

EFL Student Teachers' Experiences with AI-Assisted Lesson Planning

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ABSTRACT

Objective: Artificial Intelligence (AI) is increasingly transforming English language teaching, yet its potential to integrate technology, moral values, and authentic content in pre-service teacher education remains underexplored. This study investigates how pre-service English teachers utilize AI to design culturally and morally grounded lessons. **Method:** Adopting a quantitative descriptive approach, data were collected via an online survey from 34 undergraduate students enrolled in a Microteaching course at a private university in Indonesia. The instrument comprised open-ended questions on AI use, integration of Islamic moral values, and selection of authentic materials. **Results:** Results show that ChatGPT was the most frequently used tool, followed by Gemini. Participants employed AI to source learning materials, recommend teaching strategies, generate quizzes, and adapt lessons to learner needs. Moral values were embedded through ethical guidance, social responsibility, prayer rituals, and spiritual reflection. AI-suggested authentic content was incorporated to enhance contextual relevance but was selectively adapted to align with cultural and personal values. Findings demonstrate that AI substantially enhances lesson planning by streamlining resource selection and fostering pedagogical creativity, while preserving the teacher's role as a cultural and ethical filter. **Novelty:** This study highlights AI's dual potential—as an innovative pedagogical partner and as a tool requiring critical oversight—to ensure language instruction that is technologically enriched, culturally responsive, and value-oriented.

INTRODUCTION

The rapid advancement of Artificial Intelligence (AI) has revolutionized various sectors of human life, including education. In the era of the Fourth Industrial Revolution and Society 5.0, AI has emerged as a key driver of educational transformation, requiring teachers and pre-service teachers to effectively integrate technology into the teaching process. AI offers a range of features, from automating administrative tasks and personalizing learning experiences to developing contextually relevant instructional materials [1] While these capabilities present new opportunities to optimize learning, they also introduce challenges—particularly in embedding moral values and ensuring the cultural relevance of AI-generated content [2].

In Indonesia, the need for innovation in English language teaching is becoming increasingly urgent. As a global lingua franca, English plays a strategic role in enhancing the competitiveness of human resources in the international arena. University-level pre-service English teachers are thus expected to master not only effective pedagogical skills but also the ability to leverage emerging technologies. AI can assist in preparing lesson plans or instructional modules, providing rich learning resources, and designing learning activities that align with students' characteristics [3]

However, the integration of AI into English language teaching cannot be separated from the challenge of incorporating moral and cultural values. Since AI systems are largely trained on global datasets, the content they generate may not always align with local values or social norms. In the context of Islamic higher education in Indonesia, embedding Islamic moral values – such as ethics, social responsibility, cooperation, and spirituality – is not an optional supplement, but rather an integral element of educational goals. Teachers must therefore possess critical skills to evaluate AI-generated outputs and adapt them to these values [4].

The use of authentic materials also plays a pivotal role in English language teaching. Authentic materials – originally created for real-life communication rather than instructional purposes – are considered more effective in developing learners' language skills by providing exposure to language in genuine contexts. AI has significant potential to support teachers in sourcing, adapting, or even generating such materials, for example, by recommending relevant news articles, videos, or dialogues. Nevertheless, as with moral values, authentic materials from AI require careful selection and adaptation to match learners' proficiency levels and cultural contexts.

Previous studies have shown that AI tools such as ChatGPT and Gemini can improve teachers' efficiency in lesson planning, enabling them to generate topic ideas, create quizzes, develop teaching resources, and provide automated feedback [5] [6]. However, much of the existing literature focuses on the technical aspects of AI integration, while the moral and cultural dimensions – particularly in Islamic higher education contexts – remain underexplored. This gap warrants further investigation. AI-supported instruction that neglects moral alignment risks producing technically sound lessons that fail to reflect the holistic educational objectives expected in such contexts. Likewise, the use of culturally insensitive authentic materials may lead to misunderstandings or resistance among learners [7]. Therefore, it is necessary to examine how pre-service English teachers employ AI not only to enhance instructional effectiveness but also to harmoniously integrate Islamic moral values and authentic materials.

This research is particularly relevant in light of global trends toward AI-augmented teaching, where teachers' roles shift from mere transmitters of content to curators, facilitators, and evaluators of technology-generated resources. Pre-service teachers must therefore be equipped to harness the power of AI while safeguarding the moral and cultural integrity of the learning experience, combining technological literacy with moral literacy. Within the microteaching context – a core component of teacher education – AI offers pre-service teachers' hands-on opportunities to merge technology with creative, student-centered pedagogies. It can support the creation of interactive quizzes, conversational simulations, and problem-based projects relevant to learners' real-life contexts. AI also enables differentiated instruction by tailoring material difficulty to students' abilities, fostering an inclusive learning environment. However, personalization must go hand in hand with moral reinforcement; for example, AI could

be used to propose discussion topics that are linguistically relevant and morally reflective, such as social responsibility, work ethics, or environmental stewardship.

The present study seeks to explore how pre-service English teachers utilize AI in lesson planning that integrates Islamic moral values, authentic materials, and technology. The study aims not only to identify the types of AI tools used and the features applied, but also to examine strategies for adapting AI-generated content to align with local values and cultural norms. This focus is expected to contribute to the development of AI integration models in English language teaching that are technically robust, morally grounded, and culturally relevant. For pre-service English teachers, the ability to harness Artificial Intelligence (AI) effectively has emerged as a critical and increasingly indispensable professional competence. The integration of AI into lesson planning extends beyond the mere selection of materials and pedagogical strategies; it also encompasses the deliberate incorporation of moral values – particularly Islamic values – into the learning process. This study seeks to address the central research question:

How do pre-service teachers utilize AI in planning English language instruction that integrates moral values, authentic materials, and technology?

Theoretical Framework

Technological Pedagogical Content Knowledge (TPACK)

TPACK conceptualizes effective teaching with technology as the intersection of three core knowledge domains: content knowledge (CK), pedagogical knowledge (PK), and technological knowledge (TK). In the context of the English Language Education Study Program, CK refers to mastery of English language skills and related materials, PK involves strategies for teaching language effectively, and TK relates to the ability to use AI tools (e.g., ChatGPT, Gemini) in lesson planning [8]. The TPACK framework underscores that optimal integration occurs when teachers can align these three domains to create meaningful, contextually relevant instruction.

Values-Based Education

Given the emphasis on embedding Islamic moral values into lesson planning, the study extends TPACK with the moral dimension of teaching. Values-based education promotes the intentional integration of ethical principles – such as social responsibility, spiritual reflection, and ethical decision-making – into instructional design. This extension, referred to in this study as Technological Pedagogical Moral Knowledge (TPMK), reflects the role of pre-service teachers as both technology users and moral gatekeepers, ensuring AI-generated materials align with local cultural and religious norms [9].

SAMR Model of Technology Integration

The SAMR model provides a framework for categorizing the depth of technology use in instruction:

1. Substitution – AI replaces traditional resource search or content creation without functional change.
2. Augmentation – AI enhances lesson planning with richer, more authentic examples.

3. Modification – AI-generated content is significantly adapted to integrate moral values and cultural relevance.
4. Redefinition – AI enables the creation of new types of value-integrated, authentic learning activities previously inconceivable without the technology.

By combining TPACK, values-based education, and the SAMR model, this study positions AI-assisted lesson planning as a process that not only integrates technology effectively but also aligns with moral and cultural imperatives [10]. This integrated framework guides the analysis of how pre-service English teachers select, adapt, and implement AI-generated materials in ways that support both linguistic and character development in their future classrooms [11].

RESEARCH METHOD

This study adopted a quantitative descriptive design complemented by thematic qualitative analysis. The quantitative component was employed to map the distribution and frequency of AI use among pre-service English teachers in lesson planning, while the qualitative component provided deeper insights by interpreting open-ended responses. This mixed approach was deemed appropriate for identifying both usage patterns and strategies for integrating Islamic moral values, authentic materials, and technology into instructional design.

Participants were 34 undergraduate students enrolled in the English Language Education Program at one of private universities in East Java, taking the Microteaching course during the even semester of the 2024/2025 academic year. Purposive sampling was applied with the following criteria: (1) currently preparing or having prepared a lesson plan or teaching module aligned with the Merdeka Curriculum; (2) prior use of at least one AI tool to support lesson planning; and (3) willingness to complete the questionnaire in full. Respondents represented diverse teaching backgrounds, ranging from no formal classroom experience to prior teaching in schools or language institutions.

Data were collected using an online questionnaire developed in Google Forms, consisting of 15 items. The instrument included: demographic information; types of AI tools used (e.g., ChatGPT, Gemini); AI features utilized (material selection, quiz generation, pedagogical recommendations, lesson personalization); strategies for embedding Islamic moral values; use and adaptation of AI-sourced authentic materials; and perceptions of AI's role in instructional decision-making. The questionnaire comprised both closed-ended questions for quantitative analysis and open-ended questions to elicit richer qualitative narratives.

Data collection was conducted from 10 to 15 July 2025. The questionnaire was administered online using a digital survey link, which was distributed through the WhatsApp group of the Microteaching course. This distribution method was selected because all student teachers enrolled in the course were active members of the group, making it an accessible and efficient channel for reaching the intended respondents. Before completing the questionnaire, respondents received a brief explanation of the study. The explanation covered the purpose of the research, the focus of the

questionnaire, and the expected role of respondents in providing honest answers based on their learning experiences. Respondents were also informed that their participation was voluntary and that all data would be treated confidentially. No personal information was used to identify individual respondents in the reporting of the findings.

The respondents were instructed to answer each item based on their actual experiences in using artificial intelligence tools to support lesson planning activities. These experiences included, for example, generating lesson ideas, developing learning objectives, selecting authentic materials, integrating moral values, preparing teaching procedures, and incorporating technology into lesson plans. The instruction was given to ensure that the data reflected authentic classroom preparation practices rather than general opinions about AI. The questionnaire required approximately 15 to 20 minutes to complete. This duration was considered sufficient for respondents to read each item carefully and provide thoughtful responses. During the data collection period, the questionnaire link remained accessible to allow respondents to complete it at a convenient time. The responses collected during this period were then reviewed and organized for further analysis. Data analysis was conducted in two stages:

a. Descriptive Quantitative Analysis:

Closed-ended responses were analyzed using frequency and percentage calculations to describe the proportion of AI tools used. Microsoft Excel was used for the analysis. The analysis focused on frequency and percentage calculations to identify the distribution of respondents' answers across each item. Frequencies were used to show the number of respondents selecting each response option, while percentages were calculated to indicate the proportion of responses in relation to the total number of participants. This analysis was conducted to describe several key patterns in the data. First, it examined the proportion of AI tools used by student teachers in preparing lesson plans. Second, it identified the types of AI features most frequently utilized, such as generating learning objectives, developing teaching activities, selecting instructional media, preparing assessment tasks, and refining lesson plan content. Third, it described how student teachers integrated moral values, authentic materials, and technology into their AI-assisted lesson planning.

b. Thematic Qualitative Analysis:

Open-ended questionnaire responses were analyzed using thematic coding. This approach was used to identify recurring ideas, patterns, and meanings in respondents' written answers. The analysis focused on several major areas, including student teachers' strategies for adapting AI-generated content, examples of moral values integrated into lesson plans, and reasons for selecting authentic materials in AI-assisted lesson planning.

The coding process began with repeated reading of all open-ended responses to gain a comprehensive understanding of the data. During this stage, responses were reviewed carefully to identify meaningful statements related to the research focus. Initial codes were then assigned to words, phrases, or sentences that reflected important ideas. For example, responses related to revising AI-generated lesson objectives, simplifying teaching procedures, contextualizing materials, or aligning content with student needs

were coded as strategies for adapting AI-generated content. After the initial coding stage, similar codes were grouped into broader categories. For example, codes related to honesty, discipline, responsibility, respect, cooperation, and environmental awareness were grouped under the theme of moral value integration. Meanwhile, codes related to real-life relevance, student familiarity, cultural context, current issues, and classroom applicability were grouped under the theme of authentic material selection. This grouping process helped organize the data into coherent analytical patterns. Theme development was conducted iteratively. The researcher compared codes and categories several times to ensure that each theme accurately represented the respondents' experiences. Themes were refined by merging overlapping codes, separating distinct ideas, and checking whether the selected themes were supported by sufficient evidence from the responses. This process resulted in major themes that described how student teachers used, evaluated, and adapted AI outputs in preparing lesson plans.

Ethical Clearance

The study adhered to ethical research principles, including informed consent, data confidentiality, and the participants' right to withdraw. Respondent identities were anonymized in the research report, and all data were used solely for academic purposes.

RESULTS AND DISCUSSION

Results

Data from the Google Form questionnaire completed by 34 pre-service teachers reveal patterns of AI use in lesson planning across six key areas: AI tools used, AI features utilized, integration of Islamic moral values, use of AI-sourced authentic materials, adaptation strategies for AI-generated content, and the perceived role of AI in instructional decision-making. Quantitative results are presented as percentages and counts, while qualitative insights are supported by representative respondent quotes as presented in Table 1. To see the profile of closed-ended answers, Figure 1 explain the quantity of the responses.

Table 1. Summary of Questionnaire Results

Aspects	Closed-ended responses	Open-ended responses	The sample of response
Types of AI Tools Used	ChatGPT (87.5%, n=28), Gemini (43.8%, n=14), Others (15.6%, n=5)	Preference for ChatGPT due to accessibility, interface, and relevant output; Gemini reflects openness to alternatives.	"I use ChatGPT most of the time because it's easy to access, and the answers are already in good English that fits my lesson topics." (R12)
Utilization of AI Features	Selecting learning resources (90.6%, n=29), Teaching method recommendations (81.3%, n=26), Quiz/assessment creation (62.5%, n=20), Personalization (53.1%, n=17)	AI acts as both content provider and pedagogical assistant; supports design of materials for varying proficiency levels.	"AI helps me choose materials quickly. For example, I asked for texts about environmental issues at B1 level, and it gave me several suitable options." (R05)

Aspects	Closed-ended responses	Open-ended responses	The sample of response
Integration of (Islamic) Moral Values	Social responsibility (68.8%, n=22), Character education (62.5%, n=20), Spiritual reflection (56.3%, n=18), Ethical decision-making (46.9%, n=15)	Moral values embedded through prayer routines, ethical themes, and character-building content generated/adapted from AI.	"I often ask AI to give examples of reading texts that include messages about honesty or social responsibility, then I check if they match Islamic values." (R23)
Use of Authentic Materials	Conversation texts (71.9%, n=23), Simplified news articles (59.4%, n=19), Culturally relevant topics (53.1%, n=17)	Authentic materials integrated into speaking tasks, thematic exploration, and context-based assessments to increase engagement.	"When I teach speaking, I use AI to find real-life dialogues, like ordering food in a restaurant, so students feel the language is alive." (R02)
Strategies for Adapting AI Content	Simplifying language (81.3%, n=26), Adjusting cultural references (71.9%, n=23), Adding moral elements (65.6%, n=21)	AI outputs modified for linguistic simplicity, cultural fit, and moral alignment; teachers act as critical content curators.	"AI often gives examples with Western names and contexts, so I change them to Indonesian names or situations to make them relatable." (R15)
AI's Role in Instructional Decision-Making	Curriculum alignment (87.5%, n=28), Student-centered activities (81.3%, n=26), Moral value integration in tasks (71.9%, n=23)	AI assists in material selection and activity design, but final decisions remain teacher-led to ensure contextual relevance.	"Sometimes I'm unsure what activity to do for reading class, so I ask AI for ideas, then adjust them based on my students' needs." (R04)

The quantitative profile indicates that AI has become an important support system in student teachers' lesson planning. The main result shows that student teachers did not use AI merely to produce ready-made lesson content. Instead, they used it to strengthen several instructional decisions, especially in selecting learning resources, exploring teaching methods, designing student-centered activities, and aligning lesson components with the curriculum.

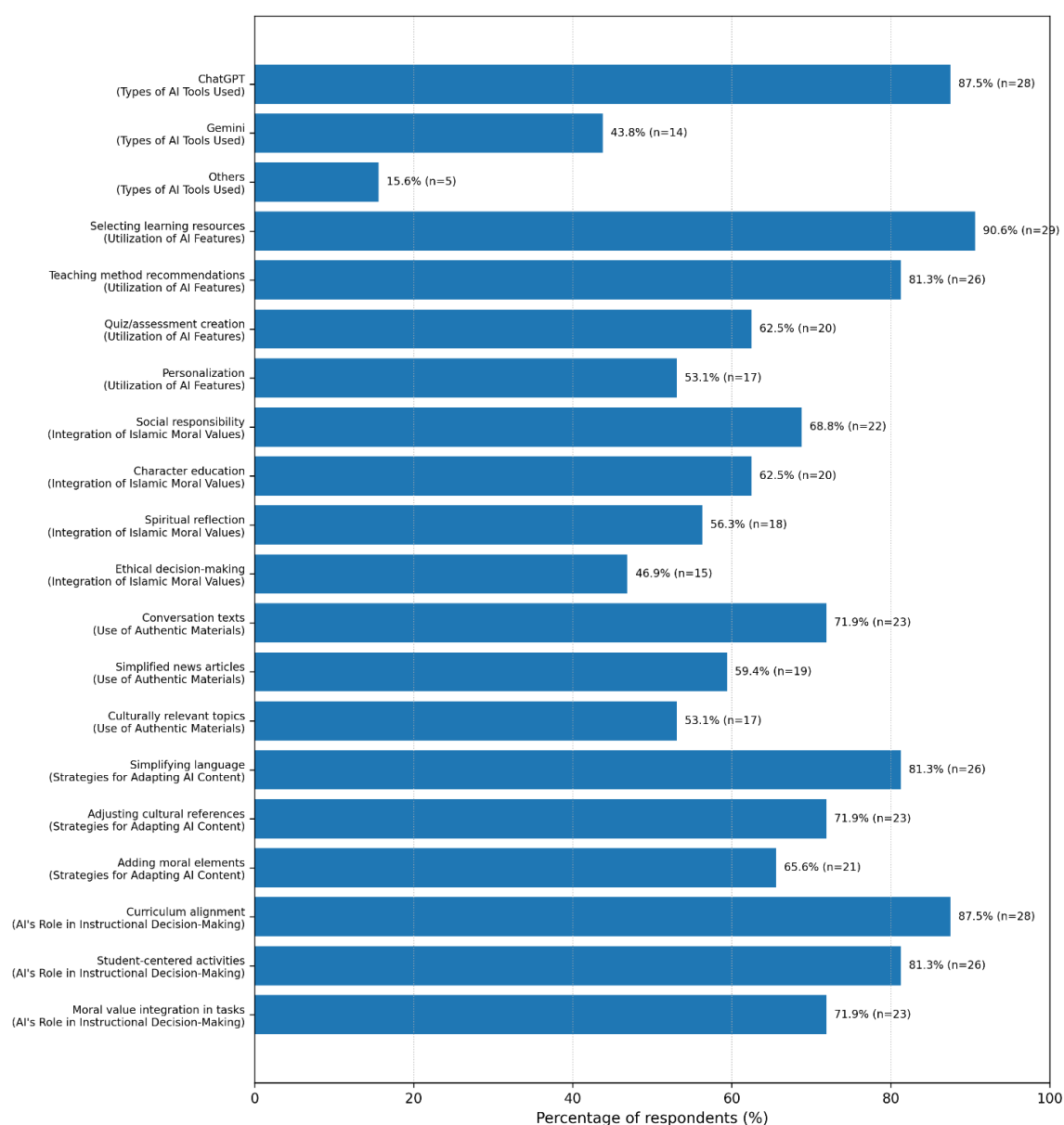


Figure 1. Quantitative profile of student teachers' AI-assisted lesson planning practices

AI Tools Used

The results indicate that ChatGPT was the primary AI tool used by student teachers in preparing lesson plans. Among 32 respondents, 28 student teachers, or 87.5%, reported using ChatGPT. This finding shows that ChatGPT served as the most familiar and preferred platform for supporting lesson planning activities. Respondents appeared to choose ChatGPT because it was easy to access, simple to use, and able to produce responses that were relevant to English lesson content. Gemini was also used by 14 respondents, representing 43.8% of the participants. Although its use was lower than ChatGPT, this result suggests that some student teachers did not depend on a single AI platform. They explored other tools to compare outputs, seek alternative ideas, or enrich their lesson planning process. This pattern reflects a growing awareness of different AI-based learning support systems.

A smaller number of respondents used other AI tools. Five respondents, or 15.6%, reported using platforms beyond ChatGPT and Gemini. This finding suggests that the use of alternative AI tools remained limited. Most student teachers tended to select tools that were already popular, easily available, and capable of generating practical lesson planning support. The qualitative data further explain this preference. One respondent noted that ChatGPT was used frequently because it was accessible and produced English responses that matched the lesson topics (R12). This statement supports the quantitative result by showing that student teachers valued AI tools not only for their availability, but also for their ability to provide usable language input and relevant teaching ideas.

AI Features Utilized

The findings show that student teachers used AI features for several lesson planning purposes. The most frequently used feature was selecting learning resources, reported by 29 respondents, or 90.6%. This result indicates that AI was mainly used to help student teachers find suitable instructional materials based on lesson topics, student proficiency levels, and classroom needs. In addition, 26 respondents, or 81.3%, used AI to obtain teaching method recommendations. This suggests that AI supported not only content preparation but also pedagogical decision-making. AI also assisted respondents in creating quizzes and assessment tasks, as reported by 20 respondents, or 62.5%. Meanwhile, 17 respondents, or 53.1%, used AI for personalization, particularly to adjust materials, activities, or tasks according to students' learning levels. Overall, these results suggest that AI functioned as both a content provider and a pedagogical assistant in lesson planning. The qualitative response from R05 supports this finding, stating that AI helped in selecting materials quickly, such as when the respondent requested texts about environmental issues at the B1 level and received several suitable options.

Integration of Islamic Moral Values

The findings indicate that a significant proportion of respondents incorporated moral values into their AI-assisted lesson designs. Twenty-five respondents, or 78.1%, reported integrating Islamic moral values into their lesson plans. Social responsibility was the most frequently emphasized value, reported by 22 respondents, or 68.8%, followed by character education, reported by 20 respondents, or 62.5%. Other values included spiritual reflection and ethical decision-making. These moral values were commonly embedded through classroom routines and learning activities, such as opening and closing prayers in English, reading texts with ethical messages, and discussion tasks that encouraged students to reflect on appropriate behavior. This practice shows that student teachers attempted to connect language learning with moral and spiritual development. The qualitative response from R23 supports this finding: "I often ask AI to give examples of reading texts that include messages about honesty or social responsibility, then I check if they match Islamic values." This statement indicates that AI was not used passively. Instead, student teachers reviewed and adjusted AI-generated content to ensure that it aligned with Islamic values and the intended character-building goals of the lesson.

Use of AI-Sourced Authentic Materials

Authentic materials played an important role in the student teachers' AI-assisted lesson planning. The data show that respondents did not use AI only to generate general lesson content, but also to locate and adapt materials that reflected real-life communication. Conversation texts were the most frequently selected type of authentic material, reported by 23 respondents, or 71.9%. This finding suggests that student teachers considered dialogue-based materials useful for developing students' communicative competence, especially in speaking activities.

Conversation texts allowed student teachers to design lessons around practical language use, such as asking for directions, ordering food, making invitations, giving opinions, or participating in daily social interactions. Simplified news articles were used by 19 respondents, or 59.4%. This result indicates that student teachers also used AI to adapt current or real-world issues into classroom materials that matched students' language proficiency. These materials supported reading comprehension, vocabulary development, thematic discussion, and critical thinking activities. In addition, 17 respondents, or 53.1%, reported using culturally relevant topics. This finding shows that student teachers attempted to connect English learning with students' social, cultural, and local contexts.

The integration of authentic materials was reflected in speaking tasks, thematic exploration, and context-based assessments. For speaking tasks, authentic materials helped create meaningful communication scenarios that resembled real-life situations. For thematic exploration, they enabled students to discuss familiar and relevant issues, such as food, environment, school life, local culture, social media, and public behavior. For assessment, authentic materials supported the development of tasks that measured students' ability to use English in practical contexts.

Overall, these findings indicate that AI helped student teachers access, adapt, and contextualize authentic materials more efficiently. The qualitative response from R02 supports this interpretation: "When I teach speaking, I use AI to find real-life dialogues, like ordering food in a restaurant, so students feel the language is alive." This statement shows that student teachers viewed authentic materials as a way to make English lessons more meaningful, engaging, and connected to students' everyday communication needs.

Adaptation Strategies for AI Content

The data suggest that student teachers approached AI-generated content as editable teaching material rather than final classroom-ready output. The most common adaptation strategy was simplifying language, reported by 26 respondents, or 81.3%. This result indicates that student teachers often revised AI-generated texts, instructions, questions, and learning activities to match students' English proficiency levels. They adjusted sentence structures, replaced difficult vocabulary, shortened lengthy explanations, and clarified task instructions to make the materials more understandable for learners.

Cultural adjustment was also a major strategy, reported by 23 respondents, or 71.9%. This finding shows that student teachers were aware that AI-generated materials

sometimes contained unfamiliar names, examples, settings, or social practices. To address this issue, they modified the content by replacing foreign contexts with Indonesian names, local places, familiar situations, and culturally relevant examples. This adaptation helped make the materials more relatable to students' everyday experiences.

In addition, 21 respondents, or 65.6%, reported adding moral elements to AI-generated content. This finding indicates that student teachers used AI outputs as initial drafts, but still inserted values that aligned with the character-building goals of the lesson. These values included honesty, responsibility, respect, cooperation, discipline, and social care. The response from R15 illustrates this process: "AI often gives examples with Western names and contexts, so I change them to Indonesian names or situations to make them relatable." Thus, AI served as a supportive tool, while student teachers maintained control over the pedagogical, cultural, and ethical quality of the lesson content.

Perceived Role of AI in Lesson Planning

AI appeared to support several stages of instructional decision-making in student teachers' lesson planning. Most respondents used AI to align their lesson content with the curriculum, as shown by 28 respondents, or 87.5%. In this process, AI helped them generate ideas for learning objectives, instructional materials, classroom activities, and assessment tasks that corresponded with the expected learning outcomes. However, the respondents did not treat AI suggestions as final decisions. They reviewed and adjusted the outputs to ensure that the lesson content remained relevant to the curriculum and appropriate for the classroom context.

The use of AI was also evident in the development of student-centered activities. A total of 26 respondents, or 81.3%, reported using AI to obtain ideas for activities that encouraged active student participation. These activities included group discussions, role plays, problem-solving tasks, reading-based discussions, vocabulary exercises, and collaborative learning projects. This finding suggests that AI helped student teachers broaden their instructional options and design learning experiences that were more interactive and learner-oriented.

Moral value integration was another important area of AI-supported decision-making. Twenty-three respondents, or 71.9%, used AI to design learning tasks that included moral or character-related values. These values included honesty, responsibility, cooperation, respect, discipline, and social awareness. Student teachers embedded these values in reading texts, discussion prompts, reflective questions, and situational learning tasks. Thus, AI contributed not only to the technical aspects of lesson planning, but also to the development of value-based learning activities.

The qualitative response from R04 strengthens this interpretation: "Sometimes I'm unsure what activity to do for reading class, so I ask AI for ideas, then adjust them based on my students' needs." This statement shows that AI served as a source of instructional support, especially when student teachers needed ideas for classroom activities. At the same time, the final decisions remained under the control of the student teachers, who

adapted the AI-generated suggestions according to students' needs, curriculum demands, and classroom realities.

Discussion

This study examined how pre-service teachers employed AI in lesson planning that integrates Islamic moral values, authentic materials, and technology. The findings reaffirm the growing role of AI as both a content generator and a pedagogical assistant, while highlighting the indispensable role of teacher agency in moral and cultural adaptation [12].

The predominance of ChatGPT (87.5%) as the primary AI tool aligns with the Technological Knowledge (TK) domain of the TPACK framework, indicating that accessibility, ease of use, and versatility are key adoption drivers [8]. The frequent use of AI for selecting resources and recommending teaching methods reflects the Technological Pedagogical Knowledge (TPK) domain, where AI directly supports instructional decision-making in language teaching. Furthermore, adaptation of AI outputs into English lesson content demonstrates Technological Content Knowledge (TCK), ensuring alignment with linguistic objectives.

In the context of this study, the integration of values is focused on Islamic moral values by 78.1% of respondents that supports extending TPACK into Technological Pedagogical Moral Knowledge (TPMK). This extension reflects the teacher's role in ensuring that AI use is value-aligned, consistent with [13] assertion that moral education in Islamic contexts is inseparable from academic instruction. Respondents' review and modification of AI-generated moral examples illustrate moral literacy in AI adoption, aligning with recent calls for ethical AI integration in teacher education [14].

The high prevalence of AI-sourced authentic materials (84.4%) supports research linking authentic input with increased learner engagement and communicative competence. In terms of the SAMR model, most uses fell into the Augmentation level, where AI enhances material quality. When respondents modified materials for cultural and moral relevance, the process advanced to Modification, representing technology's transformative potential in language pedagogy [15]. Next, the overwhelming majority (93.8%) who adapted AI-generated content before classroom use reinforces the view that teacher autonomy is critical in AI-assisted teaching [16]. This reflects the principles of critical digital pedagogy, where technology is positioned as a tool to be mediated rather than a determinant of pedagogy. Respondents' strategies—simplifying language, adjusting cultural references, and embedding moral values—are acts of pedagogical mediation that preserve contextual appropriateness and ethical integrity [17].

Findings suggest that AI literacy in teacher education should encompass technical proficiency, pedagogical application, and moral-cultural competence. Embedding AI training within the TPACK framework, while using the SAMR model to scaffold levels of integration, could support the move from basic substitution toward redefinition, where AI enables novel, value-rich, and authentic learning experiences. While prior studies have largely emphasized AI's efficiency and personalization capabilities, the

present study extends the conversation by foregrounding the integration of moral and cultural dimensions in an Islamic higher education context [18]. This complements recent scholarship advocating for culturally responsive AI use in ELT.

CONCLUSION

Fundamental Finding : This study highlights the growing role of Artificial Intelligence (AI) in English Language Teacher Education, particularly in enhancing lesson planning through the integration of technology, moral values, and authentic materials. Findings from 32 pre-service teachers reveal that AI – especially tools such as ChatGPT and Gemini – has become an essential resource for selecting learning materials, recommending teaching methods, creating assessments, and personalizing instruction. Importantly, participants demonstrated a critical awareness in adapting AI-generated content to align with Islamic moral values and cultural relevance, ensuring that technological support does not overshadow pedagogical integrity. The study also underscores that while AI can serve as both a content provider and a pedagogical assistant, the teacher's role remains irreplaceable in filtering, contextualizing, and adapting materials to meet learners' needs. The integration of authentic materials through AI was found to increase engagement and contextual learning opportunities, but it required careful cultural and linguistic adjustments. Ultimately, AI's contribution to lesson planning in teacher education lies in its capacity to facilitate creativity, efficiency, and innovation, provided it is used alongside strong moral and cultural literacy.

Implication : These findings suggest that English Language Teacher Education programs should embed AI literacy, moral reasoning, and cultural adaptation skills into their curricula to prepare future teachers for an AI-augmented educational landscape.

Limitation : This study is limited by its relatively small sample size, drawn from a single study program, which constrains the generalizability of the findings. Furthermore, the use of self-reported data may introduce subjective bias. Nonetheless, the mixed-methods approach is expected to provide a comprehensive understanding of the phenomenon under investigation.

Future Research : Future research should expand to larger, more diverse populations and explore longitudinal impacts of AI use in teacher preparation.

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