

A Decade of Research on Speaking for Academic Purposes (2015–2025): Methodological Patterns, Pedagogical Tools, and Emerging Directions

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Abstract

Speaking for Academic Purposes (SAP) has become an increasingly important focus in applied linguistics as learners worldwide strive to meet the demands of higher education. However, challenges such as pronunciation problems, limited fluency, grammar and vocabulary errors, anxiety, and restricted opportunities for authentic communication continue to hinder academic oral performance. This study systematically reviews fifty-two peer-reviewed articles published between 2015 and 2025 to map methodological patterns, country-level research distribution, recurring challenges, and implemented strategies in SAP instruction. Guided by the PRISMA framework, the review applied transparent phases of identification, screening, eligibility, and inclusion, resulting in a consolidated body of studies for synthesis. Findings reveal a predominance of mixed-methods and quasi-experimental designs, indicating a trend toward integrating quantitative measurement with qualitative insights. Indonesia and China emerge as leading contributors to the field, while many other regions remain underrepresented. Across contexts, four recurring obstacles are consistently documented: linguistic limitations, particularly pronunciation; psychological barriers such as anxiety and low confidence; pedagogical constraints linked to teacher-centered approaches; and technological challenges including limited access and digital literacy. Diverse strategies have been implemented, ranging from AI-driven feedback and automatic speech recognition to multimodal practices such as dubbing, audiovisual translation, and virtual reality. These approaches enhanced learners' fluency, accuracy, and motivation, especially when combined with learner-centered pedagogy that promotes autonomy and collaboration. The review concludes that future research should address long-term sustainability, broaden coverage across populations and contexts, and integrate theoretical perspectives such as communicative competence and multiliteracies. These directions will support the development of more inclusive, coherent, and innovative models of academic speaking instruction.

Keywords: Speaking for Academic Purposes; Systematic Review; Research Trends; Technological Tools; Methodological Patterns; Communicative Competence

INTRODUCTION

Speaking for Academic Purposes (SAP) has increasingly attracted scholarly attention over the past decade, reflecting its vital role in enabling learners to participate in higher education successfully. International students often face challenges with pronunciation, fluency, grammar, vocabulary, and writing accuracy, which are further compounded by speaking anxiety (Karakuş, 2025). These challenges are not only linguistic but also psychological, shaped by institutional expectations and classroom dynamics. For instance, research in Saudi Arabia revealed that unrealistic teacher expectations and excessive pressure can generate fear of mistakes and low confidence, while balancing expectations with constructive feedback improved pronunciation, grammar, and fluency (Almajli & Saud, 2025). This indicates that the barriers to SAP are multifaceted and demand both pedagogical and psychological attention.

Over the years, diverse strategies have been tested to strengthen learners' oral competence. Conversation Analysis transcription symbols have been shown to enhance learners' awareness of stress and intonation, boosting both pronunciation and confidence in spoken communication (Dankanjanakpan & Sinwongsawat, 2025; Mukti et al., 2025). Integrated listening-to-speak tasks have also been examined, with evidence that comprehension evaluation and selective attention strategies significantly predict higher scores in grammar, vocabulary, pronunciation, intonation, and fluency, while unproductive fixation strategies hinder performance (Xu et al., 2025). These findings suggest that academic speaking should not be taught in isolation but in conjunction with listening and interactional strategies.

The rise of digital media and technological tools has opened new possibilities for enhancing SAP. Learners have benefited from YouTube, WhatsApp, and Netflix as digital resources to reduce anxiety, expand vocabulary, and foster motivation in speaking tasks (Syamsudin et al., 2025). Artificial intelligence-powered conversational platforms have been positively received by learners, as repeated practice and chunking improved fluency and confidence, although issues such as limited cultural awareness and technical instability remain (Mudawy, 2025). In Indonesian contexts, AI-assisted feedback has been found to strengthen pronunciation, grammar, fluency, and lexical range, particularly in presentation practice (Fitriati & Williyan, 2025). Automatic speech recognition technology such as Speechace, combined with structured peer correction, has also been shown to significantly improve pronunciation accuracy and communicative competence (Rogti, 2025).

Beyond AI, other technological innovations have been widely explored. Fuzzy logic-based multi-feature audio classification and speech matching models provided more reliable pronunciation feedback, significantly improving oral skills, reducing anxiety, and increasing self-efficacy compared to traditional methods (Yu et al., 2025). Mobile applications such as Fluency in English were shown to support Chinese college students in gaining accuracy, coherence, and fluency, even though flexibility improved less (Chen et al., 2025). Video dubbing apps enabled learners at different proficiency levels to practice authentic oral expression, with significant gains in pronunciation, intonation, grammar, and vocabulary (Wang & Lee, 2025). Similarly, the 4SkillsWeb mobile app, implemented during pandemic-driven remote learning, significantly enhanced B1-level learners' pronunciation, discourse management, and interactive communication compared to control groups (Padilla et al., 2024).

Multimodal and immersive approaches also play an important role in fostering SAP. Audiovisual translation tasks such as dubbing, audio description, and respeaking have been shown to significantly enhance learners' speaking competence across different languages, particularly in pronunciation, intonation, and pragmatic fluency (Sánchez-Requena & Frumuselu, 2024). Virtual reality (VR)-based situated learning has further demonstrated potential by immersing learners in authentic contexts through role-plays, producing significant gains in vocabulary, fluency, pronunciation, and grammar, while promoting positive perceptions of authenticity, collaboration, and reflection (Yan et al., 2024). Asynchronous video-based learning has also expanded opportunities for oral practice. For instance, studies on Flip demonstrated that learners' fluency, accuracy, vocabulary, and content improved significantly, while students reported reduced anxiety and stronger motivation, despite some technical drawbacks (Baeyens, 2024; Kaya & Ersanli, 2025). Together, these innovations underscore the ongoing expansion of multimodal, digital, and immersive methods in academic speaking instruction.

Despite the growing number of studies, significant gaps remain. First, there has been no systematic synthesis of the methodological patterns used in SAP research across the last decade, whether qualitative, quantitative, experimental, or mixed methods. Second, although research has examined various learner populations, little is known about which groups, such as pre-service teachers, vocational students, or higher education cohorts, have been most frequently studied, and which remain overlooked. Third, while numerous pedagogical interventions and technological tools have been explored, their overall effectiveness and sustainability have not been consolidated. Fourth, although challenges such as speaking anxiety, limited feedback, and lack of authentic contexts are well documented, few studies have systematically examined which solutions have proven most effective and transferable. Finally, although the field has clearly shifted in its emphases, the trajectory of these developments and the emerging directions for SAP research between 2015 and 2025 remain insufficiently mapped.

To frame these issues, the present study draws on three theoretical perspectives. First, communicative competence (Canale & Swain, 1980) emphasizes that speaking proficiency includes not only grammatical accuracy but also sociolinguistic appropriateness, discourse management, and strategic competence. Second, multiliteracies theory (Cope & Kalantzis, 2015; Courtney et al., 2005; Navehebrahim, 2011) highlights that academic speaking today involves orchestrating meaning across multiple modes, including linguistic, digital, visual, and oral resources. This aligns with multimodal interventions such as video dubbing, audiovisual translation, and VR learning, which allow learners to redesign available resources into new academic performances. Third, digital pedagogy underscores

how technology-mediated environments, from mobile apps to AI platforms, offer feedback-rich, collaborative, and learner-centered opportunities that extend speaking practice beyond the classroom. These theoretical lenses provide a foundation for understanding how SAP research has evolved and where it is heading.

Yet, SAP research remains fragmented. Some studies foreground technology without connecting it to broader theories of communication and pedagogy, while others focus narrowly on psychological issues such as anxiety without integrating multiliteracies or communicative competence. Moreover, although many interventions report short-term improvements, their long-term sustainability across diverse contexts is rarely examined. This fragmentation underscores the need for a comprehensive synthesis that unites theory, methodology, pedagogy, and practice into a coherent account.

The novelty of the present study lies in offering such a synthesis across a ten-year span, 2015 to 2025. Unlike previous reviews that focus on specific interventions, isolated populations, or particular tools, this study maps research comprehensively across methodological patterns, learner populations, pedagogical interventions, recurring challenges, and the evolution of emphases. By integrating theoretical perspectives with empirical findings, it provides a holistic and future-oriented understanding of SAP.

Accordingly, this study seeks to answer the following research questions: (RQ1) What methodological patterns, whether qualitative, quantitative, experimental, or mixed methods, have been employed in Speaking for Academic Purposes research between 2015 and 2025? (RQ2) What is the distribution of countries conducting research on this topic, and which country has produced the most studies? (RQ3) What recurring challenges in Speaking for Academic Purposes have been reported, and what strategies have been implemented to address them?

By addressing these questions, the study clarifies what has been achieved, identifies areas that remain underexplored, and highlights new directions for both researchers and practitioners in developing more coherent and sustainable innovations in academic speaking instruction.

METHODS

The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework, supported by a 27-item checklist, provides a standardized guideline that ensures systematic reviews and meta-analyses are conducted transparently and reproducibly through a four-phase process of identification, screening, eligibility, and inclusion (Liberati et al., 2009). In this review, the PRISMA approach was applied through database searches with predefined keywords, strict inclusion and exclusion criteria, and full-text assessment, ultimately yielding a consolidated body of high-quality articles for synthesis (Abdullah et al., 2025). This structured process enhances reproducibility and minimizes bias in synthesizing a large body of studies.

Distribution of Journal Publishers (Scopus search: "improve pronunciation" AND "speaking skills", N=140)

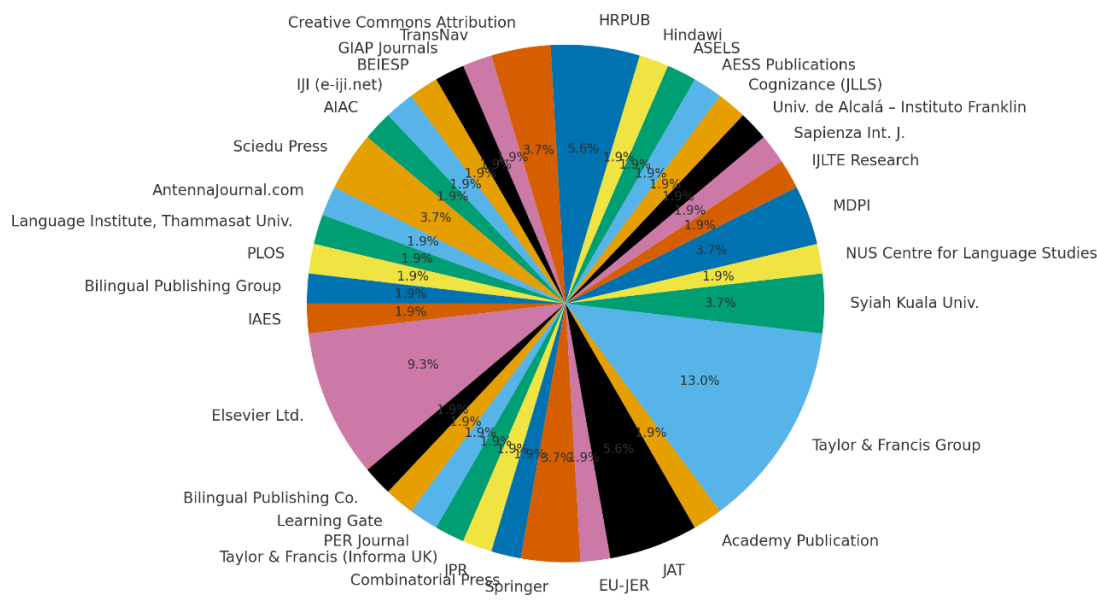


Figure 1. Identification of publishers

Following PRISMA guidelines, this review applied a four-phase process: identification, screening, eligibility, and inclusion. In the identification phase, a comprehensive search was conducted across multiple academic databases, including Sciedu Press, Journal of VLSI Circuits and Systems (ISSN 2582-1458), National Journal of Antennas and Propagation (ISSN 2582-2659), Language Institute Thammasat University, Public Library of Science (PLOS), Institute of Advanced Engineering and Science (IAES), Elsevier Ltd., Bilingual Publishing Group, Learning Gate, Participatory Educational Research (PER) Journal, Informa UK Limited (Taylor & Francis Group), Journal of Pedagogical Research, Combinatorial Press, Springer Nature, and Eurasian Society of Educational Research Association (ESER).

Identification of studies via journal publish

identification

Keyword: "improve pronunciation" AND "speaking skills"
 Tools Scopus: 140
 Identified in the journal publishers
 Sciedu Press: 2
 Antennajournal.com (DOI prefix 10.31838): 1
 Language Institute, Thammasat University: 1
 PLOS (Public Library of Science): 1
 Bilingual Publishing Group: 1
 Institute of Advanced Engineering and Science (IAES): 1
 Elsevier Ltd.: 5
 Bilingual Publishing Co.: 1
 Learning Gate: 1
 Participatory Educational Research (PER) Journal: 1
 Informa UK Limited, trading as Taylor & Francis Group: 1
 Journal of Pedagogical Research (JPR): 1
 Combinatorial Press: 1
 Springer (Springer Nature): 2
 European Journal of Educational Research (EU-JER): 1
 Journal of Audiovisual Translation (JAT): 3
 Academy Publication: 1
 Taylor & Francis Group: 7
 Syiah Kuala University (Indonesia): 2
 Centre for Language Studies, National University of Singapore: 1
 MDPI (Multidisciplinary Digital Publishing Institute): 2
 International Journal of Learning, Teaching and Educational Research: 1
 Sapienza International Journal of Interdisciplinary Studies: 1
 Universidad de Alcalá - Instituto Franklin: 1
 Cognizance Research Associates (JLLS): 1
 AESS Publications: 1
 Arab Society of English Language Studies (ASELS): 1
 Hindawi (Wiley): 1
 Horizon Research Publishing (HRPUB): 3
 Creative Commons Attribution: 2
 TransNav / Polish Navigation Forum: 1
 GIAP Journals (Gyandhara International Academic Publications): 1
 Blue Eyes Intelligence Engineering & Sciences Publication (BEIESP): 1
 International Journal of Instruction (e-iji.net): 1
 Australian International Academic Centre (AIAC): 1

Record removed before screening
 Out the scope of law: 8
 Restricted-access journal: 7
 Retracted Article: 3
 Maintenance mode : 1
 404 not found: 4
 Conference paper: 33
 Book chapter: 8
 DOI not found: 14
 Book: 2
 Conference review: 2
 Duplicate: 2
 Review: 1
 Before 2015: 3

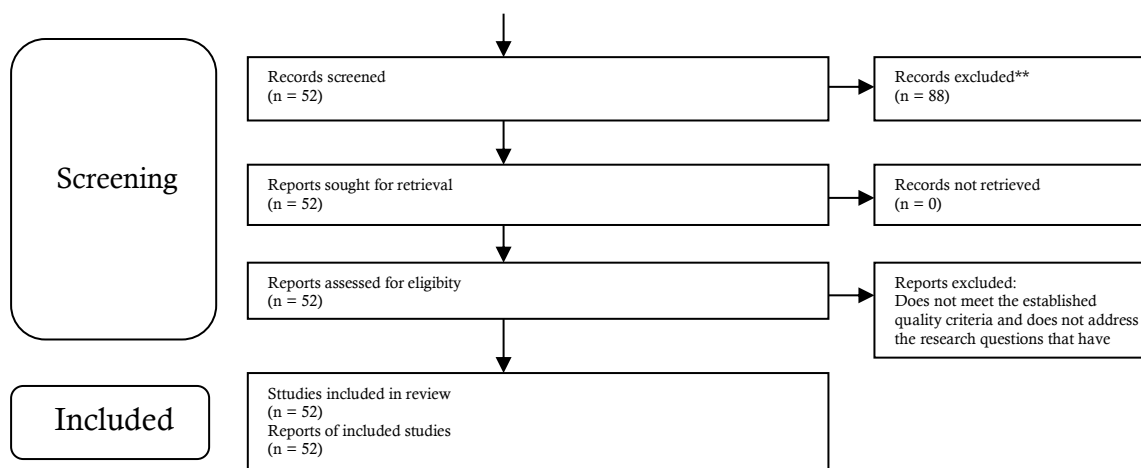


Figure 2. PRISMA flowchart

Keywords and Boolean operators such as “improve pronunciation” AND “speaking skills” were used to capture relevant studies published between 2015 and 2025. Duplicates were removed to ensure unique entries. In the screening phase, the titles and abstracts of all retrieved studies were reviewed to remove irrelevant items. At this stage, initial exclusion criteria were applied to filter out non-English publications, book chapters, dissertations, conference abstracts, and studies outside the scope of academic speaking. Only peer-reviewed journal articles were retained for further consideration (Page et al., 2021). Eligibility criteria were applied during full-text screening to exclude studies lacking completeness of research components, clear research questions or hypotheses, methodological description, detailed intervention, or explicit answers to the research objectives (Sajidin, 2026). Studies that did not address speaking in academic contexts or failed to meet minimum methodological quality standards were excluded.

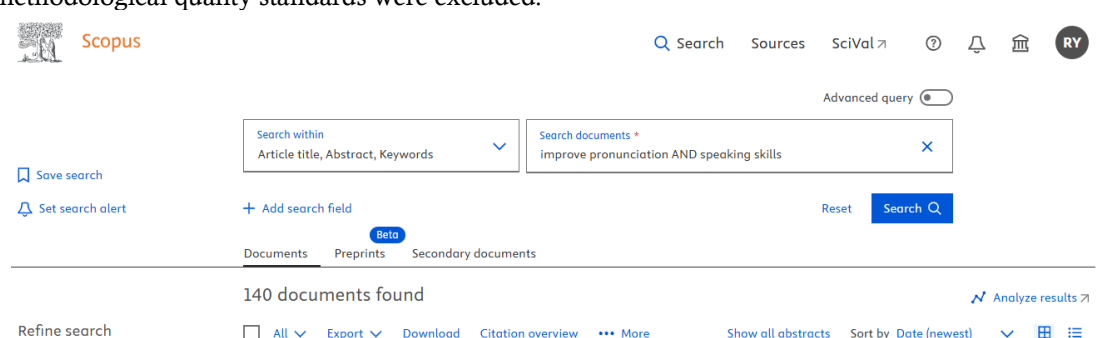


Figure 3. 140 documents from Scopus

Finally, in the inclusion phase, a total of 140 peer-reviewed articles met all criteria and were included in the analysis. These articles were systematically coded and synthesized to map methodological patterns, learner populations, pedagogical interventions, technological tools, recurring challenges, and evolving research emphases. The overall selection process is illustrated in the PRISMA flowchart (Fig. 2), which demonstrates the transparency and reproducibility of the review procedure.

FINDINGS AND DISCUSSION

Methodological Approaches to Speaking for Academic Purposes: A Decade in Review (2015–2025)

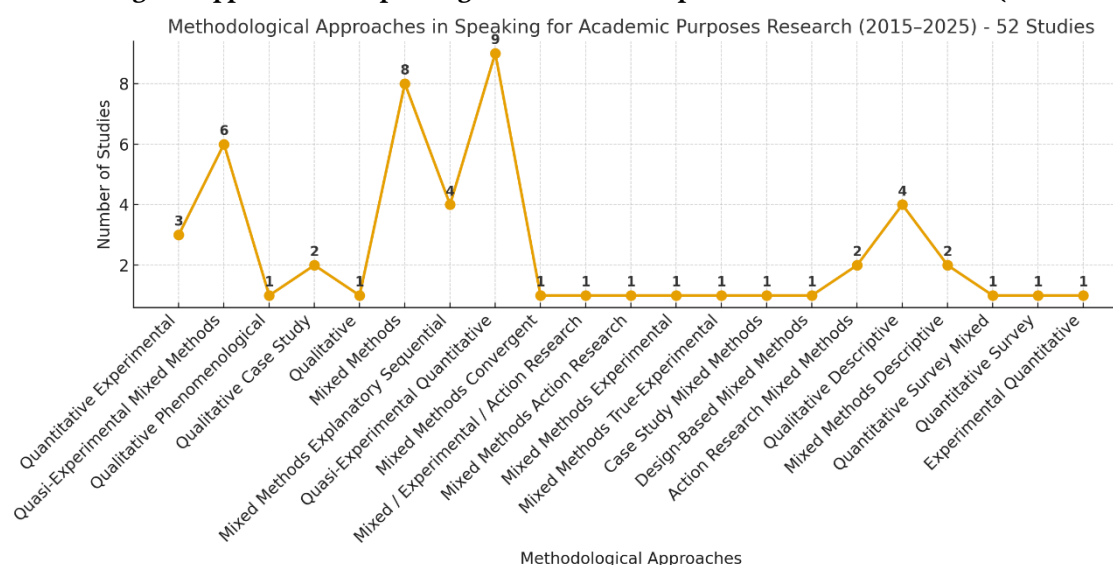


Figure 4. Methodological Approaches to Speaking for Academic Purposes

The synthesis of 52 studies on methodological approaches to Speaking for Academic Purposes (2015–2025) demonstrates a diverse methodological orientation, yet one marked by a consistent preference for mixed-methods and quasi-experimental designs. The analysis shows that 19 studies (36.5%) adopted mixed-methods designs, confirming their position as the dominant strategy in this field. These studies appeared in several configurations: explanatory sequential designs connected statistical results with qualitative interpretations, convergent and design-based models combined experimental data with reflective accounts, and action research cycles applied iterative processes of planning, implementation, observation, and revision in authentic classrooms. Many of these studies focused on the use of digital and multimodal technologies such as virtual reality role-play, intralingual dubbing, and AI-based learning platforms. They assessed not only measurable improvements in speaking accuracy and fluency but also learners' affective experiences, engagement, and motivation. The strong presence of mixed-methods approaches illustrates the tendency of the field to combine numerical evidence with qualitative depth to capture the multifaceted nature of speaking for academic purposes.

In parallel, 15 studies (28.8%) employed quasi-experimental quantitative designs, making this the second most frequent methodological pattern. These studies typically used control and experimental groups, pre- and post-tests, and inferential statistical techniques such as t-tests, ANOVA, ANCOVA, or regression models. In several cases, researchers complemented the statistical data with surveys or self-report instruments to provide an additional layer of interpretation. The majority of quasi-experimental studies aimed to test the effectiveness of specific pedagogical or technological interventions, including mobile applications, automatic speech recognition tools, video-based platforms, role-play, and collaborative storytelling. Their methodological strength lay in producing reliable evidence of improvement while also ensuring a level of comparability across groups. The prevalence of quasi-experimental approaches underscores the emphasis placed on measurable outcomes, the evaluation of innovation, and the development of evidence-based teaching practices within the field.

Alongside these dominant approaches, 7 studies (13.5%) employed qualitative methodologies, such as phenomenological, case study, and descriptive designs. These studies enriched the broader landscape by exploring learners' lived experiences, challenges, and identities in diverse educational and sociocultural contexts. Common data collection methods included classroom observations, semi-structured interviews, focus groups, and stimulated recall, which helped capture in-depth perspectives

on affective factors such as anxiety, motivation, and confidence. In addition, 6 studies (11.5%) relied on quantitative experimental designs, frequently adopting controlled pre- and post-test structures or computational simulations to measure the effectiveness of interventions under carefully arranged conditions. Finally, 5 studies (9.7%) applied quantitative survey-based designs, drawing on large-scale questionnaires, factor analyses, and regression models to identify the key variables influencing speaking performance, including vocabulary, grammar, pronunciation, and self-confidence. Although smaller in number, these studies offered valuable insights by mapping broader patterns and highlighting predictors of oral proficiency. Overall, the distribution across methodological patterns reflects diversity and increasing methodological sophistication, showing how the field systematically combines experimental approaches with qualitative inquiry to advance comprehensive understanding of speaking for academic purposes.

Country-Level Distribution of Research Output

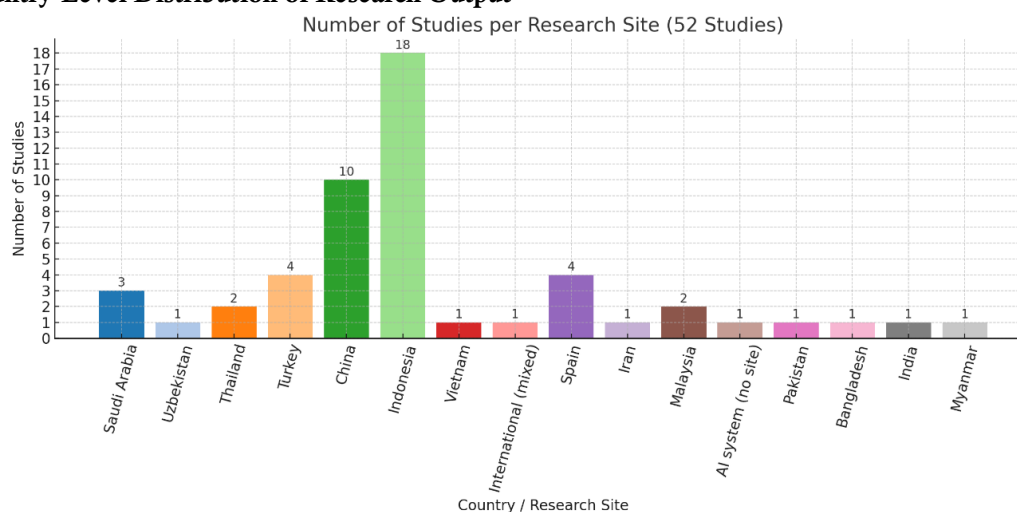


Figure 5. Country-Level Distribution of Research Output on Speaking for Academic Purposes

The analysis of fifty-two research sites reveals a diverse geographical distribution of empirical studies on speaking skills in EFL contexts. Indonesia clearly dominates with 19 studies (36.5%), highlighting its strong engagement in classroom-based research. China follows with 11 studies (21.2%), reflecting the country's large population of English learners and the government's emphasis on communicative competence. Other frequently represented sites include Saudi Arabia with 4 studies (7.7%), Turkey with 4 studies (7.7%), and Spain with 4 studies (7.7%). Smaller but noteworthy contributions come from Thailand (2; 3.8%), Malaysia (2; 3.8%), and Vietnam (2; 3.8%), while Iran, Pakistan, Bangladesh, India, Myanmar, and Uzbekistan each appear once (1.9%). In addition, one study was conducted in an international or mixed context (1.9%), and another employed an AI-system without a physical site (1.9%), pointing to the growing relevance of digital and simulated learning environments.

From a statistical perspective, the mean number of studies per country is 3.25, while the median is 2, indicating that half of the countries contribute only two studies or fewer. The mode is represented by Indonesia, which appears far more frequently than any other country. These figures suggest that although research is geographically widespread, it is heavily concentrated in certain regions, particularly Southeast and East Asia. Such diversity underscores the global relevance of speaking-related research, while simultaneously pointing to Indonesia and China as the major contributors to the empirical literature in this domain.

Recurring Challenges and Implemented Strategies in Speaking for Academic Purposes

Research in Speaking for Academic Purposes has consistently identified recurring challenges that cut across linguistic, psychological, and contextual dimensions. Pronunciation problems, particularly with stress, intonation, and difficult consonants like /θ/, /ð/, and dark /ɫ/, emerge repeatedly in different contexts, causing frequent mispronunciation and reduced intelligibility

(Dankanjanakpan & Sinwongsuwat, 2025; Rogti, 2025; Zhu et al., 2024; Sattar & Alghamdi, 2023). These difficulties are compounded by limited vocabulary, persistent grammar errors, and lack of discourse coherence, which hinder both spontaneous conversation and formal presentations. For example, international students in Türkiye reported grammar and spelling errors that slowed fluency and reduced accuracy (Karakuş, 2025), while Indonesian learners continued to face limited lexical range and weak pronunciation due to insufficient feedback (Bashori et al., 2024).

Psychological factors also play a central role. Learners often experience anxiety, low confidence, and fear of mistakes, which lead to reduced willingness to speak in class (Syamsudin et al., 2025; Amoah & Yeboah, 2021; Thi & Hoang, 2020). Such anxiety is not limited to students, as even teachers in Indonesia have been found to separate theory from practice in their classroom performance, limiting interaction and relying heavily on drilling (Ihsan et al., 2025). Structural and institutional conditions exacerbate these issues: overcrowded classrooms, limited time allocation, and teacher-centered approaches restrict learners' opportunities to engage in authentic interaction (Kaya & Ersanli, 2025; Ulla, 2017). Furthermore, while technology has become widely integrated, learners in Saudi Arabia reported frustration with AI conversational tools due to technical glitches and lack of cultural adaptability, which limited the effectiveness of practice (Mudawy, 2025).

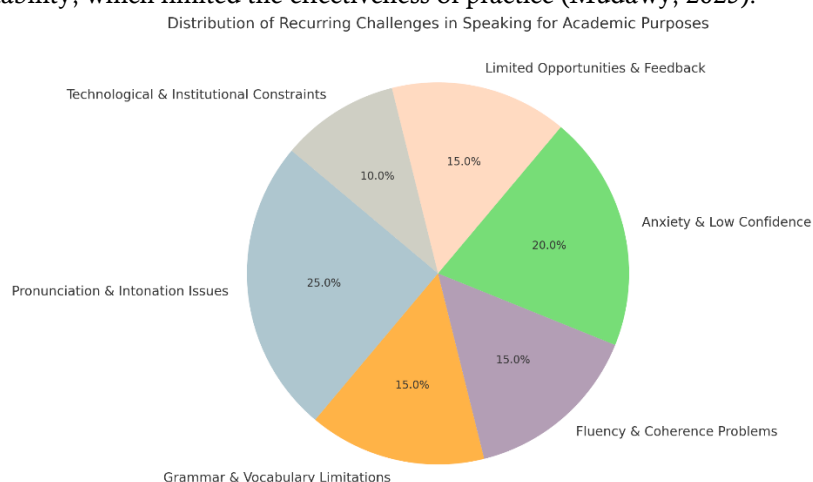


Figure 6. Distribution of Recurring Challenges in Speaking for Academic Purposes

To address these challenges, researchers have proposed diverse strategies combining technological, pedagogical, and psychological approaches. Technology-assisted interventions are particularly prominent. Mobile applications such as *Fluency in English*, *Oraiapp.com*, and *4SkillsWeb* have been shown to improve accuracy, fluency, and coherence by providing instant feedback and structured practice opportunities (Chen et al., 2025; Simatupang et al., 2019; Padilla et al., 2024). Automatic Speech Recognition tools like Speechace and NovoLearning significantly enhanced pronunciation and vocabulary by offering real-time corrective feedback (Rogti, 2025; Bashori et al., 2024), while AI-driven platforms supported learners' self-regulated presentation practice and improved both delivery and confidence (Fitriati & Williyani, 2025; Hwang et al., 2024). More immersive technologies such as augmented and virtual reality helped Chinese learners build articulatory awareness and confidence, showing gains in fluency, vocabulary, and pronunciation in situated learning environments (Yan et al., 2024; Zhu et al., 2024; Ebadi & Azizimajid, 2024).

At the same time, multimodal and interactive practices have enriched speaking instruction. Tasks such as intralingual dubbing, audiovisual translation, and video dubbing were found to significantly improve fluency, intonation, and pragmatic competence in Spain and China (Sánchez-Requena & Frumuselu, 2024; Baeyens, 2024; Wang & Lee, 2025; Sánchez-Requena & Navarrete, 2024). Similar benefits were reported with Flip video discussions in Türkiye, which boosted learners' fluency and reduced speaking anxiety (Kaya & Ersanli, 2025), and with digital storytelling in

Malaysia, which fostered vocabulary growth and collaborative engagement (Nair & Md Yunus, 2022). Even social media platforms such as TikTok have been utilized to provide low-pressure speaking practice, enabling learners to improve pronunciation, intonation, and fluency while enjoying a motivating environment (Chuah & Ch'ng, 2023).

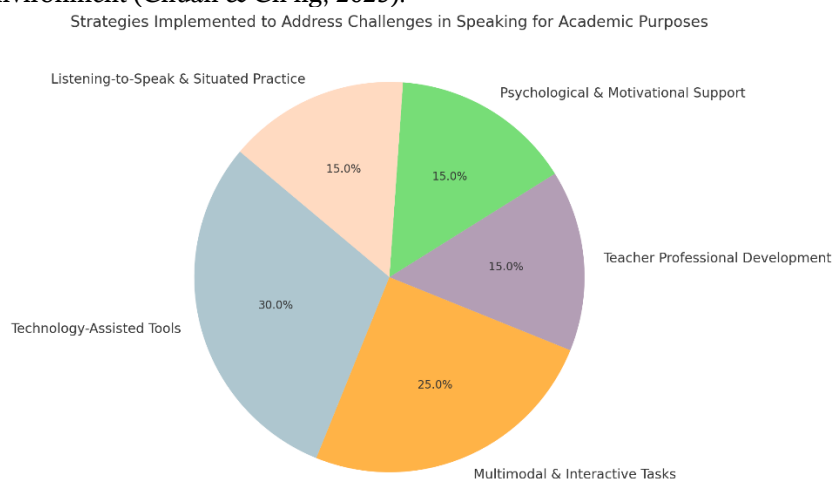


Figure 7. Strategies Implemented to Address Challenges in Speaking for Academic Purposes

Pedagogical development remains a key factor in sustaining these gains. Indonesian studies highlight the need for continuous professional training so that teachers can balance theoretical knowledge with pedagogical practice and integrate pronunciation effectively into classroom interaction (Ihsan et al., 2025). Thai research further demonstrates that embedding pronunciation into content-based business courses improved learners' stress placement and confidence without hindering content learning (Kanoksilapatham & Pariwatnanont, 2024). Learner-centered strategies such as peer correction, self-assessment, and code-switching have also been effective in boosting autonomy, fluency, and interpersonal communication (Rogti, 2025; Mendoza & Avila, 2022; Eiten et al., 2019). Additionally, creative activities such as poetry in India and music in Vietnam were shown to enhance pronunciation, vocabulary, and fluency in ways that were enjoyable and motivating (Deepa & Ilankumaran, 2019; Linh et al., 2020).

Another dimension concerns integrated listening and speaking. Chinese research revealed that comprehension evaluation and selective attention strongly predicted performance in integrated tasks, suggesting that explicit training in listening-to-speak strategies can enhance grammar, vocabulary, and fluency (Xu et al., 2025). Similarly, VR-based role-play provided learners with authentic and collaborative speaking contexts that strengthened both linguistic competence and psychological readiness (Yan et al., 2024).

Discussion

This systematic review of 52 studies on Speaking for Academic Purposes (SAP) between 2015 and 2025 reveals convergent patterns despite the diversity of contexts, learners, and tools. Across different regions and institutional levels, the studies consistently identify obstacles in four interconnected areas: linguistic limitations, psychological challenges, pedagogical barriers, and technological constraints. The review also highlights how innovative pedagogical and technological solutions have been introduced to overcome these obstacles and to create more sustainable improvements in speaking competence. By examining the body of research as a whole, it becomes evident that although individual studies are situated in distinct cultural and institutional settings, they share common concerns and contribute to a collective trajectory of innovation in speaking pedagogy.

Linguistic and Pronunciation Barriers

The most recurrent linguistic challenge reported in the studies is pronunciation, particularly in the areas of stress, intonation, and accurate phoneme realization. Thai learners, for example, struggle with suprasegmental features due to their syllable-timed native language, which often results in

miscommunication and breakdowns in interaction (Dankanjanakpan & Sinwongsuwat, 2025). Similarly, Chinese learners face difficulties with problematic consonants such as dark /ɫ/, /θ/, and /ð/, which are compounded by limited pronunciation instruction and speaking anxiety (Zhu et al., 2024). Algerian students also struggle with accurate English pronunciation, where first language interference and lack of feedback remain pressing issues (Rogti, 2025), while Pakistani undergraduates show distorted phoneme realization that reduces speaking accuracy (Sattar & Alghamdi, 2023).

These challenges are not confined to one region but appear globally. Spanish-speaking children, for instance, find vocabulary acquisition uninteresting and pronunciation particularly difficult when taught through traditional materials, yet their engagement increases significantly with holographic mobile applications (Cerezo et al., 2019). In Ecuador, the integration of the 4SkillsWeb app resulted in improved oral competence across pronunciation, grammar, and discourse management (Padilla et al., 2024). Likewise, speech recognition technology, augmented reality filters, and e-dictionaries have repeatedly been shown to provide immediate feedback and foster accuracy (Bashori et al., 2024; Rogti, 2025; Zhu et al., 2024; Sattar & Alghamdi, 2023). Collectively, these findings suggest that pronunciation and segmental challenges remain the most consistent linguistic obstacles, but they also affirm that technology-enhanced instruction can significantly narrow the gap when implemented systematically.

Psychological Factors and Affective Dimensions

A second major theme is the psychological dimension of speaking, particularly anxiety, fear of mistakes, and lack of confidence. Indonesian EFL learners frequently reported that their speaking anxiety, combined with limited vocabulary and grammar, reduced fluency and hindered classroom participation (Syamsudin et al., 2025; Simatupang et al., 2019). Chinese learners expressed similar concerns, with studies concluding that psychological barriers often outweighed purely linguistic difficulties (Amoah & Yeboah, 2021). Vietnamese students described their low confidence and poor nonverbal communication as additional factors that constrained performance (Thi & Hoang, 2020). Jordanian undergraduates (Saed et al., 2021) and Saudi students entering university (Ahmad, 2016) experienced similar struggles, often linked to traditional learning models that offered little motivation or authentic practice.

Solutions to psychological obstacles varied widely but were often centered on creating supportive, motivating, and engaging environments. Self-assessment practices increased confidence and autonomy among Ecuadorian Navy students (Mendoza & Avila, 2022). Enjoyable classroom practices such as music-based activities (Linh et al., 2020), poetry performance (Deepa & Ilankumaran, 2019), and TikTok voice-over challenges (Chuah & Ch'ng, 2023) enhanced both fluency and motivation. Digital platforms such as Clubhouse (Ebadi & Azizimajid, 2024), Alexa (Hsu et al., 2023), and conversational chatbots (Lee & Lim, 2023) also reduced anxiety by extending practice beyond the classroom and offering low-pressure environments for rehearsal. These findings reinforce the argument that affective variables cannot be separated from linguistic development and must be systematically addressed in pedagogical design.

Pedagogical Practices and Institutional Challenges

Pedagogical traditions rooted in grammar-translation and teacher-centered approaches continue to constrain speaking development. Studies from Indonesia, Iraq, Myanmar, and Bangladesh highlighted how such approaches limit communicative interaction, reduce learners' autonomy, and perpetuate reliance on drilling (Ihsan et al., 2025; Idham et al., 2024; Ulla, 2017; Eiten et al., 2019). In many cases, learners were deprived of authentic speaking opportunities, thereby reinforcing linguistic and psychological barriers.

Innovative pedagogical solutions addressed these gaps through the integration of multimodal practices and situated learning. Intralingual dubbing tasks were reported as highly motivating and effective for improving stress, intonation, and fluency (Baeyens, 2024; Sánchez-Requena & Navarrete, 2024). Audiovisual translation practices such as dubbing, voice-over, and audio description also enriched pragmatic competence and enhanced communicative effectiveness (Sánchez-Requena & Frumuselu, 2024). Virtual reality-based situated learning in Chinese classrooms provided authentic, interactive contexts for practice, resulting in gains across all oral skills and higher learner engagement (Yan et al., 2024).

Institutional and contextual studies also revealed how learners' needs differ across settings. Pre-service teachers in Indonesia struggled to integrate theoretical and pedagogical principles, highlighting the need for continuous professional development (Ihsan et al., 2025). Vocational and professional learners, such as marine pilots in Indonesia (Sari & Sari, 2020) and employees in multinational companies (Narzoles & Palermo, 2021), identified specific communicative needs tied directly to safety and workplace effectiveness. In community contexts, studies with migrant women in Spain showed how communicative agency is linked not only to language development but also to empowerment and social inclusion (Marrero-Aguilar, 2021). Taken together, these studies underscore the importance of aligning speaking pedagogy with institutional missions, learner identities, and real-world communication demands.

Technological Tools and Digital Innovation

One of the most prominent findings from the review is the central role of digital and AI-based technologies in reshaping speaking instruction. Mobile applications such as Fluency in English (Chen et al., 2025), 4SkillsWeb (Padilla et al., 2024), and OraApp (Simatupang et al., 2019) consistently improved fluency, vocabulary, and learner confidence. Asynchronous tools like Flip video discussions expanded speaking opportunities for Turkish high school learners, reducing anxiety while promoting peer feedback (Kaya & Ersanli, 2025). Digital storytelling through Toontastic created engaging collaborative environments for rural Malaysian students (Nair & Md Yunus, 2022).

Artificial intelligence introduced further possibilities. AI-enhanced self-regulated learning tools empowered Indonesian students to improve presentation skills and autonomy (Fitriati & Williyan, 2025), while speech-enabled corrective feedback technologies provided immediate, personalized support that reduced anxiety and enhanced performance (Shadiev et al., 2020). Other studies demonstrated the effectiveness of AI-integrated video drama applications (Hwang et al., 2024) and large language model-based games (Pituxcoosuvann et al., 2024). Even simple yet widely accessible platforms like YouTube (Saed et al., 2021), WhatsApp and Netflix (Syamsudin et al., 2025), and VoIP-based tools supported by wireless optimization (Mukti et al., 2025) contributed to significant speaking gains. Despite these successes, challenges such as technical glitches (Mudawy, 2025), limited digital literacy, and unequal access (Nithidechaiwarachok et al., 2022) highlight the importance of infrastructure and teacher training in ensuring equitable and effective integration.

Emerging Directions for Future Inquiry

Synthesizing the 52 studies reveals three major trajectories for future research and practice. The first is the principle of integration. Effective interventions often blended multiple approaches, such as combining pronunciation with content learning (Kanoksilapatham & Pariwatnanont, 2024), embedding ASR with peer correction (Rogti, 2025), and linking self-assessment with formative feedback (Mendoza & Avila, 2022). The second trajectory is the growing emphasis on learner agency and autonomy. Learners increasingly benefited from self-regulated learning supported by AI (Fitriati & Williyan, 2025), leveled conversational agents (Lee & Lim, 2023), and self-assessment frameworks (Mendoza & Avila, 2022), which positioned them not only as recipients but also as active participants in their learning process. The third trajectory is sustainability and empowerment. Research has moved beyond the classroom into workplaces, vocational training, and community contexts, emphasizing the long-term role of English speaking competence in professional advancement, safety, and social participation (Narzoles & Palermo, 2021; Sari & Sari, 2020; Marrero-Aguilar, 2021).

CONCLUSION

This systematic review of fifty-two studies on Speaking for Academic Purposes (2015–2025) demonstrates both the diversity and convergence of research in this field. Mixed-methods and quasi-experimental designs dominate, reflecting the effort to capture measurable outcomes while also considering learners' lived experiences. Geographically, the strongest concentration of studies is found in Indonesia and China, while many other regions remain underrepresented. Across contexts, recurring challenges cluster around four domains: linguistic limitations, particularly pronunciation; psychological barriers such as anxiety and low confidence; pedagogical constraints linked to teacher-centered practices; and technological obstacles including limited infrastructure and digital literacy.

A wide range of solutions has been tested, from AI-driven feedback and automatic speech recognition to multimodal practices such as dubbing, audiovisual translation, and virtual reality.

These interventions consistently enhanced fluency, accuracy, and motivation, especially when embedded in learner-centered approaches that encourage autonomy and collaboration. The most effective initiatives integrate technology with pedagogy and address both linguistic and affective dimensions of speaking.

Future research should give greater attention to the sustainability of interventions, expand investigations to less represented regions and learner populations, and strengthen theoretical integration, particularly through communicative competence and multiliteracies. By linking innovative methods with inclusive pedagogies, SAP research can continue to advance models of speaking instruction that prepare learners more effectively for academic and professional communication.

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