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VOCATIONAL HIGH SCHOOL STUDENTS' PERCEPTIONS OF USING AI FOR LEARNING ENGLISH: BENEFITS AND CHALLENGES

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Abstract: This study investigates vocational high school students' perceptions of using artificial intelligence (AI) in English language learning, focusing on both the benefits and challenges. The research was conducted with 11th grade students at SMK Model Patriot IV Ciawigebang, Kuningan, West Java, Indonesia, employing a mixed-methods design. Quantitative data were collected through structured questionnaires, while qualitative insights were obtained from open-ended responses and semi-structured interviews. The findings indicate that students perceive AI as a supportive tool that enhances comprehension, enriches vocabulary, improves efficiency, and provides instant feedback, thereby fostering greater autonomy in learning. However, students also expressed concerns about information overload, inaccurate or irrelevant feedback, overreliance on AI for assignments, superficial learning, and ethical issues such as plagiarism. These dual perceptions highlight AI's ambivalent role as both a facilitator and a potential risk in language education. For vocational students, whose learning is closely tied to employability, this paradox underscores the necessity of embedding AI within pedagogically sound frameworks that balance accessibility and innovation with critical thinking and ethical awareness. The study contributes to the growing body of literature on AI in education by offering context-specific insights from Indonesia and emphasizing the importance of careful integration of AI in vocational English instruction.

Keywords**:** artificial intelligence; English learning; vocational high school; student perceptions

INTRODUCTION

The rapid development of Artificial Intelligence (AI) has increasingly influenced educational practices, including the teaching and learning of English as a Foreign Language (EFL). AI technologies such as chatbots, machine translation systems, automated writing assistants, and pronunciation analysis tools provide learners with immediate feedback, personalized guidance, and interactive learning opportunities beyond traditional classroom instruction (Du & Daniel, 2024; Li et al., 2024). These tools allow students to practice language skills independently while receiving adaptive support, thereby expanding opportunities for English learning both inside and outside formal learning environments.

Previous studies indicate that AI can support the development of various language skills. AI-assisted writing tools have been shown to improve students' writing accuracy and learning motivation (Song & Song, 2023). Similarly, AI-generated feedback can enhance second-language intelligibility (Hirschi et al., 2025), while speech-recognition technologies help learners improve pronunciation and oral fluency (Dennis, 2024). Such findings suggest that AI can facilitate more interactive and learner-centered English learning by providing immediate feedback and opportunities for repeated practice.

Despite these advantages, the integration of AI in language education also raises important pedagogical and ethical concerns. Scholars note that excessive reliance on translation tools or automated content generation may reduce students' engagement in independent language production and critical thinking (Godwin-Jones, 2021; Zhang, 2025). International organizations have also highlighted risks related to algorithmic bias, misuse of AI-generated content, and the need for teacher guidance to ensure responsible implementation in educational contexts (UNESCO, 2023; OECD, 2023). In Indonesia, the government has increasingly promoted the digitalization of education to support technology-enhanced learning environments (GovInsider, 2025). However, the effectiveness of AI integration depends not only on technological availability but also on how students perceive and utilize these tools.

These issues are particularly relevant in vocational high school contexts, where English learning is closely related to workplace communication and employability. Vocational students are expected to develop practical language skills that support professional interaction in various industries. Integrating digital technologies into vocational education can help bridge the gap between classroom learning and real-world communication demands. Hybrid learning models incorporating digital technologies have been shown to strengthen vocational students' employability skills (Wahjusaputri et al., 2024), while strengthening English instruction remains essential for improving vocational graduates' competitiveness in the labor market (Safira & Azzahra, 2022).

Students' perceptions play a crucial role in determining how effectively AI technologies are adopted in learning. Previous studies indicate that students often perceive AI tools as helpful for translation, grammar correction, and writing assistance, but they also express concerns about dependency, plagiarism, and reduced creativity (Sarwanti et al., 2024; Salwa & Tyas, 2024; Utami et al., 2023). In addition, limitations in internet access and digital literacy may affect how students utilize AI technologies in educational settings (Nurlita & Taufiq, 2025; Nurhayati et al., 2024). Although several studies have examined AI use in language learning and students' attitudes toward educational technologies (Karataş et al., 2024; Peña-Acuña & Durão, 2024; Wei, 2023), research focusing specifically on vocational high school students in Indonesia remains limited. Therefore, this study investigates vocational high school students' perceptions of using AI for learning English among 11th-grade students at SMK Model Patriot IV Ciawigebang, Kuningan, West Java.

METHOD

This study employs a mixed-methods design to examine vocational high school students' perceptions of Artificial Intelligence (AI) in English learning by integrating quantitative and

qualitative approaches to capture both measurable patterns and in-depth insights (Creswell & Creswell, 2018). The quantitative data were collected through a structured questionnaire administered to 11th-grade students at SMK Model Patriot IV Ciawigebang, Kuningan, West Java, focusing on perceived benefits such as support in translation, writing, and pronunciation, as well as challenges including plagiarism, overreliance, and reduced creativity; surveys are effective for describing distributions of opinions and behaviors (Creswell & Creswell, 2018; Fraenkel, Wallen, & Hyun, 2012). The qualitative strand, using semi-structured interviews, explores the depth and complexity of students' perceptions, particularly how they interpret both the supportive and problematic aspects of AI in context (Fraenkel et al., 2012). Through methodological triangulation, the integration of survey and interview data enhances validity via cross-verification, enabling the study to explain not only what students perceive about AI use but also why these perceptions emerge within the vocational education context (Creswell & Creswell, 2018; Fraenkel et al., 2012).

FINDINGS

This section presents the findings on the perceived benefits and challenges of using Artificial Intelligence (AI) in English learning, based on both quantitative and qualitative data to capture general trends and in-depth insights into students' experiences. The questionnaire, adapted from Laili et al. (2025), reveals that students perceive AI as beneficial for translation, writing, and pronunciation, while also identifying challenges such as overreliance, plagiarism, and reduced creativity. These results are complemented by qualitative data from open-ended responses and semi-structured interviews, which provide deeper insights into how students interpret the advantages and limitations of AI. By integrating both data types, the findings offer a comprehensive understanding of vocational high school students' perceptions, highlighting not only the breadth of their views but also the contextual factors shaping their experiences with AI in English learning.

Students' Perceived Benefits and Challenges (Quantitative Data)

This subsection presents the quantitative results on students' perceived benefits and challenges when using artificial intelligence (AI) as a tool for English language learning. Data were obtained from eight Likert-scale questionnaire items, each designed to capture distinct aspects of AI use. Table 1. summarizes students' responses to these statements, illustrating both positive perceptions and areas of concern.

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Table 1. Benefits and challenges students experience

No	Statements	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
		F	P (%)	F	P (%)	F	P (%)	F	P (%)	F	P (%)
1.	AI helps me understand difficult materials in Learning English.	1	0.7	3	2.2	34	25.4	69	51.5	27	20.1
2.	AI helps me learn new vocabulary in English.	4	3	9	6.7	37	27.6	58	43.3	26	19.4
3.	AI assists me in improving my speaking, writing, and reading skills in English.	2	1.5	10	7.5	49	36.6	56	41.8	17	12.7
4.	AI provides quick and useful feedback for learning English.	2	1.5	1	0.7	49	36.6	69	51.5	13	9.7
5.	I can learn English independently with the help of AI.	6	4.5	9	6.7	67	50.0	37	27.6	15	11.2
6.	I felt overwhelmed by the amount of information from AI when I was learning English.	2	1.5	17	12.7	45	33.6	52	38.8	18	13.4
7.	AI's answers or corrections sometimes do not match my needs when I was learning English.	4	3	12	9	49	36.6	49	36.6	20	14.9
8.	I feel too dependent on AI when studying and doing my English assignments.	5	3.7	18	13.4	48	35.8	41	30.6	22	16.4

The questionnaire results indicate that students generally perceive Artificial Intelligence (AI) as a supportive tool for English learning, particularly in enhancing comprehension and vocabulary acquisition, with more than half agreeing and 20.1% strongly agreeing that AI helps them understand complex materials, and 43.3% agreeing and 19.4% strongly agreeing that it supports vocabulary learning, although a notable proportion remained undecided, suggesting variability in effectiveness. Perceptions of AI's role in developing core skills such as speaking, writing, and reading were more mixed, with over half expressing agreement but 36.6% selecting "undecided," while more than 60% valued AI's immediate feedback despite continued uncertainty among over one-third of students. Responses regarding independent learning were also divided, with around 40% agreeing and half remaining undecided, indicating ongoing reliance on teacher guidance. Despite these benefits, several challenges were identified, including information overload (38.8% agree; 13.4% strongly agree), issues of relevance (36.6% agree; 14.9% strongly agree), and dependence on AI (30.6% agree; 16.4% strongly agree), with substantial proportions of students remaining undecided in each case. Overall, these findings reflect a dual perception in which AI is widely viewed as a beneficial learning aid that supports comprehension and language

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development, while simultaneously raising concerns related to accuracy, personalization, and overreliance.

Students' Perceived Benefits and Challenges (Qualitative Data)

The qualitative data, drawn from open-ended questionnaire responses and semi-structured interviews, provide a richer account of how students experience the benefits and challenges of using AI in their English learning.

Table 2 Categorization of students' perceived benefits

No	Category	Questionnaire		Interview	
		F	P (%)	F	P (%)
1	Improves understanding of difficult materials	13	9.29	18	26.09
2	Supports vocabulary development	5	3.57	3	4.35
3	Enhances several English skills	6	4.29	6	8.70
4	Offers instant and continuous feedback	6	4.29	2	1.45
5	Increases learning efficiency and autonomy	21	15.00	14	21.74
6	Increases emotional comfort	2	1.43	2	2.90
7	Task support (assignments & schoolwork)	26	18.57	10	14.49
8	Accessibility & practicality	61	43.57	14	20.29
Total		**140**	**100**	**69**	**100**

The most frequently cited benefit of Artificial Intelligence (AI) was its accessibility and practicality, appearing in 43.57% of questionnaire responses and 20.29% of interviews, with students emphasizing that AI tools are easy to access, simple to use, and often free, as reflected in the statement, "*Mudah. Dari fiturnya gampang dimengerti, terus aksesnya gratis*," which highlights how convenience supports everyday learning. AI was also valued for supporting academic tasks (18.57% questionnaire; 14.49% interviews), helping students complete assignments and prepare for tests, as well as for promoting learning efficiency and autonomy (15.00% questionnaire; 21.74% interviews) by enabling independent study and better time management. Additional benefits included simplifying difficult materials, improving language skills, providing instant feedback, and increasing motivation, all of which contributed to greater learner confidence. However, students also identified several challenges, including issues of accuracy and reliability, where AI responses could be incorrect or misleading and required verification, as well as concerns about dependence and superficial learning, where overreliance reduced independent thinking and deeper understanding. Other challenges involved limitations in handling nuanced or local language contexts and ethical concerns such as plagiarism. Overall, students perceive AI as a practical and supportive learning tool that enhances autonomy and efficiency, while remaining aware of its limitations related to accuracy, dependence, and academic integrity.

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DISCUSSION

Benefits of AI in Learning English

One of the most prominent benefits of Artificial Intelligence (AI) in English learning is its **support for comprehension**. More than 70% of students agreed that AI helps them understand difficult materials, with interview data confirming that students frequently use AI to clarify grammar and reading content. As one participant noted, "*Kalau ada materi grammar yang sulit, saya pakai ChatGPT untuk minta penjelasan, jadi lebih mudah dipahami*." This aligns with Laili et al. (2025) and Dochia (2024), who highlight AI's ability to simplify complex linguistic input. In addition, **vocabulary enrichment** emerged as a key benefit, with over 62% of students reporting improved vocabulary acquisition. Students described using AI tools to explore meanings, synonyms, and contextual usage, supporting findings by Losi et al. (2024) and Thu et al. (2023) that AI facilitates lexical development through contextualized feedback.

Students also emphasized AI's role in promoting **learning efficiency and autonomy**. Although about half of the questionnaire respondents were undecided, qualitative data revealed that many students rely on AI to study independently and prepare for assessments. For instance, one student stated, "*Saya bisa belajar sendiri pakai ChatGPT, minta dibuatkan soal latihan buat ulangan*," while another highlighted time efficiency: "*Lebih cepat dapat jawaban daripada harus cari di buku satu per satu.*" These findings support Firdaus et al. (2024), who argue that AI can enhance independent learning when appropriately guided by teachers.

Another important benefit is the provision of **instant feedback**, which contributes to increased motivation and confidence. More than 60% of students valued AI's immediacy in correcting errors and providing suggestions. As one participant explained, "*Kalau ada yang salah di tulisan, langsung dikoreksi sama AI, jadi saya bisa tahu cepat apa yang harus diperbaiki*." This finding is consistent with Hashemifardnia and Kooti (2025), who identify immediate feedback as a key factor in supporting learner confidence. Overall, these findings indicate that students perceive AI as a practical and supportive tool that enhances **comprehension**, **vocabulary development**, **learning efficiency**, **autonomy**, and **motivation**.

Challenges of AI in Learning English

Despite its benefits, students identified several challenges in using Artificial Intelligence (AI) for English learning. A major concern was **information overload**, with 52.2% of students agreeing that AI generates excessive content. Interview data showed that lengthy responses often made it difficult to identify relevant information, as one student noted, "*Kadang jawabannya terlalu panjang, jadi malah bingung harus pilih yang mana.*" This finding reflects Dwivedi et al. (2023), who argue that unfiltered AI outputs can overwhelm learners. Another issue was **accuracy**

and relevance of feedback, as more than half of the students reported that AI responses did not always align with their learning needs. One participant explained, "*Ada jawaban yang kurang pas sama materi, jadi saya harus cek lagi ke buku atau guru*," supporting Deep and Chen's (2025) claim that AI feedback may lack contextual accuracy.

Students also expressed concerns about **overreliance on AI**, with nearly half admitting frequent dependence on AI for completing assignments, which interviews suggest reduces active engagement, as reflected in the statement, "*Kalau ada tugas, saya langsung pakai ChatGPT. Jadinya jarang mikir sendiri*," aligning with Sarwanti et al. (2024) on risks such as reduced creativity and potential plagiarism. Closely related is **superficial learning**, where reliance on AI-generated answers limits deeper understanding, as noted by a student, "*Jawaban cepat memang membantu, tapi kadang saya hanya baca sekilas tanpa benar-benar paham*," consistent with Zhai et al. (2024) regarding diminished critical thinking. Students also raised concerns about **ethical issues and contextual limitations**, including inaccurate or awkward translations in local contexts and worries about academic integrity, as reflected in "*Kalau terlalu sering pakai, takutnya dianggap plagiat*," supporting Octaberlina et al. (2024). Overall, while students recognize the usefulness of AI, they demonstrate critical awareness of its limitations, particularly in terms of dependence, learning depth, accuracy, and ethical implications.

The comparison between benefits and challenges highlights the ambivalent role of Artificial Intelligence (AI) in vocational English learning. Students recognized AI as a supportive and accessible tool that enhances comprehension, vocabulary development, and task completion, while also increasing motivation through instant feedback, consistent with Laili et al. (2025) and Losi et al. (2024). At the same time, they demonstrated awareness of its limitations, particularly issues of information overload and irrelevant responses, which can hinder understanding (Dwivedi et al., 2023). Concerns about overreliance and superficial learning further indicate that dependence on AI may reduce critical thinking and problem-solving skills, aligning with Sarwanti et al. (2024) and Zhai et al. (2024). This creates a paradox in which AI's strengths (speed, accessibility, and volume) also generate risks related to dependence and reduced learning depth, a tension that is especially significant for vocational students who must develop not only language proficiency but also autonomy, critical thinking, and ethical awareness.

CONCLUSION

This study reveals that SMK Model Patriot IV Ciawigebang students perceive artificial intelligence (AI) as both a powerful enabler of English language learning and a potential source of risk. On the one hand, AI supports comprehension, vocabulary acquisition, autonomy, and efficiency, while also providing timely feedback that motivates learners. These strengths suggest

that AI can function as a valuable supplement to traditional instruction, particularly in contexts where resources and teacher availability may be limited. On the other hand, students' concerns about information overload, inaccurate feedback, overreliance, superficial learning, and ethical issues such as plagiarism underscore the need for careful pedagogical integration. The dual perceptions identified here resonate with broader debates in educational technology, in which AI is increasingly conceptualized as a "double-edged sword" capable of fostering both innovation and dependency. For vocational education, this paradox is especially significant, as students must develop not only linguistic competence but also critical, ethical, and employability skills. Thus, the study highlights the importance of embedding AI within structured learning frameworks that maximize its benefits while mitigating its risks.

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