

# PERCEPTIONS AND SOLUTIONS OF ARTIFICIAL INTELLIGENCE APPLICATION IN SPEAKING LEARNING FOR ACCOUNTING STUDENTS IN AN ESP CONTEXT

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**Abstract:** This study aims to explore accounting students' perceptions of the application of Artificial Intelligence (AI) in speaking skill development within the context of English for Specific Purposes (ESP). As technology advances, the integration of AI into language education becomes increasingly relevant, particularly for enhancing professional communication skills in accounting. This descriptive qualitative research employed interviews and questionnaires involving accounting students from a university. The findings indicate that most students have a positive perception of AI as a learning tool, especially in improving pronunciation, technical vocabulary, and speaking confidence. However, challenges such as limited access, lack of technological understanding, and the need for guided use remain significant concerns. The study recommends a gradual and contextual integration of AI into the ESP curriculum, accompanied by training for both lecturers and students to optimize its use in meeting the professional needs of the accounting field.

**Keywords:** *accounting students; artificial intelligence; English language learning; ESP; speaking skill*

In the accounting profession, effective oral communication in English is essential. Accounting students are expected to communicate clearly in various professional contexts, such as client meetings, financial presentations, audit discussions, and business negotiations (Jung, 2015). These situations require not just general English proficiency but also a command of specific terminology and discourse relevant to accounting (Xu & Wang, 2024). Consequently, English for Specific Purposes (ESP) is highly appropriate for equipping students with targeted and contextual language skills (Fathi et al., 2024).

Within ESP, speaking skills are a critical area of development. However, many accounting students still struggle to express financial ideas or information orally in English, particularly due to limited exposure to technical vocabulary and a lack of practice in realistic situations (Qiao & Zhao, 2023). To address this challenge, the integration of technology—particularly Artificial Intelligence (AI)—is being explored as an innovative approach to support speaking instruction (Zou et al., 2020).

AI in language learning offers more interactive and personalized learning experiences (Hwang et al., 2024). Tools such as chatbots, voice recognition software, and AI-based language learning apps can provide learners with opportunities to practice speaking independently while receiving immediate feedback (Debarger et al., 2017). These technologies can help students improve pronunciation, use technical vocabulary appropriately, and construct coherent sentences (Yuen & Schlote, 2024). However, the effectiveness of AI in ESP contexts, especially for accounting students, requires further investigation, particularly in terms of learner perceptions and the practical solutions needed to ensure successful implementation (Saadia, 2023).

In today's global business landscape, accounting professionals are required to communicate financial information clearly, persuasively, and accurately in English (Evenddy, 2024). This includes tasks such as presenting audit findings, conducting meetings with clients, and discussing budget forecasts. Such communicative events demand not only fluency in general English but also the ability to use technical accounting terminology appropriately and interact effectively in professional discourse settings (Bernacki et al., 2021). For this reason, English for Specific Purposes (ESP) has gained prominence as a pedagogical approach that aligns language instruction with the authentic needs of learners in particular disciplines, such as accounting (Kunnan, 2024).

Despite the growing interest in using technology to support language learning, most AI-based tools—such as chatbots, speech recognition systems, and interactive apps—are designed for general English purposes and fail to address the nuanced demands of domain-specific communication (Han et al., 2024). Studies on AI in language education have primarily focused on vocabulary acquisition, pronunciation feedback, or generic

conversation practice, but there is limited research on how AI can support speaking instruction in ESP contexts, especially those related to accounting (Kusal et al., 2023). Consequently, there remains a significant gap in understanding how AI can be adapted or developed to improve fluency in technical accounting language and simulate real-world professional interactions, such as client briefings or audit discussions (Jurenka et al., 2024). This study aims to address this gap by exploring accounting students' perceptions of the use of Artificial Intelligence in ESP-based speaking instruction (Liakina & Liakin, 2022). It focuses specifically on how AI might assist in improving spoken fluency involving technical terminology and the ability to perform communicative tasks relevant to the accounting field (Leo, 2021). This study aims to explore accounting students' perceptions of AI use in speaking instruction and to identify solutions that can support its effective integration in ESP-based learning environments (Zhai & Wibowo, 2023). The findings are expected to contribute to the development of more relevant and practical English teaching strategies in vocational and professional education (O'Brien et al., 2018). In doing so, this research seeks to inform the design and implementation of more effective, discipline-oriented speaking practices supported by AI technologies. The research questions (RQs) are:

1. How do accounting students perceive the use of Artificial Intelligence in learning English speaking skills within an ESP framework?
2. In what ways can AI-based tools improve students' fluency in using technical accounting terminology in spoken English?
3. How can AI assist students in practicing and simulating real-world client interactions and professional communication relevant to the accounting field?

## **METHOD**

This study employed a qualitative descriptive design (Stanley, 2023) to explore accounting students' perceptions of the use of Artificial Intelligence (AI) in English for Specific Purposes (ESP) speaking contexts. While some questionnaire items utilized Likert scales to gather supportive insights, the study's core lies in understanding student experiences and meanings, thus adopting a primarily qualitative orientation. The thematic analysis was chosen over other qualitative methods (e.g., grounded theory or phenomenology) as it allowed flexible, detailed interpretation of patterns across student narratives while remaining grounded in their perspectives.

In this current study, the focus is not on constructing a theoretical model but rather on capturing students' views about AI's potential to support fluency in technical terminology and simulate real-world accounting interactions. This approach allows the researcher to stay close to the participants' language and perspectives, which aligns with the practical and exploratory nature of the research questions.

Data were collected through semi-structured interviews, allowing for flexibility while still focusing on key themes such as familiarity with AI tools, perceived effectiveness in improving speaking skills, and contextual relevance to accounting communication needs. Participants were selected using purposive sampling, ensuring that all interviewees were accounting students enrolled in ESP courses involving speaking components.

The participants were 31 undergraduate accounting students enrolled in an ESP course at a public university in Indonesia. Participants were selected using purposive sampling, ensuring they had experience using AI-based tools (e.g., ChatGPT, Elsa Speak) for English speaking practice. Participants varied in semester level and English proficiency, providing a diverse range of insights.

This study primarily employed semi-structured interviews as the main data collection instrument to explore students' perceptions of the use of Artificial Intelligence (AI) in ESP-based speaking instruction. The interviews allowed for guided yet flexible exploration of participants' experiences and opinions, making it possible to probe into accounting-specific contexts while also uncovering emergent insights.

Sample Interview Questions included "Have you ever used AI-based tools to improve your English-speaking skills? If so, which ones?", "In what ways do you think these tools help or fail to help with accounting-specific speaking tasks, such as explaining financial reports or communicating with clients?", "Do you feel more confident speaking English in your accounting classes after using AI tools? Why or why not?", "What challenges have you encountered when using AI for practicing English speaking in accounting contexts?", these questions were developed based on literature on ESP and AI in language learning), and validated through expert review by two ESP instructors.

**Table 1. Interview Blueprint**

| No. | Interview Questions  | Purpose of Inquiry                                     |
|-----|--|--|
| 1   | Have you ever used AI-based tools (such as ChatGPT, Duolingo, or others) to improve your English-speaking skills? If yes, which tools have you used? | To identify initial experience with AI use             |
| 2   | In the context of your accounting studies, do you think AI helps you improve your English-speaking skills? Why?                                      | To explore perceived benefits of AI for ESP-accounting |

|   |   |   |
|---|---|---|
| 3 | Do you feel that AI helps improve your fluency in using technical accounting terminology in English?  | To assess AI's effectiveness in supporting technical vocabulary           |
| 4 | Have you ever used AI to simulate professional communication, such as presenting financial reports or client discussions? If yes, how was the experience? | To evaluate the suitability of AI for professional communication practice |
| 5 | What do you see as the strengths and weaknesses of using AI in English speaking learning relevant to accounting?  | To identify positive perceptions and challenges                           |
| 6 | What suggestions do you have to make AI use more effective in supporting English speaking learning for accounting students?                               | To gather user recommendations for improvement                            |

While the core approach of this study is qualitative, a brief background questionnaire was also administered to gather demographic and contextual information (e.g., age, level of study, previous AI tool usage), which helped in interpreting qualitative responses. Questionnaire containing background questions and six Likert-scale items to assess perceptions quantitatively. These items rated agreement on AI's role in improving fluency, vocabulary, and confidence (e.g., "AI tools help me use accounting vocabulary more fluently"). The use of this quantitative tool was not for statistical generalization but rather for descriptive support, and the rationale for combining methods lies in strengthening the depth of data through methodological triangulation (Schlunegger et al., 2024).

Data collection was conducted over a two-week period, during which a series of semi-structured online interviews were held using the Zoom platform. Each interview session lasted approximately 30 to 45 minutes, depending on the depth of the participants' responses and the flow of the conversation. Before each session, informed consent was obtained, and all interviews were audio-recorded with participants' permission to ensure accurate documentation of their responses. The audio recordings were later transcribed verbatim to facilitate detailed analysis and preserve the authenticity of participants' viewpoints.

To complement the interviews and gather background information, a questionnaire was distributed to all participants prior to the interviews via Google Forms. This questionnaire was designed to capture participants' preliminary perceptions, personal backgrounds, and contextual information relevant to the study, such as their educational experiences, exposure to the subject matter, and initial attitudes toward the topic under investigation. The combined use of questionnaires and interviews allowed for data triangulation.

The interview data were analysed using thematic analysis, following six-step model (Lochmiller, 2021). The processes include 1) Familiarization: Transcripts were read multiple times to gain a holistic understanding. Initial thoughts were noted 2) Generating Initial Codes: Using NVivo 12, transcripts were coded line-by-line. Both semantic (explicit) and latent (underlying meaning) codes were generated, with a focus on students' use of AI in accounting-specific speaking contexts 3) Searching for Themes: Codes were grouped into potential themes, such as "AI as a pronunciation coach," "lack of accounting-specific feedback," and "improved confidence in client role-plays." 4) Reviewing Themes: Themes were refined to ensure coherence within and across categories. Codes that did not fit were either reclassified or removed. 5) Defining and Naming Themes: Final themes were clearly defined with supporting excerpts. For example, a theme like "AI lacks domain relevance" captured students' concerns about the generic nature of existing AI tools. 6) Producing the Report: Themes were synthesized in relation to the research questions, with rich, illustrative quotes. As for ensuring trustworthiness, two researchers independently coded a sample transcript and achieved an intercoder reliability (Cohen's Kappa) score of 0.80, indicating strong agreement.

The interview data were coded thematically using an open coding process. Codes were derived inductively and then organized into themes. For example:

1. Code: *Terminology fluency* → Theme: *Accounting-specific language enhancement*
2. Code: *AI feedback inconsistency* → Theme: *Challenges in using AI for speaking accuracy*

Coding was conducted manually and cross-checked by a second coder to ensure inter-rater reliability and improve the trustworthiness of the findings.

For quantitative analysis, Likert-scale responses were analysed using descriptive statistics (mean, median, and standard deviation) in SPSS. These data were used to triangulate qualitative findings and validate themes such as student satisfaction, perceived usefulness, and ease of AI tool use. Given that quantitative findings supported but did not drive the study's conclusions, the study is best framed as qualitatively driven with supportive quantitative elements, rather than a fully integrated mixed-methods study. Ethical Considerations

Ethical clearance was obtained from the institutional review board. Informed consent was secured from all participants prior to data collection. Pseudonyms were used to ensure anonymity, and data were securely stored and used only for research purposes.

## **FINDINGS AND DISCUSSION**

### **Student Perceptions of AI Tools in ESP Speaking for Accounting**

Participants generally viewed AI tools such as ChatGPT, Grammarly, and Text-to-Speech applications as helpful for developing their speaking skills. Most students appreciated the availability of 24/7 feedback, the ability to repeat practice sessions without judgment, and access to discipline-specific vocabulary when guided appropriately.

This finding echoes previous studies that emphasized the benefits of AI in increasing learner autonomy and reducing anxiety in language learning (Hong & and Tai, 2025). However, while these tools are widely used in general English contexts, their potential in ESP—particularly in professional communication such as accounting—remains underexplored. The findings support Agzamovna (2024) argument that ESP learners benefit most from tools contextualized to their domain-specific needs.

### **Challenges in Using AI for Accounting-Specific Communication**

Despite positive perceptions, students reported several challenges when using AI tools. One key issue was the generic nature of feedback provided by most platforms. Tools like ChatGPT often lacked contextual understanding of financial reporting, audit presentations, or client communication—key speaking scenarios in accounting. Some students also expressed uncertainty about the accuracy of the AI-generated content, especially in high-stakes or formal tasks.

These concerns are consistent with studies by Assassi (2024), who noted that AI in education can be limited by lack of domain-specific customization and possible misinformation. In ESP contexts, particularly those involving technical terminology and structured discourse Jantassova et al. (2024), such limitations can hinder learning rather than support it.

### **Student-Proposed Strategies to Improve AI Integration in ESP**

To address these limitations, students suggested integrating AI tools into speaking assignments with clearer discipline-oriented prompts. Some proposed a hybrid model in which instructors supervise AI usage, helping filter responses and guiding correct usage of accounting terminology. Others suggested a custom-trained chatbot using accounting corpora or case-based scenarios to simulate real-world communication. These reflect learners' increasing digital literacy and align with Giovanoglou (2025), who advocate for learner-centered technological adaptation in ESP. Moreover, such approaches support the idea that AI should not replace but rather supplement teacher guidance, particularly in contexts requiring high accuracy and contextual appropriateness (Stronge, 2018).

The findings of this study provide valuable insight into how AI tools are perceived and utilized by accounting students in their English for Specific Purposes (ESP) speaking development. While students acknowledged the benefits of these tools in promoting autonomy and confidence, the results also highlighted the need for more domain-specific support in AI-assisted learning environments.

### **AI Tools and Learner Autonomy**

Consistent with prior research (Ordóñez Procel et al., 2024), students found AI tools empowering due to their 24/7 availability, capacity for repetition, and error-tolerant feedback. These affordances align with the principles of learner-centered ESP pedagogy, where autonomy and motivation play a critical role (Reinders & White, 2010). In this regard, AI tools have the potential to supplement classroom instruction and foster self-directed speaking practice.

### **Challenges in Accounting-Specific Contexts**

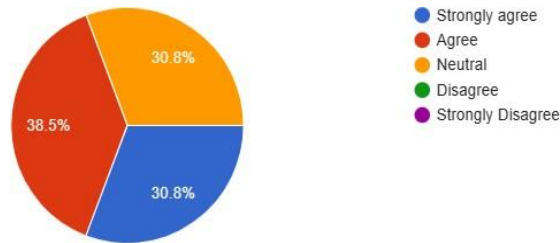
Despite the general benefits, students noted the generic nature of AI feedback as a significant limitation—particularly in professional communication scenarios such as financial briefings, audit presentations, or client consultations. This finding supports (Cheng, 2021) assertion that ESP instruction must account for discipline-specific discourse patterns and genre conventions. Tools like ChatGPT and Grammarly, while robust in general English support, lack the specialized content knowledge needed to simulate authentic communication in accounting.

### **Bridging the Gap through Contextualized AI Use**

Student-suggested improvements point toward a more contextualized and collaborative use of AI. Proposals such as guided practice, prompt design tailored to accounting scenarios, and corpus-based AI development are in line with Dabhi & Mevada (2023) emphasis on need-based curriculum design in ESP. These strategies reflect an understanding that AI should function as an assistive tool rather than a stand-alone solution. This hybrid approach acknowledges the indispensable role of teachers in scaffolding AI use, particularly when technical accuracy and appropriateness are paramount (Iroda & Risolat, 2025).

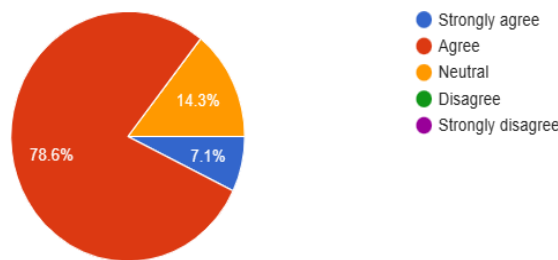
**Integrating AI into ESP Curriculum**

To be pedagogically effective, the integration of AI tools into ESP curricula must be intentional. Instructors should provide learners with training on how to evaluate AI output critically and how to use such tools to practice professional tasks, including report summaries, proposal discussions, and client interactions. Further, collaboration between educators and developers is needed to fine-tune AI responses using discipline-specific corpora and real-world scenarios from the field of accounting.



**Figure 1. Student Perspectives on the significance of ai in language acquisition**

The findings from the questionnaire reveal that 30.8% of students strongly agree, 38.5% agree, and 30.8% maintain a neutral stance regarding the importance of AI in enhancing Speaking learning. The study's findings reveal that students obtain considerable support, especially in achieving proficiency in pronunciation. Individuals can discover suitable techniques for pronunciation and receive assessments or feedback regarding the accuracy of their pronunciation. Numerous AI applications offer evaluations concerning the outcomes of their speaking pronunciation assessments. Furthermore, it serves as an alternative collaborator. A large class comprising over 30 students necessitates that both lecturers and students exert additional effort to optimize the use of the available time. Students not engaged in their duties can utilize their time to practice and collaborate with the AI application.



**Figure 2. AI Applications as an alternative for learning speaking for large classes**

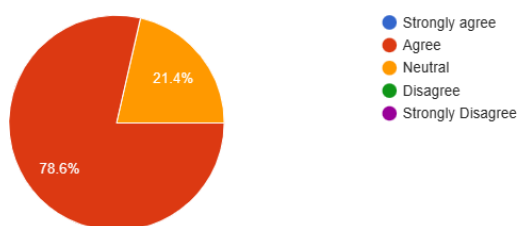
Artificial intelligence offers immediate insights into pronunciation and intonation during speech (Shehata, 2024). This is instrumental in rectifying inaccuracies in pronunciation and intonation that may influence others' comprehension. Students receive a prompt and precise assessment of their speaking abilities, allowing them to identify their weaknesses and concentrate on aspects that require enhancement.

Furthermore, AI offers ongoing speaking practice across diverse scenarios, enabling students to acclimatize to speaking in a variety of contexts. AI can enhance students' vocabulary by offering example sentences in diverse contexts, allowing students to grasp how to utilize these words in daily conversations. In the process of developing speaking abilities, AI serves as a valuable resource for learners to enhance their speaking skills, boost their confidence, and broaden their English vocabulary.

Moreover, students encounter a variety of issues and obstacles. The initial concern is the absence of social engagement. Students utilizing AI applications for speaking practice tend to engage more with the program rather than seeking assistance from peers or instructors. This may restrict social engagement among individuals and could potentially hinder their capacity to communicate effectively with others in person. Secondly, the reliance on technology can lead to a situation where students, who have grown accustomed to utilizing AI applications for speaking practice, may find themselves overly dependent on these tools, hindering their ability to engage in speaking exercises without the aid of the application. This may impede their capacity to enhance and develop their speaking skills organically. The subsequent challenge lies in the complexity of adjusting to diverse circumstances. AI applications might struggle to equip students to adapt to diverse speaking scenarios encountered in real life. In practical scenarios, learners must be equipped to adjust to different tones of voice, accents, speaking speeds, and language variations that may not be acquired through

AI tools. The fourth issue is the absence of adequate feedback. AI applications might struggle to deliver accurate and dependable feedback regarding grammar, intonation, and vocality mistakes. AI applications are limited to functioning with pre-programmed data, which means that students cannot depend on these applications to offer feedback on various errors that may arise during real-life speaking scenarios. The absence of emotional engagement in the learning process is notable. AI applications might struggle to effectively replicate learning experiences that involve interpersonal interactions and emotional contributions. In the context of speaking and learning, emotions play a crucial role in comprehending the conveyed message and fostering interactions with others. The educational outcomes derived from AI applications might be missing essential elements required for successful speaking development.

The final challenge pertains to the accessibility of materials. The AI application does not contain all the materials outlined in the Semester Learning Plan for speaking. Similarly, a single AI application may not encompass all the resources found in the Semester Learning Plan. Students encounter challenges due to the variations in the materials. There is an expectation for a dedicated application created by the campus to enhance the materials or courses related to speaking, or for a book that combines resources with AI applications, providing clear direction for effectively using AI in speaking courses.



**Figure 3. The use of AI applications for speaking learning in class needs to be supported by handouts/books equipped with guidelines**

To have a clear direction and meet learning aims when studying and utilizing AI applications, 78.6% of students want a handout or spoken book that integrates AI topics and applications. Students expect AI applications assisted by spoken books.

## CONCLUSION AND RECOMMENDATION

Three conclusions can be derived from the results and discussion. Regarding student perspectives on speaking acquisition via AI applications, 30.8% of students strongly agree, 38.5% agree, and 30.8% maintain a neutral stance on the importance of AI in enhancing speaking proficiency. Secondly, the obstacles faced by students include six primary areas: insufficient social connection, dependence on technology, difficulties in adapting to varied contexts, inadequate feedback, lack of emotional engagement in learning, and resource accessibility. Third, students expect that speaking instruction utilizing AI will provide access to resources associated with the Semester Learning Plan or offer speaking books that have AI-generated content. This research can aid educators, students, and prospective researchers in formulating instructional approaches, tactics, procedures, and resources that integrate spoken materials with AI applications. By revisiting the issues surrounding the application of AI in speaking learning and reflecting on the research methods utilized, this study underscores the transformative potential of technology in education while also recognizing the need for continued support and training for both students and educators. The insights gained from this research can guide future implementations of AI in language education, ultimately leading to more effective teaching and improved learning outcomes.

For integrating Artificial Intelligence (AI) into speaking learning, a few key recommendations center around enhancing user perceptions and addressing practical solutions to potential challenges. Here's a structured approach. AI should be perceived as a tool that personalizes learning experiences, catering to individual student levels, accents, and learning speeds. Implement AI that adapts to each student's speaking style and progress, providing customized feedback. AI algorithms like Natural Language Processing (NLP) can assess pronunciation, intonation, and fluency, helping students progress at their own pace. Users may feel self-conscious if feedback is overly critical. AI should be seen as a non-judgmental guide rather than a judge. Program the AI to offer positive reinforcement and constructive criticism without discouraging learners. Algorithms that use polite, friendly language in feedback messages can boost confidence and motivation. Learners often value practical, real-life applications of skills. AI should be viewed as a realistic training partner that prepares students for real-world communication. Incorporate role-play scenarios where AI mimics real-life conversation patterns, adjusting responses based on the context (e.g., formal vs. informal). This approach fosters a more immersive and

relevant learning experience. AI should be viewed as a supportive mentor that helps learners monitor their progress toward specific language goals.

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