

The Use of AI in Understanding Pragmatics of English Learning in a Vocational High School

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Abstract: The development of Artificial Intelligence (AI) has created benefits in current activities, for example, in the teaching and learning process, particularly in English language learning at vocational high schools. One of the important aspects that often becomes a challenge for students is pragmatics, which demands an understanding of context, implied meaning, and appropriate language use based on social, cultural, and communicative purposes. This study aims to explore the experiences of vocational high school students using AI technology to understand pragmatics in English learning, specifically focusing on acquisition and enhancement, using a qualitative phenomenological approach. The data was collected through in-depth interviews, observations, and documentation involving vocational high school students who used AI-based tools. The data analysis was conducted by identifying major themes related to students' learning experiences, perceptions, motivation, and challenges encountered while using AI to understand English pragmatics in class. The study concludes that AI serves as a powerful, personalized, and accessible supplement for pragmatic learning, effectively bridging the gap between classroom knowledge and real-world communication needs in the vocational context, and could be taken into account when selecting a suitable method in English language teaching in vocational high schools.

Keywords: Artificial Intelligence; Pragmatics; English Learning; Vocational High School

INTRODUCTION

Nowadays, AI technology is becoming more mature and is being applied in various fields, including English language learning. The rapid spread of artificial intelligence (AI) into everyday life has fundamentally changed how people communicate, learn, and work. This study examines the impact of a learning system that uses AI tools to improve students' learning performance. We can't exclude AI from our lives, even in classroom teaching and learning. All we need to do is use AI to enhance our teaching and learning wisely. The previous paper explored how AI is generated in pragmatic competence tests and connected speech, and, from a transcript, investigated the potential for AI-generated items to measure specific constructs of interest to language testers, such as pragmatic competence as outlined by Brown (2016), but found this potential to be limited. Results demonstrated AI tools for language testing and assessment, but not for learning. The current study seeks to address this gap. This study aims to fill the gap in the use of AI in the pragmatics learning process in Vocational High School, since previous studies have focused more on the use of AI, such as ChatGPT, for essay and test assessments.

This study explores that traditional English language teaching systems have several weaknesses, such as a lack of multimedia and automation, and a lack of comprehensiveness. Modern learning using AI is currently a practical solution to improve student and teacher efficiency in interactive learning. The challenges are to describe things as they are and to understand meaning and essences in light of intuition and self-reflection. Methods of preparation include reviewing the professional and research methods, formulating the research questions, illustrating the topic and research questions, and selecting the participants.

This study investigated the potential of AI to generate pragmatic meaning in English language teaching. The AI-generated results were shown to lack sufficient reliability as a measure of the construct. While limitations in sample size and the number of items affect the reliability of measurement (Brown, 2022), it is clear that the AI-generated items did not elicit a consistent, systematic pattern of responses from the participants when the prompts were not specifically clear. However, by removing those problematic items, more participants may achieve higher English language scores using AI tools. A focus on pragmatics might encourage students to consider the relationship between authentic language use and social context. It could be beneficial, provided that the necessary resources are available to teach and learn these skills (Green, 2020). In education, this shift is especially visible in language learning, where AI-powered tools such as ChatGPT, Gemini, Duolingo, and intelligent tutoring systems have become increasingly common for both teachers and students. As AI becomes a regular part of classroom practice, a growing need has emerged for educators and learners to develop what scholars call AI literacy, the knowledge, skills, and ethical awareness required to engage with AI technologies critically and responsibly (Long & Magerko, 2020; Pang et al., 2025).

Teacher education frameworks have also been shaped by Technological Pedagogical Content Knowledge (TPACK), introduced by Mishra and Koehler (2006, as cited in Karaduman, 2025). TPACK describes how teachers integrate technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK). In the AI context, this becomes AI-TPACK, a model that specifically addresses the knowledge required to integrate AI tools into language instruction in both ethical and pedagogically sound ways (Wulan & Santosa, 2026). Karaduman (2025) used this framework to examine pre-service EFL teachers' perceptions of their AI competency in Turkey, finding that while their conceptual awareness was reasonably high, their practical confidence and technical skills remained significantly underdeveloped.

This pattern appears consistently across different teacher populations. Wulan and Santosa's (2026) systematic review of six empirical studies on EFL teacher readiness found that most teachers sit at a moderate level of AI literacy. They tend to recognize AI's usefulness and hold positive attitudes toward it, but their actual integration of AI into classroom instruction remains low to moderate. Many teachers were described as being at a "conceptual underpinning level," meaning they understand what AI is in theory, but lack the skills to apply it meaningfully to lesson design, formative assessment, or specific language skill development. Wulan and Santosa (2026) similarly identify difficulty with prompt engineering as a consistent barrier to AI integration, particularly among EFL teachers who receive limited technical support to assist their students in learning classes.

Pragmatics Learning in Vocational School

Pragmatics is a branch of linguistics that examines how people use language in social and cultural contexts to convey and interpret meaning beyond the literal meaning of words. It focuses on how speakers express intentions and how listeners make inferences based on context, shared knowledge, and social norms (Birner, 2013). As Yule (2006) in 2023 points out, *"Communication depends not only on recognizing the meaning of words, but on recognizing what speakers mean by their utterances in a particular context."* Pragmatics refers to the rules that govern the linguistic choices we make in communication, based on our understanding of contextual factors, such as social distance and power differentials between individuals (Brown, 2016). Brown and Ahn (2011, p.199) explain that "pragmatic competence engages four core variables, namely (a) differences in the function of speech acts (e.g., request, apologies, refusals, etc.), (b) differences in the relative power of speakers and hearers, (c) differences in the social distance of speakers and hearers, and (d) differences in the degree of imposition required or perceived in a given speech act".

The development of Artificial Intelligence (AI) has created benefits in current activities, for example, in the teaching and learning process in education, particularly in English language learning at vocational high schools. In vocational high school, English is no longer taught as a separate subject but as a support system for technical mastery, equipping students with the skills needed to engage with industry needs. One of the important aspects that often becomes a challenge for students in learning English is pragmatics, which demands an understanding of context, implied meaning, and appropriate language use based on social, cultural, and communicative purposes. This study aims to explore the experiences of vocational high school students using AI technology to understand English pragmatics, with a specific focus on acquisition and enhancement.

Teaching pragmatics in a vocational high school is uniquely focused on employability. In vocational high school, English is no longer taught as a separate subject but as a support system for technical mastery, equipping students with the skills needed to engage with industry needs. One of the important aspects that often becomes a challenge for students in learning English is pragmatics, which demands an understanding of context, implied meaning, and appropriate language use based on social, cultural, and communicative purposes. While general high schools focus on academic or social communication, vocational pragmatics bridges the gap between language rules and the specific social norms of the workplace. The goal is to ensure students don't just speak "correctly," but "appropriately" in professional settings, such as a hotel front desk, an automotive workshop, or a nursing station.

Vocational pragmatics is often integrated into English for Specific Purposes (ESP). It focuses on three key areas:

- a. Understanding how to perform specific professional actions through language (e.g., requesting a tool, apologizing for a delay, or handling a guest's complaint).
- b. Politeness Strategies, learning how to adjust "weightiness" in a conversation based on the power dynamic (e.g., how to talk to a manager vs. a co-worker).
- c. Teachers must clearly explain why a certain phrase is used. For example: "We use 'Could you...' instead of 'Do...' to sound more professional to clients."

Teaching pragmatics in this context comes with specific hurdles:

- a. Pragmatic Failure

Students at vocational high school might be grammatically perfect but "pragmatically rude." For example, saying "Give me the wrench" to a supervisor instead of "Could you pass me the wrench, please?"

b. L1 Interference

Vocational high school students often translate literally from their native language, which may have different politeness markers.

c. Limited Exposure

Vocational High School students often have fewer hours of English than of vocational subjects, making "incidental learning" difficult.

This study explores students' use of AI to develop and enhance their pragmatic competence in the English language classroom. Anderson and Corbett (2009) state that sentence analysis encourages students to understand grammar in depth, improving their ability to write more coherently and structurally. In addition, the use of AI tools such as Meta, ChatGPT, and others can increase students' motivation to learn pragmatics.

METHOD

This study employs a qualitative, phenomenological approach to understand students' subjective experiences of using AI for English learning. The data were collected through in-depth interviews, observations, and documentation involving vocational high school students who used AI-based tools such as ChatGPT or Gemini. The data analysis identified major themes related to learning experiences, perceptions, motivation, and challenges students faced when using AI to understand English pragmatics in class. The aim is to explore and understand the lived experiences of Vocational High School students at SMK Muhammadiyah 4 Al Amin Banjarmasin by interviewing 6 students about their engagement with AI tools to learn and comprehend pragmatic English sentences in class.

Vocational high school students were chosen because their curriculum is highly focused on practical and vocational skills, and the adoption of technology, including AI, is increasingly relevant to their future professional roles, making their experience with AI for language learning particularly rich and context-dependent.

The research questions were to ask about:

1. How do vocational high school students experience the use of AI in learning pragmatics?
2. What challenges do the vocational high school students face in learning pragmatics?

This research is conducted by using phenomenology. Amadeo Giorgi, in particular, has insisted that no scientific research can claim phenomenological status unless some use of the epoche and reduction supports it. Its task is not to contribute to our augmentation, the scope of our empirical knowledge, but rather to step back and investigate the nature and basis of this knowledge. Moustakas then presents Husserl's ideas on transcendental phenomenology. It attempts to eliminate everything that represents prejudgment or presupposition, and requires looking at things openly, undisturbed by the habits of the natural world. The challenges are to describe things as they are and to understand meaning and essences in light of intuition and self-reflection. Methods of preparation include reviewing the professional and research methods, formulating the research questions, illustrating the topic and research questions, and selecting the participants.

This research began with a review of data analysis theory. A data collection strategy for a phenomenological study focuses on gathering rich, detailed descriptions of participants'

lived experiences regarding a specific phenomenon. This study will adopt a qualitative research design, specifically phenomenology, to explore and understand the lived experiences of Vocational High School students regarding their use of AI tools for learning pragmatic sentences. The goal is to capture the depth and richness of their individual perspectives, feelings, and meaning-making processes related to this phenomenon.

1. Engage in the Epoche process to create an atmosphere and rapport for the interview.
2. Bracket the question
3. Conduct the qualitative research interview to obtain descriptions of the experience, by considering an informal interview, Open-ended questions, and a topic-guided interview

The analysis of the data follows the Interpretative Phenomenological Analysis (IPA) procedures outlined by Smith et al. (2009):

1. Transcribe interviews verbatim
2. Read and re-read transcripts.
3. Conduct initial noting (descriptive, linguistic, conceptual).
4. Identify emergent themes.
5. Cluster emergent themes into superordinate themes
6. Analyze each transcript independently.
7. Identify cross-case patterns.
8. Construct the final interpretative thematic narrative.

FINDINGS AND DISCUSSION

Vocational High School Students' Experience in Using AI for Learning Pragmatics

This study used a qualitative approach, with data collected through interviews with students. The data were collected from 6 students at SMK Muhammadiyah 4 Al Amin Banjarmasin after they had finished studying personal letters and Invitations related to the language acquisition process, including observational studies, structured experiments, and correlational analysis. The data collection process included observational studies of natural language interactions and correlational analyses to evaluate factors that enhance pragmatic understanding and translation skills.

Table 1

Research Questions and Findings

	Questions	Findings
Question 1	To explore students' experience using AI tools	Students find it easier to understand the pragmatics terms.
Question 2	To investigate students' challenges in learning pragmatics	Students find obstacles to translate the pragmatic words word by word.
Question 3	To find their perception of using AI in learning pragmatics	AI helps students understand pragmatics, but the prompt should be clear.

Table 1 shows that two classes of students majoring in *Teknik Komputer Jaringan and Otomotif* were selected as research subjects. Based on the interview, their answers were similar. Due to the rapid advancement of information technology and the opportunities offered by artificial intelligence, there have been profound changes in education. The results

showed that students had a better understanding of pragmatics when they used AI as a tool during English language class. They were able to find the correct meanings of pragmatic terms, construct sentences with logical structural variations, and select relevant and polite vocabulary when presenting their statements.

Challenges Faced by the Vocational High School Students in Learning Pragmatics

This subsection addresses the study's second finding. AI has great potential to assist teachers in creating fast, effective learning, including by improving their ability to understand pragmatic sentences. In classroom observations, the group of students who used AI to translate pragmatic terms showed significantly higher scores than the group who used traditional methods, such as a manual dictionary or Google Translate. However, students should not rely purely on AI results. Manual evaluation, statistical analysis, and teacher guidance are essential to ensure the quality of learning outcomes. Overall, this study confirms the importance of pragmatics as an integral part of English-language materials. More targeted and intensive teaching of pragmatics in Vocational High School can significantly improve the quality of students' writing skills. Among these, critical thinking and evaluation skills are especially vital. In language learning, AI tools can generate grammatically rational but factually or culturally inaccurate text, making the ability to assess AI outputs carefully an indispensable skill. Pang et al. (2025) recommend that educators design activities in which students compare AI-generated responses with traditional sources, thereby building critical awareness and analytical depth. This resonates with Wu et al.'s (2025) broader point that ethical AI literacy requires teachers to examine not just the accuracy of AI outputs, but also how algorithmic biases may maintain inequities, for example, by privileging standard varieties of English over World Englishes.

CONCLUSION

The conclusion of this study highlights some benefits of using AI in learning pragmatics in English language teaching: allowing students to use AI tools to translate pragmatic terms they encounter in the learning process has successfully overcome the shortcomings of traditional models by providing a rich and personalized learning environment. AI has great potential to assist teachers in creating fast, effective learning, including by improving their ability to understand pragmatic sentences. In classroom observations, the group of students who used AI to translate pragmatic terms showed significantly higher scores than the group who used traditional methods, such as a manual dictionary or Google Translate.

However, students should not rely purely on AI results. Manual evaluation, statistical analysis, and teacher guidance are essential to ensure the quality of learning outcomes. Overall, this study confirms the importance of pragmatics as an integral part of English-language materials. More targeted and intensive teaching of pragmatics in Vocational High School can significantly improve the quality of students' writing skills. Therefore, more innovative teaching strategies, such as the use of AI tools, are needed to improve students' mastery of pragmatics and prepare them for the challenges in the academic and professional world.

The study concludes that AI serves as a powerful, personalized, and accessible supplement to pragmatic learning, effectively bridging the gap between classroom knowledge and real-world communication needs in vocational contexts. However, this

study assumes that teacher guidance during the learning process is crucial to ensure that the use of AI does not affect students' critical thinking abilities and social engagement. Therefore, AI can be seen as an innovative educational tool for improving vocational high school students' pragmatic competence in learning English.

This study reveals an essential finding during the implementation of AI in English class: that the use of AI provides a more interactive, adaptive, and contextual learning experience. Students found it easier to understand expressions, politeness, strategies, idiomatic language, and implied meanings in English conversations and personal or business letters by using AI tools to find meaning through a pragmatic process, so this could be taken into account when selecting a suitable method in English language teaching in Vocational High School. Future research should prioritize longitudinal studies examining how AI literacy evolves among language teachers and learners, as well as cross-cultural comparative work that reveals how local contextual factors shape AI literacy development. There is also a pressing need to develop and validate AI literacy assessment tools tailored to language education settings, and to establish curriculum frameworks that embed AI literacy across disciplinary boundaries rather than isolate it as a standalone module. By addressing these gaps, the field will be better positioned to harness the opportunities of the AI era while thoughtfully managing its inherent risks.

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