

Toward More Interactive Speaking Classes: Integrative Digital Approaches in English Language Teaching

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doi: 10.17977/um065.v6.i3.2026.14

Article history

Submitted: 14 February 2026

Revised: 17 March 2026

Accepted: 19 March 2026

Published: 11 April 2026

Keywords

Digital approaches

English language teaching

Interactive

Speaking classes

Abstract

This study investigates how digital technologies can enhance the effectiveness and interactivity of speaking classes in an EFL context at a state university. Despite the growing use of digital tools in language education, limited research has explored how integrative digital platforms simultaneously support engagement, peer interaction, and personalized feedback in Indonesian higher education speaking classes. Using a qualitative case study design, classroom observations and student interviews were conducted over eight weeks. The findings reveal that the integration of platforms such as Flipgrid, Zoom breakout rooms, and AI-supported pronunciation tools increased student motivation, facilitated peer collaboration, and created authentic speaking opportunities. At the same time, challenges related to digital literacy, device access, and internet connectivity were identified. This study contributes empirical insights into how integrative digital approaches can support interactive speaking pedagogy while highlighting contextual challenges in technology-mediated EFL classroom. The findings provide practical guidance for language educators seeking to design more engaging digital speaking environments.

1. Introduction

Speaking competency is commonly regarded as one of the most difficult abilities for EFL students, necessitating real-time language processing, fluency, accuracy, and confidence (Nguyen & Bui, 2022). Traditional speaking classes frequently restrict opportunities for authentic interaction and timely feedback, resulting in low student engagement (Hammett, 2021). Recent research suggests that digital integration can overcome these constraints by encouraging interactivity, autonomy, and meaningful oral practice (Bao & Du, 2023; Yeh et al., 2022). In countries like Indonesia, where English is a second language, there is an urgent need to investigate novel digital tools to improve speaking outcomes (Yunita & Santoso, 2022).

Digital technologies have provided new opportunities to improve EFL speaking learning. Flipgrid, Zoom breakout rooms, and AI-powered pronunciation tools allow students to practice speaking outside of the classroom (Pham, 2023; Puangpuni, 2023). Flipgrid, for example, has been found to increase students' desire to communicate, establish safe practice environments, and boost their confidence (Lim & Yunus, 2021; Robillos, 2023). Similarly, Zoom breakout rooms enable small-group cooperation and authentic peer contact in online classes (Edwards-Lane et al., 2021). Meanwhile, AI-powered applications provide tailored feedback on pronunciation and fluency, allowing learners to self-correct and track progress (Rakhman et al., 2023). Together, these tools show how integrative digital techniques might improve speaking outcomes in higher education (Yusri & Rahman, 2022; Cruzatty & Vélez Yanza, 2025).

Empirical research shows that digital storytelling, video discussion, and podcast integration improve EFL learners' speaking performance. For example, Bai et al. (2024) discovered that digital storytelling reduces speaking anxiety and promotes self-regulation, whereas Peng et al. (2025) showed that podcast-integrated speaking activities improve informal digital learning of English (IDLE). Similarly, asynchronous video platforms like Flipgrid have been associated with higher social presence and engagement (Yeh et al., 2022). These multimodal approaches not only provide authentic opportunities for speaking but also stimulate reflection and feedback, both of which are necessary for oral language development (Rahmawati et al., 2021; Alizadeh, 2024).

Despite these advantages, some obstacles remain in digitally mediated speech education. Many learners face poor internet connectivity, a paucity of gadgets, and unequal digital literacy (Hidayati & Saputra, 2022;

Nasution & Lubis, 2021). Teachers also have difficulty devising successful assignments that balance pedagogy and technology (Boonmoh et al., 2022). According to research in Indonesia, although learners are generally motivated, self-regulation and active involvement remain difficult to achieve. These findings highlight the significance of investigating how digital integration can be adjusted to local contexts to maximise efficacy while addressing access and pedagogical limitations (Cruzatty & Vélez Yanza, 2025).

The COVID-19 pandemic has driven the use of online speaking platforms, presenting both opportunities and challenges for post-pandemic education. Breakout rooms and asynchronous technologies have been shown in research to promote interactivity during remote learning, but fatigue, digital overload, and institutional support remain important challenge (Edwards-Lane et al., 2021). According to studies, graduates need sophisticated speaking skills to compete in global job markets, colleges must strategically integrate digital technologies into courses (Yunita & Santoso, 2022). As a result, investigating the sustained, integrated use of technologies, such as Flipgrid, Zoom, and AI pronunciation assistance in Indonesian higher education is both timely and necessary (Rakhman et al., 2023; Robillos, 2023).

Although previous studies have explored the use of individual digital tools such as Flipgrid or Zoom in language learning, limited research has examined how multiple digital platforms can be integrated simultaneously to support interactive speaking instruction in Indonesian higher education contexts. Most existing studies focus on single tools or short-term interventions, leaving a gap in understanding how combined digital environments influence learner engagement, peer interaction, and speaking development over time. Addressing this gap is important for designing sustainable technology-supported speaking pedagogy in post-pandemic EFL classroom.

Therefore, the study aims to investigate how the integrative use of digital platforms-Flipgrid, Zoom breakout rooms, and AI-supported pronunciation tools can enhance engagement, interaction, and speaking development among EFL students.

2. Method

2.1. Research Approach and Design

This study used a qualitative case study methodology to investigate how digital technologies can enhance engagement in speaking sessions in an EFL setting. A case study was chosen because it gives a thorough knowledge of classroom dynamics, learner experiences, and the pedagogical consequences of incorporating technology within a limited system (Creswell & Poth, 2018; Merriam & Tisdell, 2016).

2.2. Research Participants

The participants were 28 undergraduate students (20 females and 8 males) from the English Education Department at one of state university at Makassar, Indonesia, enrolled in a second-year speaking course. The age range was from 19 to 22 years old. They were selected through purposive sampling because they represented learners directly involved in digitally mediated speech instruction. The course lecturer also served as a collaborator, providing contextual and pedagogical insights. All students provided informed consent before participating, and the department's academic committee granted ethical clearance.

2.3. Instruments

Several instruments were used to gather rich and triangulated data: **Observation Checklist:** Used during classroom sessions to capture students' engagement, interaction patterns, and use of digital platforms. The observation checklist consisted of three main indicators: (1) student participation and speaking frequency, (2) interaction patterns between students and peers, and (3) the use of digital platforms during speaking activities. Each indicator was recorded using descriptive field notes and frequency counts during classroom observations.

Interview Guides: Semi-structured interview protocols for both students and the lecturer to explore their perceptions, challenges, and experiences. The interview protocol consisted of open-ended questions designed to explore students' perceptions of digital speaking activities, their experiences using digital tools, and perceived changes in speaking confidence and participation.

Document Analysis Sheet: A tool to analyze course materials, students' Flipgrid video submissions, and lecturer feedback.

2.4. Data Collection Procedure

The data collection process lasted 8 weeks and was conducted as part of the university's speaking course. At the outset, authorization and ethical clearance were obtained from the faculty, and the students were informed about the research aim, procedures, and voluntary participation. Classroom observations were then

conducted across sixteen sessions, with the researcher acting as a non-participant observer. An observation checklist was used to record interaction patterns, participation in digital platforms such as Flipgrid and Zoom breakout rooms, and students' spoken performance. This step offered contextual information about how digital integration influenced classroom dynamics.

Students' speaking improvement was observed through changes in speaking participation, length of oral responses, vocabulary variety, and fluency patterns during recorder Flipgrid submissions and classroom speaking activities.

Following the observations, semi-structured interviews were performed with twelve students chosen to reflect a range of competency levels and digital literacy skills. The interviews focused on students' impressions of interactivity, the obstacles they encountered, and their evaluations of digital alternatives. Furthermore, an in-depth interview with the lecturer provided a pedagogical viewpoint on instructional design and student engagement. To supplement the findings, relevant course materials, including lesson plans, student video uploads, and lecturer feedback, were examined. The combination of observation, interviews, and document review increased data richness and provided for a more comprehensive knowledge of the topic under investigation.

The interviews followed a semi-structured format. Sample interview questions included: (1) How do digital platforms such as Flipgrid or Zoom affect your willingness to speak English? (2) What challenges do you experience when using digital tools for speaking activities? (3) Do you feel that these tools help improve your speaking confidence or fluency? Why? (4) How useful is peer or lecturer feedback provided through digital platforms?

2.5. Data Analysis

All data from classroom observations, interviews, and document reviews were analyzed using thematic analysis (Braun & Clarke, 2021). The process began with repeated reading of transcripts and observation notes to achieve data familiarization, followed by the generation of initial codes that captured key patterns. These codes were then grouped into categories and refined into broader themes aligned with the research objectives. To enhance trustworthiness, multiple data sources were triangulated, member checking was conducted with selected participants, and peer debriefing was conducted with a fellow researcher. This iterative and systematic approach ensured that the findings reflected both the participants' voices and the contextual realities of digitally mediated speaking classes (Lincoln & Guba, 1985).

To ensure coding reliability, the initial codes were reviewed by a second researcher familiar with qualitative analysis. Any discrepancies were discussed until consensus was reached, strengthening the credibility and dependability of the thematic interpretation.

3. Results and Discussion

Four main themes emerged from document reviews, interviews, and classroom observations that show how digital tools affected the interactive nature of the university's speaking classes. Increased motivation and engagement, improved peer connection and collaboration, genuine speaking opportunities, tailored feedback, and difficulties with digital literacy and accessibility are among these themes.

3.1. Enhanced Engagement and Motivation

One of the study's most notable findings was that using digital tools in speaking classes increased student motivation. Speaking in English in person frequently made many students nervous, but using digital platforms gave them a sense of security and control. "When I record my video, I feel more relaxed and want to try again until it sounds better," one student said, recalling how shy they used to be in class (Student 7, Interview). After practicing online, students who had previously been silent were more inclined to participate in conversations, as evidenced in the observation notes.

Because it lets students record, re-record, and modify their work before sharing it with their peers, Flipgrid was recognized as a motivational tool. "I like Flipgrid because I can prepare and repeat my video," one student wrote. I feel more comfortable speaking in front of the class because of it (Student 5, Interview). In a similar vein, document analysis of Flipgrid video uploads revealed a steady increase in speech length and complexity over the eight-weeks, demonstrating both skill development and motivation.

To increase participation, Zoom breakout rooms were crucial. Students believed that speaking in front of a large number of people was less stressful in smaller group settings. Student 12 thought, "I feel more comfortable talking in breakout rooms. It is not a large test, but rather a casual chat with friends. These answers demonstrate how digital platforms promoted increased participation by offering synchronous and asynchronous environments that catered to various learning styles.

Overall, students' desire to participate in speaking activities was much enhanced by the combination of synchronous contact (via Zoom breakout rooms) and asynchronous practice (using Flipgrid). Compared to sessions that relied solely on traditional means, observational evidence showed that classroom energy levels were higher during sessions that used digital platforms.

3.2. Enhanced Peer Interaction and Collaboration

Students complained that speaking sessions were frequently teacher-centered before digital tools were introduced, with little opportunity for student voices to take center stage. However, Flipgrid's peer feedback systems and breakout spaces changed this dynamic.

Students frequently reported that in smaller digital settings, peer collaboration felt simpler and more natural. According to one participant, "I do not feel so nervous in breakout rooms because there are only a few friends there and we can talk more freely" (Student 11, Interview). "I like it when we comment on each other's Flipgrid videos," said another. My friends are kind when they give me advice, and it helps me get better (Student 16, Interview). Students in breakout rooms tended to talk for longer periods of time than in the real-time classroom interaction, according to observation data.

Flipgrid's asynchronous structure also promoted more deliberate peer review. Before leaving comments, students frequently rewatched their peers' videos, which led to more thoughtful and helpful responses. Student 20 stated, for example: "I wanted to give helpful advice, so I watched my friend's video three times before giving feedback." Peer feedback logs were analyzed, and the comments included constructive criticism (e.g., "Try speaking slower to make it clearer") as well as praise (e.g., "Great effort, your pronunciation is improving!").

The sense of community among students was strengthened by this collaborative culture, which reduced emotions of loneliness often associated with online or technology-mediated learning. The professor also noticed that students were supporting one another emotionally and academically, indicating a significant increase in peer participation. According to the results, digital tools improved language practice and fostered a positive learning atmosphere in the classroom.

3.3. Realistic Speaking Possibilities and Personalized Responses

The fact that digital integration gave students additional opportunities to practice speaking and receive tailored feedback was another important discovery. The ability to prepare and re-record Flipgrid contributions was valued by students, as it more accurately reflected real-life speaking scenarios than classroom practice dialogues. According to Student 3, "I can check my mistakes and try again when I record on Flipgrid. I can not repeat like that in class.

Greater self-reflection was prompted by the ability to self-monitor before submission. Many students reported that this technique increased their awareness of their vocabulary, pronunciation, and fluency. This was corroborated by observational data showing that students gradually began using a wider variety of words and expressions. According to one document study, a student who first submitted extremely brief Flipgrid recordings went on to create larger, more cohesive narratives with fewer pauses.

Additionally, AI-powered pronunciation aids were thought to be quite beneficial. Comment from Student 15: "The AI software alerts me when I mispronounce words. It makes my speech clearer.' These technologies' instantaneous corrective feedback was greatly appreciated, as it enabled students to recognize and correct mistakes on their own. In contrast, lecturer feedback on Flipgrid assignments was more customized since the instructor could pay close attention to each entry and offer pertinent criticism.

All of these results suggest that digital tools promoted authenticity by mimicking real-world speaking activities and facilitating more insightful, tailored feedback. The learners' communication skills were enhanced by this mix of independence and direction.

3.4. Difficulties with Accessibility and Digital Literacy

Although the results were generally encouraging, several issues surfaced that reduced the effectiveness of digital integration. Students' differing degrees of digital literacy were a major problem. Some users had trouble using the platform's basic functionality, including submitting videos and using the feedback section. As Student 9 acknowledged, "I get anxious sometimes when I do not know how to submit my video." These challenges occasionally led to decreased trust in technology and delays in completing work.

Infrastructure-related issues, namely device availability and internet access, posed another difficulty. Student 2 clarified: "My speaking test is disrupted, and I feel let down if the internet is slow." Technical difficulties disrupted group discussions or stopped students from uploading their work on time in multiple

sessions, according to observational notes. Students who relied on mobile data instead of dependable Wi-Fi connections were more likely to experience these issues.

Additionally, students who spent a lot of time on screens reported feeling digitally exhausted. Student 18 thought: "I feel exhausted and less attentive after spending a lot of time on Zoom. There are moments when I simply want to return to my regular classes." This demonstrates that although digital platforms offer flexibility, when not balanced with offline activities, they can also lead to cognitive overload and diminished attention.

Lastly, the lecturer and the students underlined the importance of institutional support in tackling these issues. "Some students lack devices or training," the speaker noted. The institution ought to offer more facilities and workshops. These results highlight the necessity of proper infrastructure, training, and governmental support for digital initiatives to be egalitarian and sustainable.

3.5. Motivation and Engagement

The present study demonstrates that in EFL classrooms, digital technologies can dramatically increase student motivation and lower speaking fear. Students' opinions on Flipgrid's value in boosting self-esteem align with those of Almusharraf and Khahro (2020), who found that asynchronous digital technologies lower learners' affective filters by enabling repeated practice. Similarly, Liu and Chu (2023) contend that technology-mediated speaking exercises provide students with a "buffer zone" in which they can practice and observe themselves before giving a presentation to an audience. This lends credence to the idea that digital settings help overcome psychological obstacles related to spoken performance in addition to promoting language proficiency.

A sense of control over the learning process was also associated with motivation. Students took an active role in directing their own development by re-recording their Flipgrid videos. This is consistent with the findings of Sari and Wahyuni (2021), who discovered that greater learner investment is facilitated by autonomy in digital practice activities. Arndt and Woore (2022) also stress that fluency and confidence are increased via repetition in multimodal settings. Students in this study cited the chance to "try again" as a key source of motivation, indicating that agency and autonomy are important considerations when creating speaking tasks that are mediated by digital media.

By demonstrating that synchronous tools, such as Zoom breakout rooms, also contributed to motivation by reducing the pressure of speaking in front of large groups, the study also advances ongoing discussions. Students characterized breakout rooms as "safe spaces" that helped them feel less anxious. Similar results in Indonesian contexts are reported by Oktaviani and Desiarti (2022), who demonstrate that shy learners are more likely to participate in smaller online speaking groups. Therefore, the data from this study emphasize that synchronous and asynchronous platforms work together to form a complete motivational framework: synchronous tools encourage real-time engagement in low-stress settings. In contrast, asynchronous tools help people build confidence through private practice.

3.6. Peer Interaction and Collaboration

Additionally, the results show that digital tools improved peer contact and collaboration, changing the teacher-centered classroom dynamics to a student-centered one. This is consistent with Vygotsky's (1978) sociocultural theory, which emphasizes the role of social interaction in language development. According to recent empirical research, online collaborative spaces encourage knowledge co-construction by removing the teacher's authority (Mercer & Howe, 2022). Zoom breakout rooms and Flipgrid peer feedback, which offered controlled yet adaptable chances for contact, were key factors in the current study's high peer collaboration.

Active engagement was especially encouraged in breakout rooms. In smaller groups, students were more at ease expressing themselves, consistent with Choi and Lee's (2021) findings that students are better able to negotiate meaning in digital micro-environments. Additionally, observational data showed that students conversed for longer periods in breakout rooms than in in-class discussions. The current study adds to this body of literature by demonstrating how synchronous breakout rooms and asynchronous peer review combine to produce a feedback loop in which students work together in real time and then provide thoughtful comments on their recorded contributions.

The collaborative environment on Flipgrid was further improved via peer feedback. Before leaving a comment, students frequently rewatched their peers' videos, which led to thoughtful and helpful recommendations. According to Shadiev and Yang (2020), asynchronous peer contacts promote greater intercultural awareness and critical reflection, both of which were demonstrated in this study. Students who characterized their class as "more connected" when using digital tools supported Bervell and Arkorful's (2020) assertion that digital peer feedback can enhance learning communities in online higher education. These results imply that technology-enhanced cooperation fosters supportive learning communities, which are necessary for long-term engagement, and also improves speaking practice.

3.7. Authentic Speaking Opportunities and Personalized Feedback

This study also makes a significant contribution by showing how digital integration facilitates real-world speaking chances and tailored feedback. As Richards (2020) argues that authenticity is a fundamental component of successful ELT practice, students highlighted that Flipgrid enabled them to replicate authentic communicative tasks. Students engaged in a process akin to preparing for social or professional communication outside the classroom by recording and editing their own speech. Similarly, Sun and Chen (2022) note that multimodal technologies help students engage in speaking activities that mimic real-world situations, bridging the gap between classroom instruction and real-world application.

Additionally, tailored feedback was essential for developing communicative ability. Many students appreciated the instantaneous corrected feedback that came with using AI-powered pronunciation tools. This result is consistent with Godwin-Jones (2021), who emphasizes the use of AI to provide tailored language learning assistance. In the current work, a dual-feedback system that reinforced learning was created by combining lecturer and AI feedback.

Compared with in-class corrections, lecturers' Flipgrid submission comments were seen as more focused and considerate. According to Chen et al. (2020) and Hockly (2021), educators can offer more detailed, individualized feedback in asynchronous digital environments. In this instance, this was clear, as the instructor could listen to the students' work several times before providing in-depth feedback. Peer, AI, and teacher feedback work together to create a multi-layered feedback environment that optimizes learning. This idea is further supported by Yang (2023), who contends that hybrid feedback models, which combine human and artificial intelligence, are especially useful for language acquisition in higher education. As a result, the study shows that learners can receive personalized guidance and authentic practice through integrated digital approaches, which is challenging to accomplish in conventional classroom settings.

3.8. Challenges in Digital Literacy and Accessibility

Notwithstanding the favorable results, the study identified significant obstacles related to internet connectivity, device access, and digital literacy. Adedoyin and Soykan (2020), who stress that the global move to online learning highlighted profound disparities in access to technology, agree with these impediments. Similar issues have been raised in Indonesia by Nugroho et al. (2021), who contend that digital learning programs may be hampered by inadequate infrastructure. Students in this study who relied on mobile devices or had unstable internet connections frequently encountered disruptions, which had a detrimental impact on their confidence and involvement.

Another important issue that surfaced was digital literacy. As Bond et al. (2021) emphasize, digital skills are a crucial driver of successful technology integration, and some students found it difficult to use fundamental platform functionalities. Even easy-to-use instruments can cause worry and irritation if they are not properly trained. Students' complaints of uncertainty and bewilderment when using new platforms demonstrated this, highlighting the importance of continuous digital skill development.

Digital tiredness was another issue, especially after using Zoom for extended periods of time. Following lengthy online sessions, students reported feeling fatigued and having trouble focusing. This result is consistent with research by Moorhouse and Wong (2022) and Martín-Martínez and Rodríguez-García (2023), which shows that prolonged cognitive internet use can cause cognitive strain. Digital technologies improve communication, but if they are not balanced with offline activities, they can also lead to burnout.

These difficulties highlight the need for more institutional assistance. Bervell and Arkorful (2020) contend that, in addition to educational innovation, administrative and infrastructure dedication are also necessary for successful digital integration. The study's instructor also emphasized the necessity of training and seminars, reaffirming the notion that colleges and institutions need to be proactive in promoting diversity. In a similar vein, Yang (2023) highlights policy-level measures to ensure fair access. Therefore, even if digital techniques have the potential to be revolutionary, systemic support that accounts for both the technical and human aspects of learning is necessary for their effectiveness.

3.9. Implications

The study's conclusions have a number of practical ramifications for teaching English in higher education. First, balanced chances for reflective speaking practice and real-time interaction can be created by combining synchronous platforms like Zoom breakout rooms with asynchronous tools like Flipgrid. Second, using pronunciation tools with AI help can offer quick, personalized feedback that enhances teacher input. Third, lecturers ought to create organized digital speaking exercises that promote peer communication and helpful criticism. Lastly, in order to guarantee that every student may profit from technology-mediated learning settings, educational institutions should encourage digital integration by offering sufficient infrastructure, training courses, and device access.

3.10. Limitations

When evaluating the results, it is important to take into account the many limitations of this study. First, the study was carried out in a single speaking class at a single Indonesian institution, which would restrict how broadly the findings can be applied. Second, the eight-week study period may not have adequately captured the long-term effects of digital integration on speaking development. To give more comprehensive data on the efficacy of digital speaking pedagogies, future research might use mixed-method approaches and involve several universities.

4. Conclusion

This study investigated how digital tools can improve the efficiency and engagement of speaking lessons in an EFL setting. Results showed that Flipgrid, Zoom breakout rooms, and AI-powered pronunciation apps significantly increased students' motivation, fostered peer collaboration, and provided real-world speaking opportunities with tailored feedback. However, problems including low levels of digital literacy, erratic internet availability, and unequal device access brought to light enduring obstacles that need to be overcome in order to realize the potential of technology-mediated learning fully. Overall, the study emphasizes how technology can enhance speaking pedagogy by fostering autonomy, engagement, and communicative competence when carefully incorporated. However, for implementation to be successful, institutional support in the form of infrastructure, training, and inclusivity is just as important as pedagogical innovation. To make sure that technology facilitates rather than hinders English language instruction, future studies should look at the long-term effects of digital integration on oral proficiency and explore ways to remove obstacles to fair access.

Author Contributions

Farida contributed to the conceptualization of the study, data collection, and preparation of the original manuscript draft. Supardi is responsible for methodology development, data analysis, and validation of the research findings. Andi Adisaturrahimi contributed to supervision, project administration, and critical review and editing of the manuscript. All authors discussed the results, contributed to the interpretation of the findings, and approved the final version of the manuscript.

Funding

This research was funded through self-funding by the authors. The authors independently supported all research activities, including data collection, analysis, and manuscript preparation. No external financial support was received from any funding agency, commercial organization, or institution.

Declaration of Conflicting Interests

The authors declare that there are no conflicts of interest regarding the publication of this article. The research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Data Availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request. The datasets include interview transcripts, observation notes, and supporting documents collected during the study. All data have been anonymized to protect participants' confidentiality.

Declaration on AI Use

The authors declare that artificial intelligence (AI) or AI-assisted tools were used only for language editing and readability improvement under human supervision.

Acknowledgement

The authors would like to express their sincere gratitude to the students and lecturers of the English Education Department who participated in this study. Their cooperation and valuable insights greatly contributed to the completion of this research.

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