving social justice, autonomy, bias, and misuse. In short, the literature

portrays ChatGPT in education as a double-edged sword – offering creative assistance but also prompting debates about reliability, ethics, and the evolving role of teachers (Ebrahimi et al., 2025; Memarian & Doleck, 2023).

Empirical investigations have begun to examine how teacher-education students actually use and perceive ChatGPT. A recent systematic review of ChatGPT in language teacher education found that many preservice teachers view ChatGPT as a “valuable pedagogical assistant” that can spark creativity, enhance self-efficacy, and support instructional innovation when used thoughtfully. For example, Kalenda et al. (2025) surveyed 59 preservice teachers (in STEM, TESOL, and social studies methods courses) and reported that, after a guided analysis of ChatGPT-generated lesson plans, students’ confidence in ChatGPT’s planning ability declined, even as they acknowledged it could provide useful ideas. Specifically, students agreed that they would use ChatGPT for lesson planning but emphasized that “revision of [its] output is necessary”. Similarly, Gurl et al. (2025) studied secondary math teacher candidates who used ChatGPT in a microteaching lesson plan. Those participants found that ChatGPT’s suggested lessons tended to be teacher-centered and repetitive, often requiring careful critique. One group noted that ChatGPT’s math solutions sometimes were incorrect but appeared as “different approaches,” underscoring the need for PSTs to scrutinize AI output. Another recent qualitative study involving three math teachers and three preservice teachers using ChatGPT for 5E lesson planning found wide variation in use: some users generated many prompts while others few, and importantly some saw ChatGPT as a helpful assistant whereas others equated its use with cheating (Şimşek, 2025). These early studies collectively suggest that ChatGPT can offer novel lesson-planning support (such as generating examples or structuring activities), but its outputs must be interpreted critically and supplemented by human pedagogical judgment.

Despite this growing body of work, notable gaps remain. Much of the existing research on ChatGPT and lesson planning has been conducted in mathematics or general education contexts, predominantly outside Indonesia. There is relatively little focus on English as a Foreign Language (EFL) teacher trainees or on the Indonesian teacher education setting. In particular, few studies have explored how pre-service English teachers perceive ChatGPT’s role in planning language lessons. Ebrahimi et al. (2025) emphasize that ChatGPT’s successful integration depends on teacher AI literacy and local context, implying that beliefs and attitudes of trainees in specific cultural settings are critical. To date, no published research has examined Indonesian preservice English teachers’ subjective views of using ChatGPT in their pedagogical practice, indicating a clear need to investigate this topic.

Accordingly, the present study aims to address these gaps by examining Indonesian pre-service English teachers’ perceptions of using ChatGPT in lesson planning. By documenting students’ perceived benefits and concerns, this research will inform how teacher education programs can effectively incorporate generative AI tools. Understanding these perceptions is important because as AI becomes more prevalent in education, teacher trainers must know how their students interpret and appropriate such tools. In doing so, this study contributes to efforts to enhance teacher preparation, for example, by guiding AI literacy instruction and ultimately to leveraging ChatGPT’s potential while safeguarding pedagogical quality.

1.1 Theoretical Significance

This study extends current theory on generative AI in teacher education by foregrounding the Indonesian EFL context. While global frameworks emphasize that AI literacy in teacher education is multifaceted encompassing AI as a teaching tool, content, and learning facilitator most research to date has focused on Western or general contexts (Huang et al., 2025). By examining Indonesian pre-service English teachers’ experiences with ChatGPT in lesson planning, the study bridges this gap, adding an important cultural and linguistic dimension to AI-in-education theory. For example, existing models (such as the extended TPACK framework) underline the need for teachers to critically evaluate AI outputs within ethical and cultural contexts, our work tests these ideas in Indonesia, where language norms and curriculum standards may differ. In doing so, it contributes new insights to theories of teacher professional development and technology acceptance by demonstrating how Indonesian pre-service teachers make sense of GenAI tools given their unique pedagogical goals and constraints (Prilop et al., 2025).

1.2 Practical Significance

The findings have concrete implications for Indonesian teacher preparation, policy, and technology integration. Teacher educators can use our results to design curricula that incorporate AI literacy explicitly, as recommended by Huang et al. (2025). For instance, training programs might include hands-on sessions with ChatGPT to help pre-service teachers learn to critically assess and adapt AI-generated lesson ideas. Education policymakers will find guidance here for national standards and guidelines: recent Indonesian policy initiatives (e.g. introducing

AI learning in schools) underscore the need for targeted AI education programs, and this study's insights can inform such curricula (Nurhayati et al., 2025). Our evidence on perceptions of risk and reward can help shape institutional policies that encourage AI use while safeguarding academic integrity. Finally, technology developers can benefit by tailoring AI tools to local needs: for example, participants reported that ChatGPT can expedite planning but may produce generic or culturally mismatched content (Gurl et al., 2025; Wulandari & Purnamaningwulan, 2024). Understanding these user experiences can guide the creation of Indonesian-language prompts or interfaces that make ChatGPT more pedagogically effective and context-sensitive. In sum, this study informs both theoretical knowledge and practical action in Indonesia: it shows what pre-service English teachers need to know about AI and how to teach them, and it offers recommendations for practice and policy to support responsible AI integration in teacher education (Huang et al., 2025; Wulandari & Purnamaningwulan, 2024).

2. Methods

2.1. Research Design

This study will use a mixed-methods design by combining survey data and interview data to give a more complete picture of participants' perceptions. The survey will provide general patterns, while the interviews will offer deeper explanations (Gamlem et al., 2025; Gläser-Zikuda et al., 2024). An explanatory sequential mixed-methods design to address the two research questions in a systematic manner. The questionnaire was administered first to answer Research Question 1, which examines pre-service English teachers' perceptions of using ChatGPT for lesson planning. This quantitative phase aimed to capture general patterns of attitudes, including perceived usefulness, efficiency, and views on ChatGPT's role as a supportive pedagogical tool, through Likert-scale items analyzed using descriptive statistics. Subsequently, semi-structured interviews were conducted to address Research Question 2, focusing on how pre-service English teachers experience and interpret the integration of ChatGPT in their lesson planning practices. The interview phase was designed to explain and contextualize the survey findings by eliciting in-depth accounts of participants' actual use, perceived benefits and challenges, and critical considerations that could not be fully captured through numerical data. This approach will be common in recent studies on AI in education (Gamlem et al., 2025; Sholikhah et al., 2025). By merging numerical results and interview insights, the study will gain both broad and detailed understanding of pre-service English teachers' views on using ChatGPT for lesson planning.

2.2. Samples/Participants

The participants of this study consisted of 30 pre-service English teachers from the English Education Program at Universitas Muhammadiyah Kalimantan Timur (UMKT), drawn from the 5th and 7th semesters. These cohorts were selected because students at this stage had completed most pedagogical coursework and possessed sufficient experience in lesson planning to meaningfully evaluate the use of ChatGPT. All 30 participants completed the questionnaire in the quantitative phase. For the qualitative phase, 3 participants were purposively selected and volunteered for semi-structured interviews. The interview sample size was intentionally limited, as the purpose of the qualitative phase was not to achieve statistical generalization but to provide in-depth explanations and contextual understanding of the survey results. A small number of interviewees allowed for richer, more focused exploration of individual experiences, consistent with explanatory sequential mixed-methods designs, where qualitative data are used to elaborate and clarify quantitative findings. This approach ensured depth of insight while maintaining coherence between the two phases of the study.

2.3. Instruments

Two instruments will be used to collect data: a structured questionnaire and a semi-structured interview. The questionnaire will provide quantitative data about participants' views of ChatGPT in lesson planning. It will include closed statements on usefulness, ease of use, and teaching impact, rated on a five-point Likert scale. Items will be adapted from existing technology-attitude surveys and will be checked by experts for suitability. The survey also will ask basic demographic questions. Using Likert-scale items will help show general patterns in participants' beliefs (Sholikhah et al., 2025).

The semi-structured interviews will explore participants' experiences in more depth. After the survey, 3 volunteers will be interviewed individually. Questions will focus on how they use ChatGPT for lesson planning, the benefits and challenges they face, and their concerns about AI in teaching. Each interview will last 10–20 minutes and will be recorded with permission. The flexible format will allow follow-up questions to gain deeper insights. This combination of surveys and interviews will follow earlier mixed-methods studies on teachers' perceptions of AI (Sholikhah et al., 2025).

2.4. Data analysis

Quantitative (Questionnaire) Analysis: The Likert-scale responses will be coded and entered into statistical software such as SPSS. Descriptive statistics (frequencies, percentages, means, and standard deviations) will be calculated to show overall patterns in perceptions. For example, the analysis will report how many students agree that ChatGPT is useful for lesson planning. Average scores for each scale (such as perceived usefulness) will also be computed. This descriptive approach will be suitable for a small sample and for an exploratory study, following common practice in teacher-attitude research (Gupta et al., 2025). If needed, reliability checks (Cronbach’s alpha) and simple comparisons between groups (e.g., 5th vs. 7th semester) will also be conducted, although the main focus will remain on descriptive results.

Qualitative (Interview) Analysis: All interview recordings will be transcribed word-for-word and analyzed using thematic analysis. The transcripts will be read several times, and inductive coding will be used to identify repeated ideas. Related codes (such as “time-saving,” “idea generation,” or “accuracy concerns”) will then be grouped into broader themes like Benefits or Challenges. Two researchers will code the data separately and then discuss any differences to ensure trustworthy results. Thematic analysis is appropriate for interview data, following steps described by Jackson & Wenderoth (2024). The final themes will be connected to the questionnaire findings to explain the patterns shown in the quantitative data. For example, if many students agree that “ChatGPT saves preparation time,” interview comments will help explain why.

3. Results

3.1 The Perceptions of Pre-Service English Teachers

Table 1. Pre-Service English Teachers’ Perceptions of ChatGPT for Lesson Planning: Perceived Usefulness and Efficiency (N = 30)

| Statements | Strongly Disagree | Disagree | Agree | Strongly Agree |
|---|-------------------|----------|-------|----------------|
| ChatGPT helps me generate lesson ideas more easily. | 0% | 6.7% | 60.0% | 33.3% |
| Using ChatGPT makes lesson planning more efficient and time-saving. | 0% | 10.0% | 56.7% | 33.3% |
| ChatGPT supports me in structuring lesson plans (objectives, activities, and assessment). | 0% | 13.3% | 53.4% | 33.3% |
| ChatGPT provides useful examples and teaching activities for English lessons. | 0% | 6.7% | 56.7% | 36.6% |
| ChatGPT is easy to use for lesson planning purposes. | 0% | 3.3% | 60.0% | 36.7% |

Table 1 presents the descriptive results related to pre-service English teachers’ perceptions of ChatGPT’s usefulness and efficiency in lesson planning. Overall, responses were strongly positive, with the majority of participants selecting Agree or Strongly Agree for all statements. Between 86.7% and 96.7% of respondents agreed or strongly agreed that ChatGPT helps generate lesson ideas, improves efficiency, supports lesson structure, provides useful examples, and is easy to use. Only a small proportion of participants expressed disagreement, and no strongly negative responses were recorded.

Table 2. Pre-Service English Teachers' Perceptions of ChatGPT: Accessibility, Confidence, and Learning Support (N = 30)

| Statements | Strongly Disagree | Disagree | Agree | Strongly Agree |
|---|-------------------|----------|-------|----------------|
| ChatGPT is accessible whenever I need support for lesson planning. | 0% | 10.0% | 56.7% | 33.3% |
| ChatGPT helps improve my confidence in designing lesson plans. | 0% | 6.7% | 60.0% | 33.3% |
| ChatGPT encourages me to be more creative in lesson planning. | 0% | 10.0% | 53.3% | 36.7% |
| ChatGPT supports my learning as a future English teacher. | 0% | 6.7% | 56.7% | 36.6% |
| I am concerned that ChatGPT may provide inaccurate or misleading content. | 0% | 16.7% | 50.0% | 33.3% |

As shown in Table 2, most participants reported positive perceptions of ChatGPT's accessibility and its role in supporting confidence, creativity, and professional learning. For these four statements, more than 86% of respondents agreed or strongly agreed. At the same time, concerns about inaccurate or misleading content were also evident, with 83.3% of participants agreeing or strongly agreeing with this statement, indicating that positive perceptions coexisted with awareness of potential limitations.

Table 3. Pre-Service English Teachers' Perceptions of Ethical Issues and the Role of ChatGPT in Teacher Education (N = 30)

| Statements | Strongly Disagree | Disagree | Agree | Strongly Agree |
|--|-------------------|----------|-------|----------------|
| I worry that relying too much on ChatGPT may reduce my independent thinking skills. | 3.3% | 13.4% | 46.6% | 36.7% |
| ChatGPT-generated lesson plans still require significant revision. | 0% | 10.0% | 50.0% | 40.0% |
| Ethical issues (e.g., plagiarism or academic integrity) are a concern when using ChatGPT. | 3.3% | 16.7% | 43.3% | 36.7% |
| ChatGPT should be integrated into pre-service teacher education programs. | 3.3% | 13.4% | 50.0% | 33.3% |
| ChatGPT is a helpful assistant, but not a replacement for teachers' professional judgment. | 0% | 6.7% | 46.7% | 46.6% |

Table 3 summarizes participants' responses regarding ethical considerations and the role of ChatGPT in teacher education. A large majority of respondents agreed or strongly agreed that excessive reliance on ChatGPT may affect independent thinking and that AI-generated lesson plans require further revision. Ethical concerns related to plagiarism and academic integrity were also widely reported. Despite these concerns, most participants supported the integration of ChatGPT into pre-service teacher education programs and strongly agreed that ChatGPT should function as a supportive assistant rather than a replacement for teachers' professional judgment.

3.2 Identifying ChatGPT Integration in Lesson Planning

The interview findings indicate that participants mainly used ChatGPT as a practical support tool for lesson planning, particularly when they faced limitations in teaching materials or time constraints. Participants reported using ChatGPT to generate additional materials beyond textbooks, organize lesson sequences, and adjust lesson plans to students' levels. ChatGPT was frequently described as helpful in structuring content and providing ideas when participants felt uncertain or lacked experience in lesson planning.

“Aku kerja sebagai guru les bahasa Inggris, kami punya buku pelajaran tapi kadang cepat selesai bukunya di semester pertama, jadi sering kehabisan materi di semester kedua. Jadi aku sering pakai ChatGPT buat cari materi sekalian merencanakan gimana pembelajarannya.” (Participant 1)

“Aku biasanya menggunakan ChatGPT waktu perlu mengajar murid. Aku biasa menemukan murid terkadang tidak ingat sama pelajaran lama, jadi aku minta ChatGPT untuk menyusun lesson plan sambil memasukkan pelajaran lama.” (Participant 2)

However, the findings also reveal several challenges in using ChatGPT for lesson planning. Participants expressed concerns about the repetitive and monotonous nature of ChatGPT's outputs, particularly in suggested learning activities. Some participants noted that the lesson plans generated by ChatGPT often required substantial revision to better suit students' needs and classroom conditions. Moreover, participants emphasized that ChatGPT could only function as a supporting tool and could not replace teachers' creativity or professional judgment in designing effective lessons.

“Tantangannya adalah bagaimana ChatGPT-nya merespon. Terkadang yang diberikan itu hal-hal yang sama, contohnya kegiatan jadi monoton karena tidak ada variasi.” (Participant 1)

“Tantangannya ya hasil ChatGPT sering monoton, jadi diri kita sendiri harus lebih kreatif kalau mau pakai hasil ChatGPT.” (Participant 3)

3.3 Perceived Benefits of ChatGPT as a Lesson Planning Support Tool

Quantitative findings show that ChatGPT is largely perceived as a beneficial support tool for lesson planning among pre-service English teachers, particularly in generating ideas and improving efficiency. As indicated in Table 1, 93.3% of participants (60.0% agree; 33.3% strongly agree) reported that ChatGPT helps them generate lesson ideas more easily. In addition, 90.0% agreed or strongly agreed that ChatGPT makes lesson planning more time-saving. These findings indicate that ChatGPT reduces the initial cognitive burden of lesson preparation, especially for pre-service teachers who are still developing pedagogical competence. This result supports Memarian & Doleck (2023), who argue that generative AI can streamline routine academic tasks and reduce workload in educational settings. Similar conclusions were drawn by Gurl et al. (2025), who found that ChatGPT effectively functions as an idea generator rather than a complete lesson-planning solution.

Interview data further illustrate how these benefits are experienced in real teaching contexts. Participants described using ChatGPT when they encountered limited teaching materials or time constraints, particularly to supplement textbooks or extend learning content. One participant stated:

“Aku kerja sebagai guru les bahasa Inggris, kami punya buku pelajaran tapi kadang cepat selesai bukunya di semester pertama, jadi sering kehabisan materi di semester kedua. Jadi aku sering pakai ChatGPT buat cari materi sekalian merencanakan gimana pembelajarannya.” (Participant 1)

This excerpt shows that ChatGPT enables pre-service teachers to quickly access additional materials and plan instruction more efficiently when resources are limited. A similar pattern was reported in Indonesian EFL contexts by Wulandari & Purnamaningwulan (2024), who found that pre-service teachers used ChatGPT to supplement teaching materials during practicum. This finding is also consistent with Nofiyanti & Ali (2022), who reported that Indonesian pre-service teachers often struggle with lesson planning due to limited resources and time, suggesting why AI-based support tools may be perceived as beneficial.

Beyond idea generation and efficiency, ChatGPT was also perceived as helpful in structuring lesson plans. Survey results show that 86.7% of participants agreed or strongly agreed that ChatGPT supports them in organizing lesson components, including objectives, activities, and assessment. Interview data explain that this feature was especially helpful for participants with limited teaching experience. One participant noted:

“Aku belum terlalu bisa dalam hal mengajar jadi kadang-kadang aku tanya ke ChatGPT untuk susunkan lesson plan-nya, tapi biasanya dalam hal menyusun saja.” (Participant 3)

Another participant highlighted ChatGPT’s role in integrating prior knowledge into lesson plans:

“Aku minta ChatGPT untuk menyusun lesson plan sambil memasukkan pelajaran lama.” (Participant 2)

These findings align with Sebulen (2023), who found that novice teachers frequently struggle with structuring lesson components coherently. Kalenda et al. (2025) similarly reported that ChatGPT can assist pre-service teachers by providing structural drafts that help reduce uncertainty during lesson planning, although these drafts still require revision.

In addition, ChatGPT was perceived as contributing to professional learning and confidence development. As shown in Table 2, 93.3% of respondents agreed or strongly agreed that ChatGPT supports their learning as future English teachers, while 93.3% also reported increased confidence in designing lesson plans. This suggests that ChatGPT may function not only as a technical aid but also as a confidence-building resource during early professional development. Ebrahimi et al. (2025) similarly found that pre-service teachers perceived ChatGPT as supportive of pedagogical learning when used reflectively. Huang et al. (2025) further emphasize that such perceived benefits are closely related to emerging AI literacy among pre-service teachers.

Overall, the findings indicate that pre-service English teachers perceive ChatGPT as a supportive lesson-planning assistant that facilitates idea generation, improves efficiency, and helps structure lessons. Importantly, ChatGPT is not viewed as a replacement for pedagogical expertise but rather as a starting point that supports novice teachers in overcoming initial planning challenges. This interpretation aligns with Dornburg & Davin (2024), who argue that AI-generated lesson plans are most effective when treated as flexible drafts. It also reflects Prilop et al. (2025) assertion that generative AI should be positioned as a complementary tool that supports, rather than substitutes for, teachers’ professional judgment.

3.4 Challenges and Critical Considerations in Using ChatGPT for Lesson Planning

Despite generally positive perceptions, the findings reveal several challenges and critical considerations in using ChatGPT for lesson planning. Quantitative data indicate that participants were highly aware of the limitations of AI-generated lesson plans. As shown in Table 3, 90.0% of respondents agreed or strongly agreed that lesson plans generated by ChatGPT still require significant revision, while 83.3% expressed concern that relying too much on ChatGPT may reduce independent thinking skills. These results suggest that pre-service English teachers do not view ChatGPT as a complete or ready-to-use solution but recognize the need for substantial teacher involvement. This finding aligns with Kalenda et al. (2025), who reported that pre-service teachers’ confidence in ChatGPT declined after critically analyzing AI-generated lesson plans, leading them to emphasize the necessity of human revision.

Qualitative interview data provide deeper insight into why revision is considered necessary. Participants frequently described ChatGPT’s outputs as repetitive and monotonous, particularly in suggested learning activities. One participant stated:

“Tantangannya adalah bagaimana ChatGPT-nya merespon. Terkadang yang diberikan itu hal-hal yang sama, contohnya kegiatan jadi monoton karena tidak ada variasi.” (Participant 1)

Another participant similarly noted:

“Tantangannya ya hasil ChatGPT sering monoton, jadi diri kita sendiri harus lebih kreatif kalau mau pakai hasil ChatGPT.” (Participant 3)

These excerpts illustrate that while ChatGPT can generate lesson plans quickly, the lack of variation and creativity in its outputs requires teachers to actively modify and enrich the content. This challenge reflects findings by Gurl et al. (2025), who observed that ChatGPT-generated lesson plans often follow generic and repetitive patterns, particularly when prompts are not carefully refined.

In addition to monotony, participants raised concerns about the suitability of AI-generated lesson plans for actual classroom implementation. Survey data show that 83.3% of participants agreed or strongly agreed that ChatGPT may provide inaccurate or misleading content. Interview data clarify that this concern is not limited to factual accuracy but also relates to pedagogical appropriateness. One participant explained:

“Terkadang ChatGPT tidak memberikan lesson plan yang bisa diikuti oleh murid, jadinya murid kadang susah untuk mengikuti apa yang aku ajarkan.” (Participant 2)

This statement highlights the gap between AI-generated plans and real classroom dynamics, where students' levels, needs, and engagement must be carefully considered. Dornburg & Davin (2024) similarly argue that ChatGPT-generated lesson plans often lack sensitivity to learner context and instructional feasibility, making teacher judgment essential for adapting AI outputs to classroom realities.

Ethical and professional concerns also emerged as critical considerations in the use of ChatGPT. As indicated in Table 3, 80.0% of participants agreed or strongly agreed that ethical issues such as plagiarism and academic integrity are a concern when using ChatGPT. Additionally, 83.3% agreed or strongly agreed that overreliance on ChatGPT could negatively affect independent thinking. These concerns reflect participants' awareness of the potential risks associated with uncritical AI use. Such findings are consistent with Cotton et al. (2023), who caution that generative AI tools may encourage dependency and raise academic integrity issues if not used responsibly.

Importantly, participants consistently emphasized that ChatGPT should function only as a supporting tool rather than a substitute for teachers' professional judgment. Questionnaire results show that 93.3% of respondents agreed or strongly agreed with the statement that ChatGPT is a helpful assistant but not a replacement for teachers. This stance was echoed in interview responses, where participants explicitly rejected the idea of relying solely on AI-generated lesson plans. One participant stated:

“Tidak, karena ChatGPT hanyalah alat pembantu. ChatGPT tidak bisa menghasilkan lesson plan yang menarik. Sederhananya, ChatGPT cuma sekedar memberikan ide.” (Participant 3)

This perception aligns with Şimşek (2025), who found that both teachers and pre-service teachers viewed ChatGPT as useful but insufficient for independent pedagogical decision-making. It also supports Prilop et al. (2025), who emphasize that AI literacy involves understanding both the affordances and limitations of generative AI, particularly in maintaining professional autonomy.

Overall, the challenges identified in this study demonstrate that while ChatGPT offers practical benefits, its integration into lesson planning requires critical awareness, creativity, and ethical consideration. Pre-service English teachers recognize that AI-generated outputs must be evaluated, adapted, and contextualized to ensure pedagogical quality. These findings reinforce the argument that effective use of ChatGPT in teacher education depends not merely on access to technology but on the development of AI literacy and reflective practice, as emphasized by Huang et al. (2025).

3.5 Contributions of the Study to Generative AI and Teacher Education Research

This study contributes to the growing body of research on generative AI in teacher education by providing empirical evidence from the Indonesian EFL context, which has been underrepresented in prior studies. While

earlier research has largely focused on Western settings or non-language disciplines such as mathematics and general education (Gurl et al., 2025; Kalenda et al., 2025), the present findings extend these discussions by foregrounding the perspectives of Indonesian pre-service English teachers. Consistent with global studies, participants in this study perceived ChatGPT as a useful tool for idea generation and time efficiency; however, the integration of questionnaire and interview data offers a more nuanced understanding of how these benefits are negotiated alongside concerns about monotony, contextual mismatch, and professional judgment. In doing so, this study responds directly to calls by Ebrahimi et al. (2025) and Huang et al. (2025) for context-sensitive research that examines how GenAI is interpreted and utilized within specific linguistic, cultural, and educational environments.

In addition, this study contributes conceptually to discussions of AI literacy and responsible AI integration in teacher education. The findings demonstrate that pre-service English teachers do not position ChatGPT as a replacement for pedagogical expertise but rather as a supplementary resource that requires critical evaluation, adaptation, and ethical awareness. This stance aligns with the triadic model of AI literacy proposed by Prilop et al. (2025), which emphasizes the need to understand AI as a tool, content source, and object of critical reflection. By showing how participants balance perceived usefulness with skepticism and creativity, this study provides empirical support for the argument that AI literacy should be explicitly embedded in pre-service teacher education programs (Huang et al., 2025; Widianingtyas et al., 2023). Consequently, the study offers both theoretical and practical contributions by informing future research agendas and guiding teacher educators in designing AI-informed pedagogical training that supports innovation without compromising professional autonomy.

4. Conclusion

This study reveals that Indonesian pre-service English teachers generally perceive ChatGPT as a useful support tool for lesson planning, particularly for generating ideas, organizing lesson structures, and saving preparation time. The questionnaire results indicate predominantly positive attitudes toward ChatGPT's practical benefits, which are further clarified by interview findings showing how participants use the tool to supplement materials, scaffold lessons, and respond to classroom needs. These findings suggest that ChatGPT can help pre-service teachers overcome initial planning challenges, especially when experience, time, or resources are limited. At the same time, the study highlights participants' critical awareness of ChatGPT's limitations. Interview data show that AI-generated lesson plans are often perceived as repetitive and generic, requiring substantial revision to align with learners' needs and contextual demands. Importantly, participants consistently emphasized that ChatGPT should not replace teachers' professional judgment, creativity, or pedagogical decision-making. This cautious stance indicates that pre-service teachers recognize the importance of maintaining instructional autonomy and responsibility when integrating generative AI into their planning practices. Overall, the findings suggest that ChatGPT holds pedagogical value when used strategically and critically within pre-service teacher education. Rather than functioning as an autonomous lesson-planning solution, ChatGPT is best positioned as a complementary tool that supports, but does not substitute for, teachers' expertise. Therefore, teacher education programs should encourage guided and reflective use of generative AI tools to ensure that future teachers can leverage their benefits while preserving pedagogical quality and professional integrity. Despite its contributions, this study has several limitations that should be acknowledged. First, the sample size was relatively small and drawn from a single private university in Indonesia, which limits the generalizability of the findings to broader pre-service teacher populations. The study also relied primarily on self-reported questionnaire responses and a limited number of interview participants, which may reflect subjective perceptions rather than actual long-term instructional practices. In addition, the use of descriptive statistics without inferential analysis restricts the ability to identify statistically significant differences across participant groups or levels of experience. Future research could address these limitations by involving larger and more diverse samples across multiple institutions and regions in Indonesia. Longitudinal studies are also recommended to examine how pre-service teachers' perceptions and uses of ChatGPT evolve over time, particularly as their teaching experience and AI literacy develop. Moreover, future studies could incorporate classroom observations or analysis of AI-assisted lesson plans to triangulate self-reported data with actual instructional outcomes. Experimental or quasi-experimental designs may further explore the impact of structured AI literacy training on the quality of lesson planning and pedagogical decision-making. Such research would provide deeper insight into how generative AI can be integrated responsibly and effectively into pre-service teacher education.

Referensi

1. L. G. R. Budiarta and I. P. I. Kusuma, "Does ChatGPT Have a Significant Effect to Improve EFL Preservice Teachers' Teaching Plans? A Mixed-Method Study," *Jurnal Pendidikan Bahasa Inggris Undiksha*, vol. 12, no. 3, pp. 283–291, 2024, doi: 10.23887/jpbi.v12i3.85769.
2. D. Cotton, P. Cotton, and J. R. Shipway, "Chatting and Cheating: Ensuring Academic Integrity in the Era of ChatGPT," 2023, doi: 10.35542/osf.io/mrz8h.
3. A. Dornburg and K. Davin, "To What Extent Is ChatGPT Useful for Language Teacher Lesson Plan Creation?" 2024.
4. Z. Ebrahimi, S. Shakib Kotamjani, A. Qosimov, and I. Xodabande, "Mapping the Emerging Research Landscape on Applications of ChatGPT in Language Teacher Education: A Systematic Narrative Literature Review," *Discover Artificial Intelligence*, vol. 5, no. 1, p. 349, 2025, doi: 10.1007/s44163-025-00631-z.
5. S. M. Gamlem, J. McGrane, C. Brandmo, S. Moltudal, S. Z. Sun, and T. N. Hopfenbeck, "Exploring Pre-Service Teachers' Attitudes and Experiences with Generative AI: A Mixed Methods Study in Norwegian Teacher Education," *Educational Psychology*, pp. 1–25, 2025, doi: 10.1080/01443410.2025.2528663.
6. M. Gläser-Zikuda, C. Zhang, F. Hofmann, L. Plöbl, L. Pösse, and M. Artmann, "Mixed Methods Research on Reflective Writing in Teacher Education," *Frontiers in Psychology*, vol. 15, 2024, doi: 10.3389/fpsyg.2024.1394641.
7. A. Gupta, A. Koul, and A. Gupta, "Understanding Higher Education Teachers' Perceptions and Attitudes Towards MOOCs for Professional Development: A Scale Validation and Predictive Study," *Open Praxis*, vol. 17, no. 4, pp. 710–729, 2025, doi: 10.55982/openpraxis.17.4.933.
8. T. J. Gurl, M. P. Markinson, and A. F. Artzt, "Using ChatGPT as a Lesson Planning Assistant with Preservice Secondary Mathematics Teachers," *Digital Experiences in Mathematics Education*, vol. 11, no. 1, pp. 114–139, 2025, doi: 10.1007/s40751-024-00162-9.
9. T. Huang, C. Wu, and M. Wu, "Developing Pre-Service Language Teachers' GenAI Literacy: An Interventional Study in an English Language Teacher Education Course," *Discover Artificial Intelligence*, vol. 5, no. 1, p. 163, 2025, doi: 10.1007/s44163-025-00435-1.
10. M. A. Jackson and M. P. Wenderoth, "A Thematic Analysis of Interviews Reveals How a STEM Faculty Development Program Supported the Complexity of Implementing Evidence-Based Teaching," *To Improve the Academy*, vol. 43, no. 1, 2024, doi: 10.3998/tia.3447.
11. P. J. Kalenda, L. Rath, M. Abugasea Heidt, and A. Wright, "Pre-Service Teacher Perceptions of ChatGPT for Lesson Plan Generation," *Journal of Educational Technology Systems*, vol. 53, no. 3, pp. 219–241, 2025, doi: 10.1177/00472395241301388.
12. B. Memarian and T. Doleck, "ChatGPT in Education: Methods, Potentials, and Limitations," *Computers in Human Behavior: Artificial Humans*, vol. 1, no. 2, p. 100022, 2023, doi: 10.1016/j.chbah.2023.100022.
13. A. N. Nofiyanti and F. A. Ali, "Professional Development During Teaching Practicum: Insights of Indonesian Pre-Service EFL Teachers in Designing Lesson Plans," *Proceedings of the International Conference on Islam and Education (ICONIE)*, vol. 2, no. 1, 2022.
14. S. Nurhayati, T. Taufikin, L. Judijanto, and S. Musa, "Towards Effective Artificial Intelligence-Driven Learning in Indonesian Child Education: Understanding Parental Readiness, Challenges, and Policy Implications," *Educational Process International Journal*, vol. 15, no. 1, 2025, doi: 10.22521/edupij.2025.15.155.
15. C. N. Prilop, D.-K. Mah, L. J. Jacobsen, R. R. Hansen, K. E. Weber, and F. Hoya, "Generative AI in Teacher Education: Educators' Perceptions of Transformative Potentials and the Triadic Nature of AI Literacy Explored Through AI-Enhanced Methods," *Computers and Education: Artificial Intelligence*, vol. 9, p. 100471, 2025, doi: 10.1016/j.caeai.2025.100471.
16. M. T. Sebulen, "Lesson Planning Challenges of Pre-Service Teachers," *Cognizance Journal of Multidisciplinary Studies*, vol. 3, no. 5, pp. 19–29, 2023, doi: 10.47760/cognizance.2023.v03i05.003.
17. S. S. Sholikhah, N. Zamzami, and Sulistyaningsih, "Teachers' and Students' Perceptions of Artificial Intelligence (AI) Technology in Learning Activities," *Journal of Scientific Research, Education, and Technology (JSRET)*, vol. 4, no. 3, pp. 1474–1482, 2025, doi: 10.58526/jsret.v4i3.318.
18. N. Şimşek, "Integration of ChatGPT in Mathematical Story-Focused 5E Lesson Planning: Teachers and Pre-Service Teachers' Interactions with ChatGPT," *Education and Information Technologies*, vol. 30, no. 8, pp. 11391–11462, 2025, doi: 10.1007/s10639-024-13258-x.
19. B. C. Stahl and D. Eke, "The Ethics of ChatGPT: Exploring the Ethical Issues of an Emerging Technology," *International Journal of Information Management*, vol. 74, p. 102700, 2024, doi: 10.1016/j.ijinfomgt.2023.102700.
20. N. Widianingtyas, T. W. P. Mukti, and R. M. P. Silalahi, "ChatGPT in Language Education: Perceptions of Teachers—A Beneficial Tool or Potential Threat?" *VELES*, vol. 7, no. 2, pp. 279–290, 2023, doi: 10.29408/veles.v7i2.20326.
21. M. Wulandari and R. A. Purnamaningwulan, "Exploring Indonesian EFL Pre-Service Teachers' Experiences in AI-Assisted Teaching Practicum: Benefits and Drawbacks," *LLT Journal*, vol. 27, no. 2, pp. 878–894, 2024, doi: 10.24071/llt.v27i2.8690.