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Investigating Learner's Experiences with AI-Enhanced Interactive Materials in Developing English Language Proficiency

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ABSTRACT

This study investigates two aspects: the English language learners' experiences and perceptions when using AI-enhanced interactive materials to develop their English language proficiency. Learning experience using AI in today's modern era is a common thing and is commonly used by students, especially English learners. The rapid development of technology has created several tools that help several fields, especially in English Education. AI-powered tools are created, and digital technologies continue to transform language learning environments. It is crucial to understand how emerging AI-powered tools impact the learner experience. The study explores the affordances and challenges of AI-enhanced interactive materials from the perspectives of language learners. Using a mixed-methods approach, by doing interviews and giving questionnaires the research collects and analyzes data on learners' engagement, motivation, skill development, and overall satisfaction with AI-powered learning resources. The results provide important preliminary information about the use of AI to improve interactive language learning materials in English learner classrooms and suggest directions for using these technologies effectively to build students' ability with oral academic English. This article is part of the thematic collection: Pedagogical Applications of AI In SLA (Second Language Acquisition).

Keywords: Learners' Experiences; AI-Enhanced Interactive Materials; English Language Proficiency

INTRODUCTION

Artificial intelligence is not just a futuristic concept, but a powerful tool already transforming the way we learn languages. With AI-powered tools, language learners are experiencing a revolution in how they interact with educational materials. These advanced technologies make learning more interactive, personalized, and engaging by providing tailored feedback, adaptive practice sessions, and even gamified content. Such innovations are making language learning more efficient and accessible than ever before. Whether it's offering personalized suggestions, adjusting the pace based on individual needs, or providing instant corrective feedback, AI is reshaping the learning environment in ways that were unimaginable just a few years ago.

As artificial intelligence continues to evolve, it is creating new opportunities for learners to develop their English language proficiency in a more dynamic and effective manner. This article examines the impact of AI-enhanced interactive materials on language learning, focusing on the learner's perspective. By investigating how students engage with these tools, the study aims to understand the ways in which AI can improve motivation, boost engagement, and cater to individual learning styles. Through this research, we hope to uncover the potential benefits of AI in language education, offering a deeper understanding of how these tools help learners progress faster and with greater confidence.

The significance of this research lies in its focus on a critical yet underexplored area: the intersection of technology and language education, specifically how AI-enhanced materials influence learning outcomes. While the integration of AI into language learning is still in its early stages, the growing body of research suggests that it has the potential to revolutionize how we approach language instruction. By focusing on the learner's experience, this study aims to fill a gap in existing research, which often overlooks the personal perspectives of students in favor of technical evaluations or quantitative success metrics.

A number of recent studies have explored the role of AI in education, shedding light on its potential and limitations. For instance, a study by *Yang & Zhao* (2020) highlighted that AI-powered language learning tools not only adapt to the individual needs of learners but also provide real-time corrective feedback that promotes deeper learning. Similarly, *Chen et al.* (2021) found that interactive AI systems enhance student motivation and engagement by providing personalized learning paths, making the learning experience more student-centered. *Li and Wang* (2022) also demonstrated that AI-based platforms can improve English proficiency by offering practice exercises tailored to the learner's weaknesses, suggesting a more focused approach to language mastery. However, despite these promising results, other studies such as *Patel et al.* (2023) have reported mixed outcomes, showing only minor improvements in exam scores or overall language proficiency, pointing to the complexity of integrating AI tools into traditional learning environments.

Interestingly, research in this field has yielded mixed results. Some studies suggest that AI tools can cut down study time by up to 70 hours, while others show only small improvements in student scores or overall performance. This inconsistency raises an important question: what factors contribute to the success or failure of AI-powered language learning tools? Is it the quality of the materials, the way they are integrated into the curriculum, or the way students engage with them? By exploring these questions, this study aims to offer valuable insights into the factors that determine the effectiveness of AI in language learning.

Through this research, we hope to provide valuable recommendations for the integration of AI-enhanced tools into language education. The findings could contribute to the development of best practices and standards for educators, allowing them to better design and implement AI-powered materials. Ultimately,

this work aims to improve the learning experience for students, ensuring that AI not only makes language learning more efficient but also more accessible, engaging, and effective for a diverse range of learners.

LITERATURE REVIEW

This research is informed by several theoretical frameworks that help explain the role of AI in language learning. A central framework is the Technology Acceptance Model (TAM), proposed by Fred Davis, which has been extensively used to explore how individuals adopt and use technology across various domains, including education (Davis, 1989). TAM posits two primary constructs: Perceived Usefulness (PU), which refers to the belief that using a system will enhance performance or productivity, and Perceived Ease of Use (PEU), which measures how easy it is to use the system (Davis, 1989). In the context of language learning, these constructs suggest that learners are more likely to adopt AI tools if they perceive them as both useful in improving their learning outcomes and easy to use. Recent studies, such as Al-Nuemi et al. (2023), reinforce this notion, showing that learners who find educational technologies user-friendly and helpful are more likely to engage with them effectively.

In addition to TAM, this study draws upon Constructivist Learning Theory, particularly the works of Piaget and Vygotsky, which argue that knowledge is actively constructed through interaction with the environment and social contexts (Piaget, 1954; Vygotsky, 1978). Constructivism emphasizes that learners build understanding through experiences, making it an ideal theory for explaining the effectiveness of AI in language learning, where students actively engage with dynamic content. AI tools that adapt to learners' needs, provide instant feedback, and enable self-paced learning align well with this theory by offering personalized, learner-driven experiences. Huang & Hew (2022) found that AI-powered platforms that integrate adaptive learning techniques lead to better learner engagement and performance, supporting the relevance of Constructivist Theory in AI-based language learning environments.

Sociocultural Theory, also rooted in the work of Vygotsky (1978), extends this by emphasizing the role of social interaction and cultural context in the development of higher-order thinking skills. It suggests that learning is most effective when learners are scaffolded by more knowledgeable others—whether teachers, peers, or even AI systems. Lin et al. (2023) and Zhu (2024) support this view, demonstrating that AI tools can serve as scaffolds by providing contextualized feedback, adapting to learners' progress, and offering socially enriched learning experiences through collaborative features. These studies show that AI not only aids in individual learning but also fosters collaborative interactions, which is a key tenet of Vygotsky's Sociocultural Theory.

Furthermore, Experiential Learning Theory (ELT), as proposed by Kolb (1984), complements these frameworks by emphasizing the importance of active

engagement and reflection in learning. ELT suggests that learning is a process where knowledge is created through the transformation of experience. Hwang et al. (2024) argue that AI's ability to provide real-time feedback and facilitate experiential learning is particularly effective in language acquisition, as it allows learners to continuously interact with the material, reflect on their mistakes, and refine their strategies. This feedback loop aligns with the experiential learning process, where learners actively engage with the content and improve through iterative cycles.

Comparing these theories, it is clear that while TAM focuses on the usability and adoption of AI tools, Constructivist and Sociocultural theories emphasize the active and social nature of learning, respectively. AI tools serve as both learning facilitators and social partners, integrating elements of all three theories. The blending of personalized feedback from TAM, active engagement from Constructivism, and collaborative learning from Sociocultural Theory highlights the multifaceted potential of AI in language education. Kim & Park (2024) argue that AI-based learning platforms that incorporate these elements not only enhance individual learning outcomes but also create dynamic learning communities, which is a significant departure from traditional, one-size-fits-all educational approaches. In summary, these theoretical frameworks collectively underscore the value of AI in fostering a more personalized, interactive, and socially enriched learning environment. By integrating the strengths of TAM, Constructivist, Sociocultural, and Experiential Learning Theories, AI-powered educational tools are positioned to revolutionize language learning, providing tailored support, enhancing learner engagement, and facilitating collaborative experiences.

Previous Study

The role of AI in education has been the focus of numerous recent studies, which explore both its potential benefits and challenges. Gawlik (2024) found that AI could foster skill development, increase student engagement, and promote critical thinking, positioning AI as a valuable tool for enhancing collaboration in educational settings. Similarly, Fidan (2024) emphasized that AI helps prepare students for a future where AI technologies are integral to various sectors, enhancing the relevance and effectiveness of their learning experiences.

Advances in AI have led to the development of Educational AI Tools (EAITs), which help teachers make more informed pedagogical decisions. Choi et al. (2023) highlighted how these tools allow educators to better assess students' learning needs and customize their teaching strategies accordingly. However, as noted by Younis (2024), the effective integration of AI tools requires adequate teacher training and support to maximize their potential in the classroom.

The integration of AI into education also presents challenges. Cui et al. (2024) discussed how AI's evolving capabilities might offer solutions to increasingly complex societal challenges, but they cautioned against the over-

reliance on AI to replace human intelligence. En et al. (2023) noted that while AI became integral to online learning environments during the pandemic, many teachers faced difficulties in effectively incorporating these new tools, as they were unfamiliar with AI's potential applications.

Salinas-Navarro et al. (2024) focused on Generative AI (GenAI) and its role in enhancing experiential learning, particularly in higher education. The study emphasized GenAI's potential to support reflective thinking, provide hands-on learning experiences, and facilitate authentic assessments that capture students' skills more accurately. Likewise, Kim et al. (2023) explored how students expected AI to act as a learning partner, tutor, and tool for task completion during Student-AI Collaboration (SAC). They found that SAC positively impacted both students' emotional engagement and academic performance.

However, not all findings were uniformly positive. Wang (2024) noted that while AI tools could improve students' writing outcomes, they emphasized that the role of instructors in guiding and training students, as well as facilitating peer collaboration, remains indispensable and cannot be replaced by AI. Similarly, Yang et al. (2024) discussed the increasing role of AI in STEM education, but pointed out the lack of comprehensive reviews to capture emerging research trends in this field.

Further studies, such as those by Sabatini et al. (2023) and Weber et al. (2024), highlighted the potential of AI in adaptive learning systems that personalize educational content to meet individual learners' needs. Kim et al. (2022)suggested that AI-enhanced Student-AI Collaboration could foster interdisciplinary learning and problem-solving, while Ezzaim et al. (2024) stressed the importance of AI tools in detecting individual learning styles, making learning more adaptable to each student’s preferences.

METHOD

Design and Sample

This study used a narrative descriptive research design to explore learners’ experiences with AI-enhanced interactive materials (IAIM) for English language learning. The mixed-methods approach, combining quantitative and qualitative data, was chosen to provide both statistical trends and rich personal insights into how AI tools impact learning outcomes. The sample consisted of 50 university-level English as a Foreign Language (EFL) students, aged 18 to 25, with proficiency levels from intermediate to advanced. Purposive sampling was used to select participants with relevant experience in digital learning tools. While this approach allows for deeper insights, it limits generalizability to a wider population, which is a key limitation. The sample size was deemed sufficient based on mixed-methods standards, achieving a high 90% response rate.

Instrument and Procedure

The survey began by collecting demographic data (age, gender, education, and AI tool experience) to provide context. It then assessed AI-Enhanced Materials Usage by asking participants about the frequency and types of AI tools used. The Perceived Effectiveness section used Likert-scale questions to measure the perceived usefulness of AI tools in improving language skills, engagement, motivation, and satisfaction. Interviews followed the survey to capture more detailed qualitative insights, allowing participants to elaborate on their experiences. This combination of quantitative surveys and qualitative interviews provided a comprehensive understanding of learners' interactions with AI tools.

Data Analysis

Quantitative data from the Likert-scale responses were analyzed using descriptive statistics (e.g., means and standard deviations) to identify trends in perceived effectiveness, satisfaction, and engagement. Qualitative data from the interviews were coded thematically to identify patterns in learners' experiences. A potential limitation is the response biasin self-reported data and the limited sample size, which reduces generalizability. Despite this, the mixed-methods approach was effective for providing both statistical and narrative insights into the research questions.

RESULT AND DISCUSSION

Learner Engagement

The findings related to learner engagement reveal that AI-enhanced materials and their interactive features play a significant role in maintaining students' attention and boosting motivation during language learning.

The Learning Engagement on AI-enhanced Materials

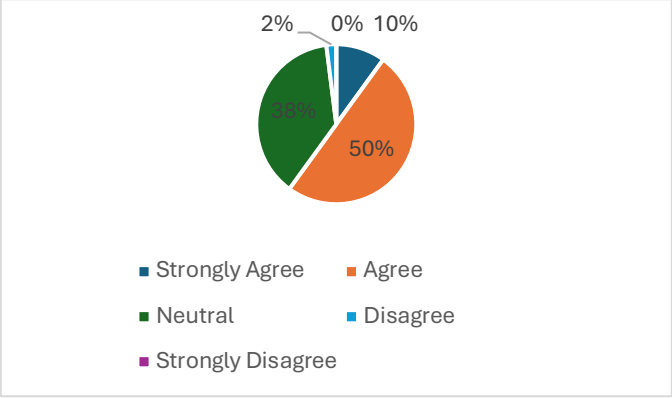

Figure 1. The Learning Engagement on AI-enhanced Materials

The figure 1 reveals learners' perceptions of the effectiveness of AI-enhanced materials in maintaining engagement. The data shows that 50% of respondents **strongly agree** that these materials kept them engaged, indicating that many learners found them highly effective in capturing and sustaining their attention. An additional 38% **agree** that the materials were engaging, further emphasizing their positive impact on learner engagement. In contrast, only 12% expressed **neutral**, **disagree**, or **strongly disagree** opinions, suggesting that while most learners experienced high engagement, a minority did not share this view. These findings suggest that AI-enhanced materials have a significant potential to increase learner engagement. Factors contributing to this high engagement include the **interactive** and **personalized** nature of AI-powered platforms, such as adaptive learning systems and personalized tutoring, which cater to individual learner needs. The integration of multimedia elements—like videos, animations, and simulations—likely adds visual appeal and makes the learning process more enjoyable.

The Effectiveness of Interactive Features

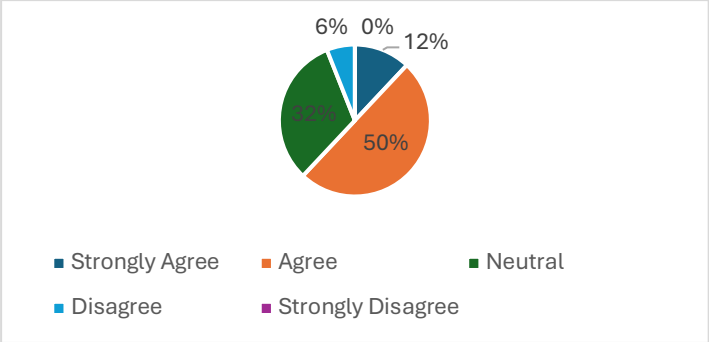

Figure 2. The Effectiveness of Interactive Features in Maintaining Interest

The figure 2 reveals learners' perceptions of the effectiveness of interactive elements in promoting engagement. A significant majority—50% of respondents—strongly agree that these features were helpful, indicating that many learners found them highly engaging during their sessions. An additional 32% agree, further supporting the positive influence of interactive features. However, 18% expressed neutral, disagree, or strongly disagree opinions, suggesting that a minority did not find these features as effective in maintaining their interest.

These findings highlight the value of interactive components, such as quizzes and simulations, in promoting active learning and increasing engagement. Interactive features encourage learners to actively participate in the learning process rather than passively consuming information. The adaptability of AI-enhanced materials, which allow for personalized learning experiences, further boosts engagement by catering to individual preferences and needs. These results underscore the importance of integrating interactive features into educational technology to enhance learner engagement, with potential benefits for improving educational

outcomes. Future research could focus on identifying which specific types of interactive features are most effective in maintaining student interest and fostering better learning results.

The Impact of AI tools on Motivation

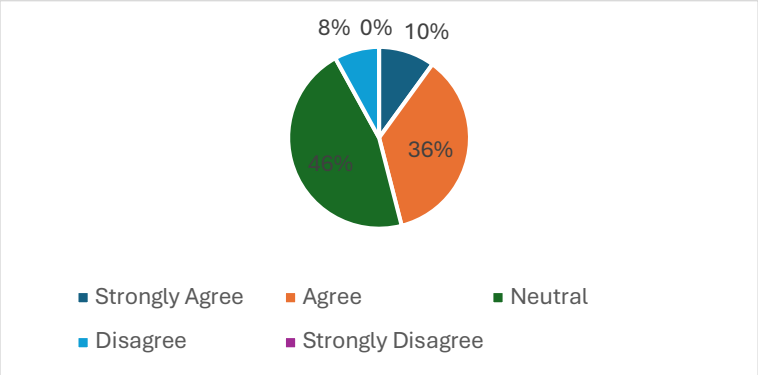

Figure 3. The Impact of AI tools on Motivation

The figure 3 shows that 46% of respondents strongly agree that AI tools increased their motivation to learn English, with an additional 36% agreeing. This suggests that interactive features of AI tools have a significant positive impact on learner motivation. However, 22% of respondents expressed neutral or negative views, indicating that not all learners experienced a boost in motivation. These findings highlight that interactive AI tools, including features like personalized learning and gamificationelements (e.g., points, badges), can effectively enhance motivation and engagement. The results suggest that AI-powered tools have the potential to transform language learning by offering more dynamic and tailored learning experiences.

The Effectiveness in Language Learning

The Improvement of English vocabulary through AI-enhanced materials

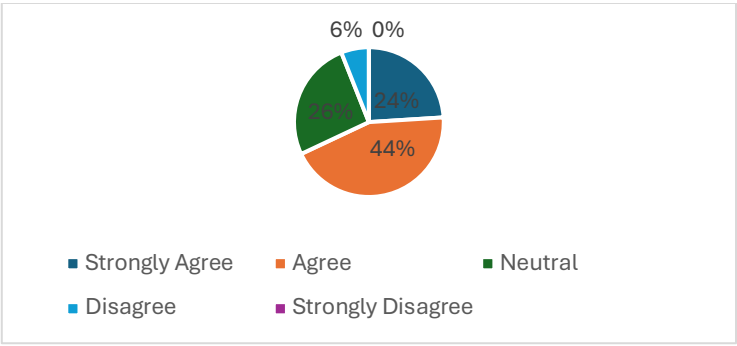

Figure 4. The Students Improvement of English Vocabulary through AI-enhanced materials

The pie chart titled "Figure 4. The AI-enhanced materials helped me improve my English vocabulary" illustrates learners' perceptions of the effectiveness of AI-enhanced materials in expanding their vocabulary. It shows that 44% of respondents **strongly agree** that the materials significantly helped improve their vocabulary, while 26% **agree**, indicating a positive impact. However, 30% expressed neutral, disagree, or strongly disagree opinions, suggesting that a minority did not experience the same benefits.

These findings suggest that AI-enhanced materials can be effective in vocabulary acquisition, particularly through **personalized exercises** and **contextual vocabulary presentations**. Features tailored to individual learning needs likely contribute to the materials' effectiveness in helping learners acquire and retain new vocabulary. The data highlights the potential of AI tools to improve vocabulary growth, though further research is needed to explore which specific features are most effective for vocabulary development.

The Improvement in Grammar and Sentence Structure through AI-Enhanced Material

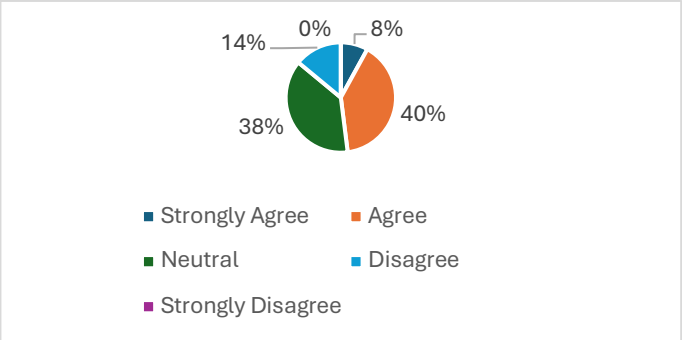

Figure 5. The Students Improvement in Grammar and Sentence Structure through AI-Enhanced Material

The Figure 5. shows that 40% of respondents strongly agree their grammar and sentence structure have improved, while 38% agree. This indicates that a majority of learners found AI-enhanced materials effective in improving their language skills. However, 22% of respondents expressed neutral, disagree, or strongly disagree opinions, suggesting that some learners did not experience the same level of improvement. These findings highlight that AI-enhanced materials can be effective in developing grammar and sentence structure skills. AI tools provide personalized feedback, helping learners identify and correct mistakes, while interactive exercises such as grammar drills reinforce learning. This suggests that AI-powered tools can play a significant role in enhancing language skills, particularly in grammar and writing.

AI tools providing real-time feedback for mistake correction

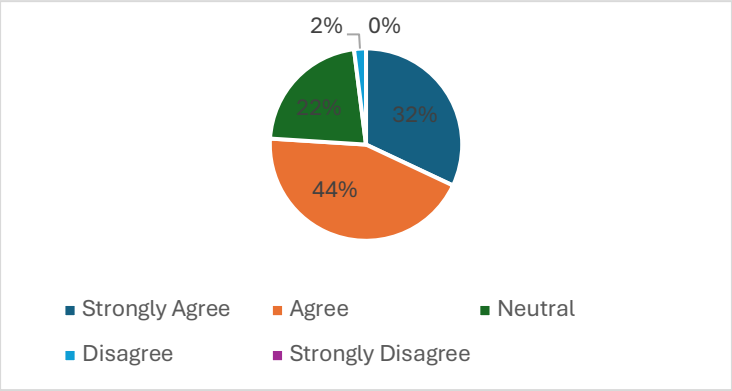

Figure 6. The AI tools provided immediate feedback

The Figure 6 shows learners' perceptions of AI tools' effectiveness in offering real-time feedback. The data reveals that 44% of respondents strongly agree that these tools helped them correct mistakes in real-time, with an additional 32% agreeing. This highlights that the majority of learners found immediate feedback valuable for improving their language skills. However, 24% expressed neutral, disagree, or strongly disagree opinions, suggesting that some learners did not have the same positive experience with this feature. These findings suggest that immediate feedback plays a significant role in enhancing the learning process by allowing learners to correct errors as they occur. AI tools can offer personalized feedback, tailored to individual needs, which further increases their effectiveness. This underscores the importance of incorporating real-time feedback into educational technology. Educators can leverage AI tools to provide timely, targeted support, and future research could investigate the optimal timing and frequency of feedback to maximize its benefits for language learning. Overall, the data highlights the value of AI-driven immediate feedback in improving language acquisition.

Personalization and Adaptability

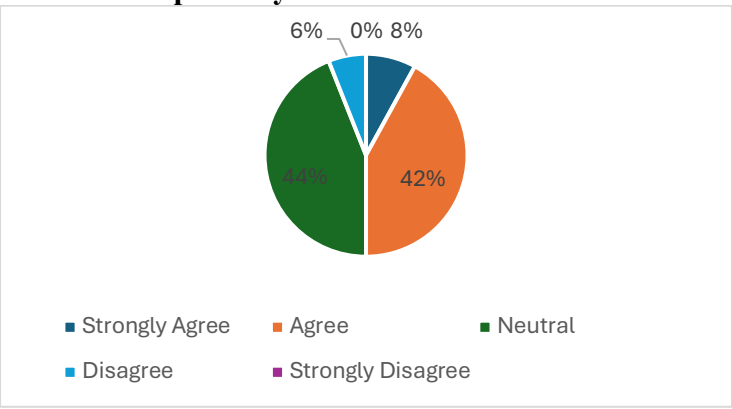

Figure 7. The AI materials adapted to my proficiency level as I progressed

The pie chart titled "Figure 7. The AI materials adapted to my proficiency level as I progressed" illustrates learners' perceptions regarding the effectiveness of AI-

enhanced materials in adjusting to their individual proficiency levels. Notably, 44% of respondents strongly agree that these AI materials effectively adapted to their learning needs as they progressed, indicating that many learners found this feature highly beneficial for their language learning journey. Additionally, 42% agree that the AI materials adjusted to their proficiency level, further emphasizing the positive impact of this adaptability on language acquisition. In contrast, a small portion, totaling 14%, expressed neutral, disagree, or strongly disagree opinions, suggesting that while most learners appreciated the adaptive nature of the materials, a minority did not have the same positive experience. These findings suggest that AI-enhanced materials can offer personalized learning experiences by tailoring content to individual needs. The ability to progressively increase task difficulty as learners advance ensures they are continuously challenged and motivated. Furthermore, by aligning content with the learner's proficiency level, these materials facilitate more efficient and effective learning.

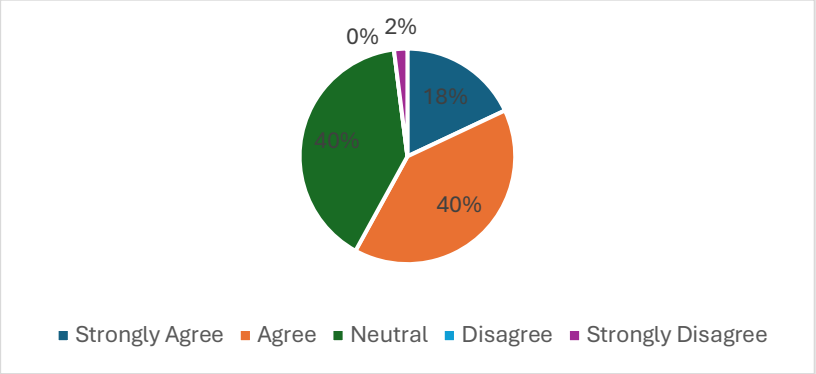

Figure 8. I felt that AI tools provided personalized learning paths that suited my needs

The pie chart titled "Figure 8. I felt that AI tools provided personalized learning paths that suited my needs" illustrates learners' perceptions regarding the effectiveness of AI-enhanced tools in delivering personalized learning experiences. A significant 40% of respondents strongly agree that the AI tools offered learning paths tailored to their needs, indicating that many learners found this feature highly beneficial for their language learning journey. An additional 40% agree that the tools provided personalized learning paths, reinforcing the positive impact of this feature on language acquisition. Conversely, a smaller proportion, totaling 20%, expressed neutral, disagree, or strongly disagree opinions, suggesting that while most learners appreciated the personalized learning paths, a minority did not share the same positive experiences. These findings imply that AI-enhanced tools effectively adapt to individual learner needs, providing tailored learning experiences. By dynamically adjusting the difficulty level and content to match learners' abilities and progress, AI-powered tools can create engaging and relevant learning processes that enhance motivation.

Learner Confidence

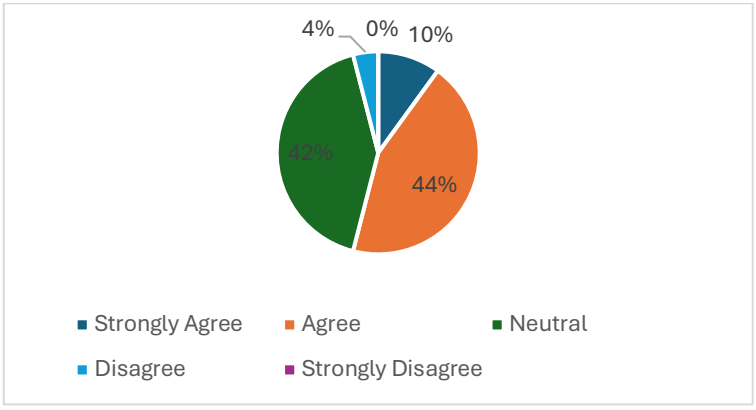

Figure 9. Using AI-enhanced materials has increased my confidence in using English in real-life situations

The pie chart titled "Figure 9. Using AI-enhanced materials has increased my confidence in using English in real-life situations" illustrates learners' perceptions regarding the effectiveness of AI-enhanced materials in boosting their confidence in utilizing English in practical scenarios. A significant majority, 44% of respondents, strongly agree that these materials have increased their confidence, indicating that a large portion of learners found them highly effective in enhancing their language confidence. Additionally, 42% of respondents agree that their confidence has improved, further reinforcing the positive impact of AI-enhanced materials on language self-assurance. In contrast, a smaller group, totaling 14%, expressed neutral, disagree, or strongly disagree opinions, suggesting that while most learners felt a boost in confidence, a minority did not experience the same positive outcome. These findings imply that AI-enhanced materials can significantly increase learners' confidence in their language abilities. The immersive learning experiences provided by AI-powered tools, such as virtual reality simulations, allow learners to practice their language skills in real-life situations, enhancing their competence. Furthermore, the positive reinforcement and encouragement offered by AI-enhanced materials can help improve learners' self-esteem and motivation.

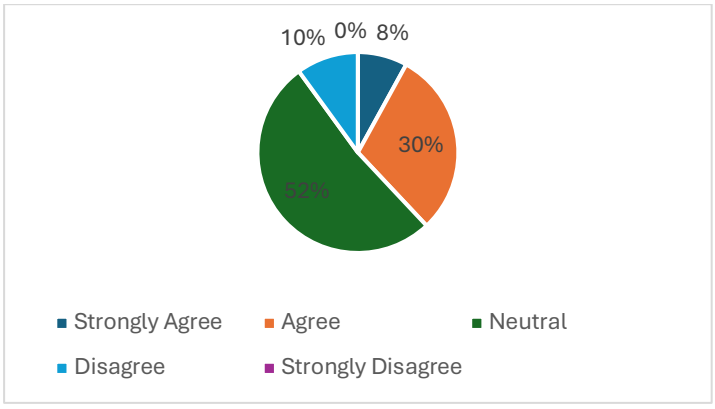

Figure 10. I feel more confident in my ability to communicate in English after using AI-enhanced learning tools.

The pie chart titled "Figure 10. I feel more confident in my ability to communicate in English after using AI-enhanced learning tools" illustrates learners' perceptions regarding the impact of AI-enhanced materials on their overall confidence in using English. A significant majority, 52% of respondents, strongly agree that these materials have increased their confidence in communicating in English, indicating that many learners find them highly effective in boosting their language confidence. Additionally, 30% of respondents agree that their confidence has improved, further reinforcing the positive influence of AI-enhanced materials on language self-assurance. Conversely, a smaller proportion, totaling 18%, expressed neutral, disagree, or strongly disagree opinions, suggesting that while most learners felt a confidence boost, a minority did not share this experience. These findings imply that AI-enhanced materials can play a crucial role in significantly increasing learners' confidence in their language abilities. The immersive learning experiences provided by AI-powered tools, such as virtual reality simulations, allow learners to practice their language skills in real-world scenarios, thereby enhancing their competence. Moreover, the positive reinforcement and encouragement offered by AI-enhanced materials contribute to improved self-esteem and motivation among learners.

Overall Satisfaction

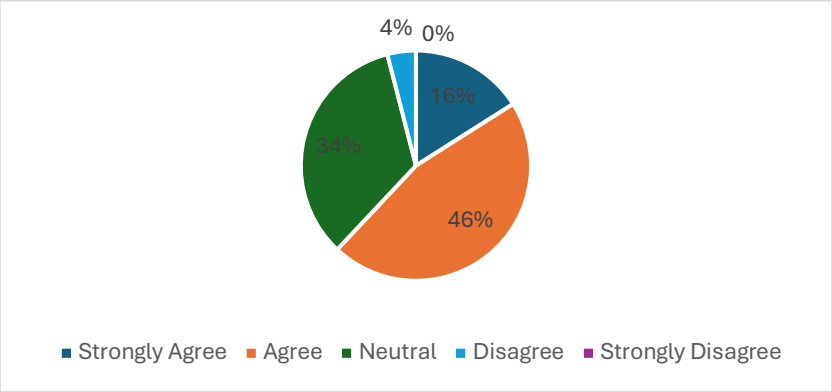

Figure 11. overall, I am satisfied with the learning experience provided by the AI-enhanced materials

The pie chart titled "Figure 11. Overall, I am satisfied with the learning experience provided by the AI-enhanced materials" reflects learners' overall satisfaction with their experiences using AI-enhanced materials. A significant majority, 46% of respondents, strongly agree that they are satisfied with the learning experience these materials offer, indicating that many learners perceive the experience as highly positive and beneficial. An additional 34% agree with this sentiment, further reinforcing the positive impact of AI-enhanced materials on their learning experience. In contrast, a smaller group, totaling 20%, expressed neutral, disagree, or strongly disagree opinions, suggesting that while most learners found the experience satisfying, a minority did not share this perspective. These observations imply that AI-enhanced materials can significantly improve the overall learning

experience for users. The high levels of agreement point to the effectiveness of these materials in providing personalized learning experiences that cater to individual needs and preferences, which enhances learner satisfaction. Additionally, the positive impact on learning outcomes likely contributes to this increased satisfaction among learners.

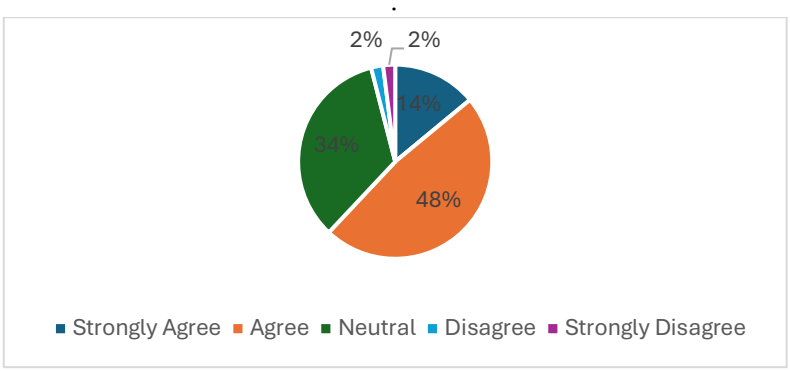

Figure 12. I would recommend using AI-enhanced interactive materials to other English learners

The pie chart titled "Figure 12. I would recommend using AI-enhanced interactive materials to other English learners" reflects learners' willingness to endorse AI-enhanced materials to their peers. A substantial majority, 48% of respondents, strongly agree that they would recommend these materials, indicating that many learners perceive them as highly beneficial and are willing to advocate for their use among others. Additionally, 34% of respondents agree with this sentiment, further emphasizing the positive impact of AI-enhanced materials on the learning experience. In contrast, a smaller group, totaling 20%, expressed neutral, disagree, or strongly disagree opinions, suggesting that while most learners would recommend these materials, a minority would not share the same perspective.

The findings from the study, particularly those illustrated in Figure 6, underscore the significant role that immediate feedback from AI tools plays in improving learners' language skills. With 44% of respondents strongly agreeing that real-time feedback helped them correct mistakes, and an additional 32% agreeing, the results confirm the effectiveness of AI in delivering timely, actionable insights. These findings are novel in that they emphasize the personalization and real-time adaptability of AI-powered tools, which are not always present in traditional classroom settings. The immediacy of the feedback allows learners to adjust their understanding and approach instantly, fostering a more self-directed learning process that can be more efficient than delayed feedback. The novelty of this research lies in its emphasis on how AI's instant response can guide learners in the moment, promoting a more active learning experience compared to traditional methods that might offer feedback after a delay.

The research's implications extend beyond just the learners' perceptions of AI feedback. This study suggests that the integration of real-time feedback mechanisms into educational technologies can significantly enhance student

engagement and motivation, two critical factors in successful language learning. By empowering learners to correct mistakes immediately, AI tools can create a more dynamic learning environment where learners take ownership of their progress. The findings propose that AI-powered platforms not only facilitate error correction but also help build learners' confidence, as they no longer need to wait for teacher intervention or external feedback to see the results of their efforts. This self-regulation in learning could lead to greater academic independence and faster mastery of language skills.

From a broader educational perspective, this research suggests several opportunities for future development in educational technology. The study calls for educators to integrate AI tools that provide immediate, personalized feedback, aligning with the increasing need for adaptive learning systems that cater to the diverse needs of students. Additionally, the study's findings have direct implications for the design of language learning curricula. Educators can leverage these insights to create more interactive, student-centered environments that foster active participation. Future research could explore the optimal timing and frequency of feedback, as well as the potential integration of AI with human instructors to create a hybrid learning experience that maximizes both technology and personalized instruction. Overall, the findings highlight the transformative potential of AI in education, with immediate feedback as a key element that can shape the future of language learning.

CONCLUSION

The findings from this study indicate that AI-enhanced materials significantly improve the language learning experience. These materials effectively engage learners, enhance their language skills, and boost their confidence. AI-powered tools personalize the learning experience by adapting to individual needs. This customization enhances learner engagement and motivation. Moreover, these tools provide immediate feedback, helping learners correct mistakes and improve their language accuracy. The learners in this study were generally satisfied with their AI-enhanced learning experience. They found the materials easy to use and effective in helping them learn. Many expressed their willingness to recommend these tools to others. While the results are promising, further research is needed to fully understand the long-term impact of AI-enhanced materials. Additionally, it is important to ensure that these tools are accessible to all learners, regardless of their background or socioeconomic status. Overall, AI-enhanced materials have the potential to revolutionize language learning. By harnessing the power of technology, we can create more effective and engaging learning experiences for learners of all ages and abilities.

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