

## REVIEW

# Technology Integration to Enhance the Speaking Proficiency of English Language Learners: A Systematic Review

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**Abstract:** English language proficiency, particularly speaking, is essential for learners to engage meaningfully in the language classroom. This article reports review results from research published between 2019 and 2025 (n = 15) on the perceptions and experiences of English language learners regarding the influence of mobile technology integration on speaking proficiency. We downloaded articles from established databases, search engines, and journals to conduct thematic synthesis, drawing on the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) framework to identify themes. Review results indicated that learners across contexts reported an improvement in their language proficiency when mobile technology was integrated into speaking practice. Although there were challenges, such as technical, socio-emotional, quality, and voice-recognition issues, the strategies learners used proved effective. Similarly, upon reviewing the methodological trends concerning this issue, it was found that mixed methods were predominantly used as the research approach, interviews were employed for data collection, and thematic analysis was utilized to analyze the data. The findings guide practitioners and policymakers in developing classroom strategies, teaching-learning approaches, and mobile technology policies that support the improvement of learners' speaking proficiency.

**Keywords:** English language learners, English speaking proficiency, mobile technology integration, speaking skills, technology in speaking skills

## 1 Introduction

Today, in this globalized world, it is essential for individuals to communicate effectively in English across academic, professional, and social settings. However, speaking is one of the most challenging skills to excel in an English as a second language (ESL) and/or English as a foreign language (EFL) context, due to its demands for real-time processing, pronunciation accuracy, and communicative fluency (Hinkel, 2020). Notably, exposure to an English-speaking environment enhances learners' speaking proficiency; however, EFL and ESL learners often lack such opportunities. In contemporary times, technology integration has undoubtedly brought significant transformation to language education, especially in the speaking proficiency of English language learners, as it provides opportunities to interact with and learn from English speakers. The availability and accessibility of a wide range of digital tools, such as language learning applications, virtual classrooms, and speech recognition software, have given learners numerous opportunities to learn, practice, and improve their speaking skills (Lavidas et al., 2022).

Similarly, mobile technology has become an integral component in academia. Both teachers and students require digital literacy to engage meaningfully in day-to-day activities, from personal to professional settings. Chan and Law (2021) define mobile technology as technology that includes components such as computing devices, networking technologies, and communication devices, and that can be carried by the user anywhere. When we integrate this mobile technology into education, we consider devices that allow both students and teachers to interact on the spot or later, in person, keeping them engaged and interested in the learning process (Bernacki et al., 2020). From the definitions, we can see that mobile technology involves mass media, wireless internet, and portable telephones.

In the traditional classroom, students are meant to sit at a desk in a set, fixed setting required for learning, but mobile learning gives learners the flexibility to continue their learning in places

they find comfortable, with no fixed setting (Lavidas et al., 2022). In the same way, Benek (2025) stated that when technology is integrated into learning, it provides opportunities for various learning styles and choices. Learners have multiple digital tools, learning methods, and strategies to choose from, tailored to their individual needs. Research by Lin and Lin (2019) found that mobile-assisted language learning (MALL), one of the technology-integrated language learning methods, has been beneficial for learners in improving their vocabulary and overall language learning (Yirci et al., 2023).

Regarding students, they primarily view technology in English language learning positively. Benek (2025) has certain concerns about ethical issues (Majid & Salam, 2021). A recent study by Majid and Salam (2021) reaffirms that learners were thankful for the technological facilities that supported writing, research, and personalized learning. These learners use various digital tools and online applications, such as mobile apps (Lin & Lin, 2019) and Augmented Reality (AR) apps (Majid & Salam, 2021), to improve their language learning and speaking skills.

However, challenges arise regardless of the benefits of technology integration (Karakose et al., 2022). In the context of Nepal, the research by Shrestha (2011) and Shrestha (2016) suggests that several Information and Communication Technology (ICT) tools are beneficial for both educators and learners to access appropriate online resources. At the same time, the digital divide poses challenges for teachers and students, particularly a lack of technological infrastructure, mismatches in application skills, and weak internet connections in rural areas. Similarly, Artificial Intelligence (AI) cannot be overlooked in today's technology discussions, which are also emerging in Nepal's education sector. As mentioned by Neupane et al. (2025), AI tools have been effective in developing the learners' pronunciation, vocabulary, and grammar by providing quick feedback. Despite the need for learning, challenges such as a lack of digital literacy, inadequate infrastructure, ethical issues, and teacher training exist, particularly in Nepal (Ghimire et al., 2024; Ghimire & Neupane, 2024; Neupane et al., 2025).

It is imperative to understand how technology integration has affected language learning, particularly speaking skills, among English learners through their perceptions, challenges, and strategies. When learners and educators are aware of these aspects of technology integration in speaking skills, they will be better equipped to use it effectively and avoid obstacles to improving their oral communication skills. A search across various databases, search engines, and scholarly journals revealed a scarcity of research on technology integration in language learning from learners' perspectives (Karakose et al., 2023).

Though a substantial number of articles have learners' voices on the issue in different countries around the globe, it is evident. From this scenario, we can see the need to explore and conduct research to understand how language learners perceive and share other aspects of technology integration. The findings from these studies will not only provide insights into this issue but also present the reality from the learners' view so that the learners, educators, curriculum designers, and policy makers can make plans, intervene with policy and practice changes, and work as per the need to enhance the speaking proficiency of English language learners. This review examines the impact of mobile technology integration on English language proficiency, encompassing learners' perceptions, its use, strategies, challenges, and needs.

As this study aims to explore the perceptions and experiences of English language learners concerning mobile technology integration influencing proficiency, the following research questions guide this study:

- (1) How has the use of mobile technology influenced the development of English language learners' speaking proficiency?
- (2) What methodological trends have been used in different research?

## 2 Methods

In this study, we adopted the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA, 2020) approach as our method of inquiry. The PRISMA 2020 approach has been updated from its original 2009 statement to this comprehensive framework for reporting systematic reviews and meta-analyses (Page et al., 2021). In the same article, they also state that this updated version provides revised reporting guidelines for systematic reviews, which emphasize improving selection, evaluation, synthesis, and reporting of findings. The PRISMA statement (n.d.) outlines the core structure of the PRISMA 2020 approach, focusing on transparency in reporting systematic reviews. This PRISMA 2020 statement paper includes a description of how reporting guidelines were developed, a 27-item checklist, an expanded checklist with an abstract checklist, and a template for flow diagrams for original and updated

reviews (Page et al., 2021).

Following the PRISMA (2020) guidelines, we have included empirical articles originally written in English that address the integration of mobile technology into speaking skills and consider learners’ voices, published between 2019 and 2025 in peer-reviewed journals. The articles focused solely on teachers’ perspectives were excluded, along with those that covered all aspects of language learning, not just speaking skills. Even articles published before 2019 were on the exclusion list, and review papers, book chapters, and conference proceedings were removed during screening. The keywords we used for searching relevant articles for this review were "mobile technology integration," "speaking skills," "English language learners," "English speaking proficiency," and "technology in speaking skills." The databases and search engines we utilized for downloading these scholarly articles included Semantic Scholar and ERIC. Additionally, we sought the assistance of ChatGPT to compile a list of articles and accessible links relevant to Nepal’s context.

The PRISMA flow chart in Figure 1 outlines the inclusion and exclusion criteria for articles considered for this review, as well as the number of articles reviewed at each stage. Initially, we downloaded 65 articles: 36 from Google Scholar, 24 from Semantic Scholar, 2 from ERIC, and 3 from NELTA and Nepal Journals Online (Nepjol). After a quick scan of the surface, 14 articles were removed as duplicates. While screening the title and abstract, 19 articles were further excluded for focusing on language learning rather than speaking skills, or for being review articles or published before 2019. Among the 32 articles selected for full screening, 17 articles were excluded because they focused solely on teachers’ perspectives and teaching, rather than learning and learners’ perceptions and experiences. Finally, 15 articles were selected for the thematic review after the inclusion and exclusion process.

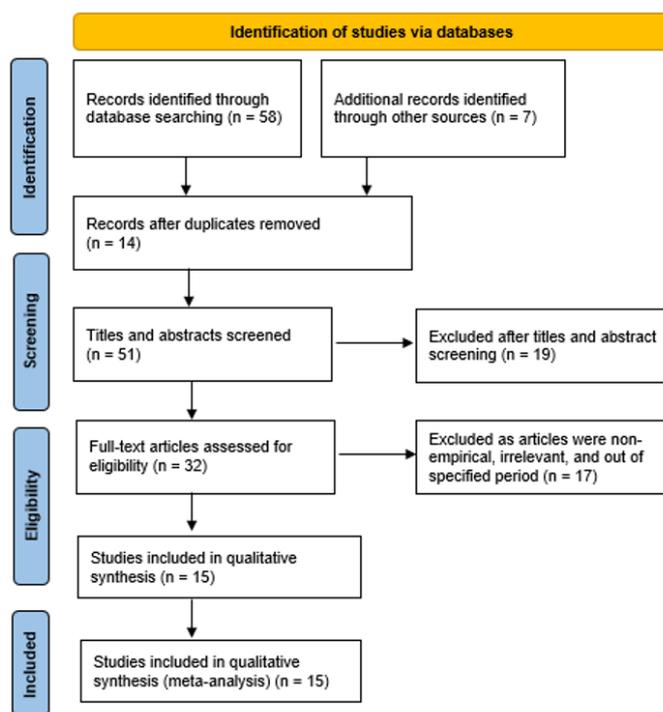


Figure 1 PRISMA Flow Chart

Similarly, Table 1 provides a clear overview of the selected 15 articles for this systematic review, including the year distribution between 2019 and 2025, context, participants with educational levels, research design, data collection tools, and data analysis, focusing on learners’ voices regarding the influence of mobile technology integration on English oral communication proficiency. As can be seen, these 15 articles were published in different years: 2019 (n = 1), 2021 (n = 2), 2023 (n = 7), 2024 (n = 4), and 2025 (n = 1). Similarly, these articles are from diverse contexts: China (n = 1), India (n = 1), Indonesia (n = 2), Kazakhstan (n = 1), Malaysia (n = 1), Nepal (n = 4), Rwanda (n = 1), Thailand (n = 1), Vietnam (n = 2), and Yemen (n = 1). We prepared a detailed table, including thematic concentration, categories, influencing factors, findings, methodology (site, participants, data collection, and data analysis), and remarks, as raw data, for the data analysis. After an in-depth review, data coding was conducted for these 15 articles to support further data analysis. Then, those extractions were compared, contrasted,

and synthesized to identify themes (thematic trends that answered the first research question) and methodological trends (which answered the second research question).

**Table 1** Perceptions and Experiences of EFL Learners on Mobile Technology Integration to Enhance Speaking Proficiency

| S.N. | Title  | Year | Context    | Participants  | Research Design               | Data Collection   | Data Analysis  |
|------|--|------|------------|---|-------------------------------|---|--|
| 1    | Students' Perspectives on Technology Integration in ELT  | 2019 | Nepal      | 6 groups of students from the public secondary schools  | qualitative research design   | focus group discussion  | thematic analysis  |
| 2    | The Use of Technology in Informal English Language Learning: Evidence from Yemeni Undergraduate Students   | 2021 | Yemen      | 110 undergraduate students of English Departments in two universities                           | mixed methods research design | Interview for qualitative data and questionnaire for quantitative data  | thematic analysis of qualitative data & descriptively analysed using SPSS of quantitative data     |
| 3    | Integrating Technology into English Language Teaching in Nepal: Student and Teacher Perspectives   | 2021 | Nepal      | 8 teachers and eight students from four secondary schools                                       | Qualitative research design   | semi-structured interviews  | thematic analysis  |
| 4    | Empowering Gen Z: Enhancing English Speaking Skills Through Technology and Authentic Communication   | 2023 | Indonesia  | Gen Z   | Mixed Method                  | surveys and qualitative interviews  | thematic analysis  |
| 5    | An Action Research to Improve Speaking Skills of English Language Learners Through Technology-Mediated Language Learning   | 2023 | Rwanda     | 30 participants aged 13-16; not proficient in speaking English                                  | Action Research               | Reconnaissance, observations, and teachers' interviews  | For quantitative: SPSS paired sample T-Test & content analysis; For qualitative: thematic analysis |
| 6    | EFL Tertiary Students' Perception and Practice with Language Learning Beyond the Classroom: The Case of Vietnam  | 2023 | Vietnam    | 200 second-year students from two majors (English language studies & English language teaching) | mixed method design           | questionnaires and semi-structured interviews   | thematic analysis of qualitative data & SPSS used for quantitative data                            |
| 7    | English Proficiency Aspirations Among Nepalese EFL Students  | 2023 | Nepal      | 24 master's level EFL students from four constituent campuses of Tribhuvan University           | Qualitative research method   | interview   | Thematic approach  |
| 8    | The Educational Use of YouTube Videos in Communication Fluency Development in English: Digital Learning and Oral Skills in Secondary Education                               | 2023 | Kazakhstan | 288 Secondary Education students  | mixed-methods study           | questionnaire   | SPSS, descriptive  |
| 9    | AI Technology Using as a Tool for Enhancing University Students' English Speaking Skills: Perceptions and Practices  | 2023 | China      | undergraduate courses of Shaanxi University; 27 male participants & 83 female participants      | Mixed research design         | Speech recognition and machine learning; Questionnaire; Interview   | descriptive statistical analysis; SPSS   |
| 10   | Developing Learners' English Speaking Skills Using ICT and AI Tools  | 2023 | India      | 100 students in the 7th grade at an Indian school   | Quantitative research design  | Experiment  | Likert scale   |
| 11   | Vlogging: An Alternative to Role-Play in Improving EFL Learners' Conversation Skills   | 2024 | Thailand   | Seventy-six: 35 in role play and 35 in vlogging   | quasi-experiment              | Mixed methods: pre-, mid-, and post-treatment speaking tests (i.e., oral interviews with the researcher), comparative analyses of weekly role-play and vlogging performances, and teacher and student questionnaire surveys | comparative analysis   |
| 12   | Using Flipgrid Videos to Enhance Speaking and Presenting in English for Non-Native Learners  | 2024 | Vietnam    | 40 Japanese students  | mixed method design           | questionnaires and interviews   | content analysis   |
| 13   | Exploring the Benefits and Challenges of Social Media in English Language Learning: Insights from English Education Students   | 2024 | Indonesia  | English Education program at STKIP YDB Lubuk Alung  | mixed-methods research design | questionnaires and interviews   | Thematic analysis  |
| 14   | Behavioral Intention of Chinese College Students Use Social Media to Improve English Speaking Skills: Based on the Technology Acceptance Model and Self-Determination Theory | 2024 | Malaysia   | 140 students from the school of media at a public university in China                           | Quantitative research design  | survey  | SPSS software  |
| 15   | English Teachers' Knowledge of Using ICT in English Language Teaching in Nepal   | 2025 | Nepal      | 222 secondary-level English teachers  | Qualitative                   | cross-sectional survey design; structured survey questionnaire  | Descriptive statistics   |

### 3 Findings and Discussion

In this section, we address both the research questions we identified in the introduction, which were extracted following the data analysis process. Analysis of the articles revealed three themes regarding English language learners' perceptions and experiences of mobile technology's influence on speaking skills, addressing the first research question. The last theme indicated methodological trends, answering the second research question.

#### 3.1 Learner-Perceived Influence of Mobile Technology on Speaking Skills

As we review these articles, learners are generally positive about the influence of mobile technology integration on enhancing speaking skills. [Madhavi et al. \(2023\)](#) and [Nguyen \(2024\)](#) found that learners who used YouTube and Flipgrid improved their speaking fluency and reduced their speaking anxiety. Similarly, participants in the action research conducted by [Mahmood et al. \(2023\)](#) in Rwanda reported that technology-mediated practice supported improvements in speaking fluency. Even students in Thailand involved in vlogging activities reported an increase in their confidence level during oral communication ([Choi & Sinwongsawat, 2024](#)). When AI-powered tools, such as speech correction apps, grammar applications, and Duolingo, were used by learners from India, Vietnam, and Kazakhstan, they noted better pronunciation quality and self-correction abilities ([Madhvi et al., 2023](#); [Nguyen, 2024](#); [Toluzhan et al., 2023](#)).

Similarly, authentic communication opportunities, such as online language exchange, role-play activities, and social media platforms, provided students with real-time speaking practice, which they valued ([Bin-Hady & Al-Tamimi, 2021](#); [Sumartono, 2023](#); [Wati et al., 2024](#)). In the context of learners and technological tools, students experienced improvements in specific skills. The use of mobile technology tools led to enhancements in Indian students' vocabulary and grammar ([Madhavi et al., 2023](#)), Vietnamese learners' accent reduction and pronunciation correction ([Nguyen, 2024](#)), and, particularly, vlogging supported content development and creative expression for Thai students ([Choi & Sinwongsawat, 2024](#)).

#### 3.2 Learner-Identified Challenges in Mobile Technology-Enhanced Speaking Practice

When there are benefits, there are challenges as well regarding the implementation of mobile technology in English language teaching and learning. As concluded in studies of Nepal, Vietnam, and Indonesia, common barriers to this approach include poor internet connections, distractions, limited infrastructure, and a lack of mobile technology skills ([Adhikari, 2021](#); [Nguyen, 2024](#); [Wati et al., 2024](#)). Adding to this claim, [Nguyen \(2024\)](#) and [Wang et al. \(2023\)](#) share learners' frustration with video-based platforms due to technical issues with editing and uploading, as well as poor AI pronunciation recognition.

Similarly, Indonesian students experienced fluctuations in motivation ([Wati et al., 2024](#)), and Malaysian students struggled with time management when using social media ([Ding & Sazalli, 2024](#)). [Choi and Sinwongsawat \(2024\)](#) found that content quality was a concern for students as they worked on creating their speaking materials. Regarding socio-emotional challenges, [Madhavi et al. \(2023\)](#) noted that Indian students faced fear, social anxiety, and shyness during the integration of technology into oral practices. Although concerned about the new advancement, undergraduate students in China are skeptical that AI tools will fully replace face-to-face teaching ([Wang et al., 2023](#)).

#### 3.3 Learner-Developed Strategies for Mobile Technology-Enhanced Speaking

After identifying the issues, EFL learners from different countries employed various strategies to overcome their speaking challenges. Learners used multiple digital platforms to address their oral difficulties, combining formal learning apps (such as Duolingo) with informal platforms (YouTube and social media), as highlighted by [Bin-Hady and Al-Tamimi \(2021\)](#) and [Madhavi et al. \(2023\)](#). Some students from Indonesia and Thailand employed collaborative strategies to practice their communication skills, including online language exchange ([Sumartono, 2023](#)) and Vlogging projects ([Choi & Sinwongsawat, 2024](#)). The studies concluded that other strategies employed by EFL learners were socio-emotional coping techniques ([Madhavi et al., 2023](#)), motivational self-regulation strategies ([Wati et al., 2024](#)), career-oriented goal setting ([Tiwari, 2023](#)), face-to-face preparation method to resolve internet connection problem ([Nguyen, 2024](#)),

and AI tools combined with human interaction to overcome pronunciation recognition issue (Wang et al., 2023).

Figure 2 clearly illustrates the overall perceptions of how technology integration has benefited learners, along with the barriers they faced, and recognizes those difficulties. The strategies they used to mitigate and improve their speaking skills are also highlighted.

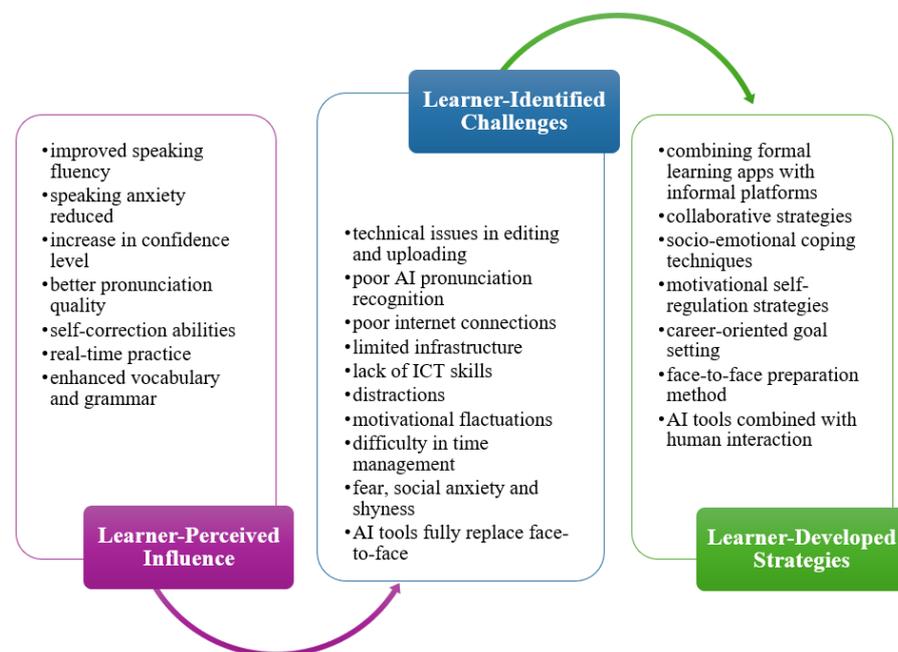


Figure 2 Influence of Mobile Technology Integration on Speaking Proficiency

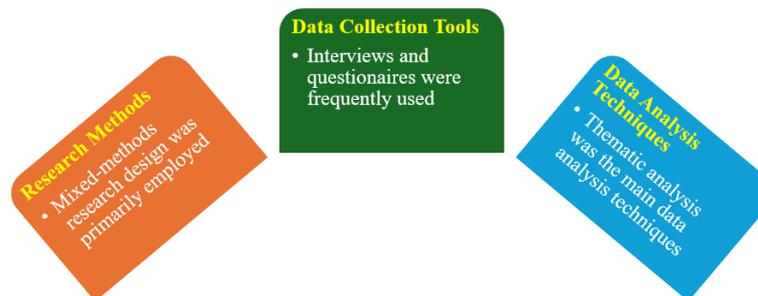
### 3.4 Methodological Trends

While we review these 15 articles to identify methodological trends, some share similarities and others differ in the application of research approaches, data collection tools, and data analysis techniques. The majority, i.e., six of the selected articles, have used the mixed research method concerning perceptions and outcomes of using technology in speaking skills (Bin-Hady & Al-Tamimi, 2021; Khanh & Le, 2023; Nguyen, 2024; Sumartono, 2023; Toleuzhan et al., 2023; Wati et al., 2024). Similarly, the qualitative research approach has been utilized by four of these articles (Adhikari, 2021; Khadka & Shahi, 2025; Singh, 2019; Tiwari, 2023). Three of the articles (Ding & Sazalli, 2024; Madhavi et al., 2023; Wang et al., 2023) employed a quantitative research design. The last two articles among the 15 articles applied action research (Mahmood et al., 2023) and quasi-experimental research (Choi & Sinwongsuwat, 2024).

Talking about the choice of data collection tools, the most used tool is the semi-structured interview in nine articles (Adhikari, 2021; Bin-Hady & Al-Tamimi, 2021; Khanh & Le, 2023; Mahmood et al., 2023; Nguyen, 2024; Sumartono, 2023; Tiwari, 2023; Wang et al., 2023; Wati et al., 2024). After that, the questionnaire, as a data-gathering tool, has been used in almost eight articles (Bin Hady & Al-Tamini, 2021; Choi & Sinwongsuwat, 2024; Khanh & Le, 2023; Nguyen, 2024; Khadka & Shahi, 2025; Toleuzhan et al., 2023; Wang et al., 2023; Wati et al., 2024), whether it is a qualitative method, a quantitative method, or a mixed method. Similarly, Ding and Sazalli (2024) select a survey in their quantitative research design, and Sumartono (2023) uses a survey in their mixed research design. Lastly, Singh (2021) has practiced focus group discussion (FGD), speech recognition by Wang et al. (2023), Likert scale by Madhavi et al. (2023), observation by Mahmood et al. (2023) in action research, and speaking tests by Choi and Sinwongsuwat (2024) in quasi-experimental research.

For the analysis of the data gathered, these studies have, in the majority, applied thematic analysis, which is about eight articles (Adhikari, 2021; Bin-Hady & Al-Tamimi, 2021; Khanh & Le, 2023; Mahmood et al., 2023; Nguyen, 2024; Sumartono, 2023; Tiwari, 2023; Wati et al., 2024) in qualitative as well as quantitative, mixed, and action research. The Statistical Package for Social Sciences (SPSS), as a data analysis technique, has been practiced in five articles (Bin-Hady & Al-Tamimi, 2021; Ding & Sazalli, 2024; Khanh & Le, 2023; Mahmood et al., 2023; Toleuzhan et al., 2023) based on quantitative, mixed, and action research approaches.

Khadka & Shahi (2025) and Wang et al. (2023) have chosen descriptive statistics to analyze their data. While Likert scoring and statistics have been applied by Madhavi et al. (2023), content analysis by Nguyen (2024), and comparative analysis by Choi & Sinwongsuwat (2024). (see Figure 3)



**Figure 3** Methodological Trends in Mobile Technology Integration on Speaking Proficiency

## 4 Conclusion and Implications

Overall, upon exploring the selected 15 articles, four major themes have emerged regarding the way mobile technology has influenced the speaking proficiency of English language learners, as perceived and experienced by these learners across various contexts. The four major themes of this systematic review are learner-perceived influence, learner-identified challenges, learner-developed strategies, and methodological trends.

The review shows that integrating mobile technology into oral communication proficiency has a positive influence on EFL learners across different contexts. Learners reported that their fluency, confidence, and pronunciation have improved after practicing on digital platforms, apps, and online tools, as well as through YouTube videos and language-learning apps like Duolingo, and by creating vlogs. However, there are still challenges during this process, such as technical issues, frustration among learners due to voice recognition problems, and issues with time and quality management when creating their own learning materials. Upon identifying the difficulties, learners adopted various strategies to overcome those challenges, including a combination of formal and informal online platforms, socio-emotional coping strategies to address shyness and anxiety, and the integration of AI tools with human interaction.

Regarding methodological trends in this issue, among the qualitative, quantitative, mixed, and action research methods, the mixed-methods design was most commonly employed in these articles. After that, the qualitative method was most commonly used, followed by the quantitative approach, while action research was least used. Similarly, most studies used interviews to gather information, and, to a lesser extent, questionnaires. A few articles employed surveys, focus group discussions, Likert scales, speech recognition, observation, and speaking tests as data collection tools. In the data analysis, thematic analysis was primarily used across multiple studies. Some of the articles used SPSS software and descriptive analysis to analyze their data, while Likert scales, content analysis, and comparative analysis were employed in only a few studies. Overall, mobile technology integration offers numerous benefits to help English language learners develop their speaking proficiency with proper intention, motivation, and effective strategies. Additionally, a few issues related to this process need to be considered and addressed through targeted strategies.

From the findings of this review, learners, teachers, including curriculum designers, policy-makers, and trainers, will gain a clear understanding of the influence mobile technology has on speaking abilities. This would help them create updated, needs-based plans and strategies to improve learners' oral communication skills. Educators and teachers can create and implement effective classroom or home activities, such as flipped classroom models, game-based approaches, and multimedia learning. In line with the need of the hour, teachers can receive training to improve their skills in mobile technology, better support their students' learning, and develop educational strategies aligned with students' needs and interests. Policymakers can plan to mitigate the challenges of internet access, infrastructure, and policy that make it easy for learners to improve their proficiency with mobile technology.

In this systematic review, the 17 articles were analyzed to reach the above-stated conclusion; however, no human subjects were involved in data collection; rather, databases and search engines were used for that purpose.

## Conflicts of Interest

The authors declare that they have no conflict of interest.

## References

- Adhikari, Y. N. (2021). Integrating Technology into English Language Teaching in Nepal: Student and Teacher Perspectives. *Prithvi Academic Journal*, 4, 107–120.  
<https://doi.org/10.3126/paj.v4i0.37052>
- Benek, K. (2025). EFL Learners' and Teachers' Perceptions of AI-Powered Language Learning Technologies: Benefits and Challenges. *International Journal of Instruction*, 18(2), 103–120.  
<https://doi.org/10.29333/iji.2025.1827a>
- Bernacki, M. L., Greene, J. A., & Crompton, H. (2020). Mobile technology, learning, and achievement: Advances in understanding and measuring the role of mobile technology in education. *Contemporary Educational Psychology*, 60, 101827.  
<https://doi.org/10.1016/j.cedpsych.2019.101827>
- Bin-Hady, W. R. A., & Al-Tamimi, N. O. M. (2021). The use of technology in informal English language learning: evidence from Yemeni undergraduate students. *Learning and Teaching in Higher Education: Gulf Perspectives*, 17(2), 107–120.  
<https://doi.org/10.1108/lthe-09-2020-0037>
- Chan, I., & Law, R. (2021). Mobile Technology. *Encyclopedia of Tourism*, 1–2.  
[https://doi.org/10.1007/978-3-319-01669-6\\_721-1](https://doi.org/10.1007/978-3-319-01669-6_721-1)
- Choi, S. H., & Sinwongsawat, K. (2024). Vlogging: An Alternative to Role-play in Improving EFL Learners' Conversation Skills. *REFlections*, 31(2), 353–385.  
<https://doi.org/10.61508/refl.v31i2.273312>
- Hyeon Choi, S., & Sinwongsawat, K. (2024). Vlogging: An Alternative to Role-play in Improving EFL Learners' Conversation Skills. *REFlections*, 31(2), 353–385.  
<https://doi.org/10.61508/refl.v31i2.273312>
- Ding, J., & Sazalli, N. (2024). Behavioral Intention of Chinese College Students Use Social Media to Improve English Speaking Skills: Based on the Technology Acceptance Model and Self-Determination Theory. *International Journal of Academic Research in Progressive Education and Development*, 13(2).  
<https://doi.org/10.6007/ijarped/v13-i2/21123>
- Ghimire, P. R., & Neupane, B. P. (2024). Teachers' Perception and Experiences on Artificial Intelligence (AI) Integration in English Language Teaching and Learning. *Lumbini Journal of Language and Literature*, 4(1), 104–116.  
<https://doi.org/10.3126/ljll.v4i1.73918>
- Ghimire, P. R., Neupane, B. P., & Dahal, N. (2024). Generative AI and AI Tools in English Language Teaching and Learning: An Exploratory Research. *English Language Teaching Perspectives*, 9(1–2), 30–40.  
<https://doi.org/10.3126/eltp.v9i1-2.68716>
- Hinkel, E. (2020). *Teaching Academic L2 Writing*. Routledge.  
<https://doi.org/10.4324/9780429437946>
- Karakose, T., Papadakis, S., Tülübaş, T., & Polat, H. (2022). Understanding the Intellectual Structure and Evolution of Distributed Leadership in Schools: A Science Mapping-Based Bibliometric Analysis. *Sustainability*, 14(24), 16779.  
<https://doi.org/10.3390/su142416779>
- Karakose, T., Tülübaş, T., Papadakis, S., & Yirci, R. (2023). Evaluating the Intellectual Structure of the Knowledge Base on Transformational School Leadership: A Bibliometric and Science Mapping Analysis. *Education Sciences*, 13(7), 708.  
<https://doi.org/10.3390/educsci13070708>
- Khadka, B. K., & Shahi, D. K. (2025). English teachers' knowledge of using ICT in English language teaching in Nepal. *American Journal of STEM Education*, 4, 27–46.  
<https://ojed.org/STEM/article/view/7408>
- Khanh, N. V., & Le, T. B. (2023). EFL Tertiary Students' Perception and Practice with Language Learning Beyond the Classroom: The Case of Vietnam. *European Journal of English Language Teaching*, 8(3).  
<https://doi.org/10.46827/ejel.v8i3.4888>
- Lavidas, K., Papadakis, S., Manesis, D., Grigoriadou, A. S., & Gialamas, V. (2022). The Effects of Social Desirability on Students' Self-Reports in Two Social Contexts: Lectures vs. Lectures and Lab Classes. *Information*, 13(10), 491.  
<https://doi.org/10.3390/info13100491>
- Lavidas, K., Petropoulou, A., Papadakis, S., Apostolou, Z., Komis, V., Jimoyiannis, A., & Gialamas, V. (2022). Factors Affecting Response Rates of the Web Survey with Teachers. *Computers*, 11(9), 127.  
<https://doi.org/10.3390/computers11090127>
- Lin, J.-J., & Lin, H. (2019). Mobile-assisted ESL/EFL vocabulary learning: a systematic review and meta-analysis. *Computer Assisted Language Learning*, 32(8), 878–919.  
<https://doi.org/10.1080/09588221.2018.1541359>

- Madhavi, E., Sivapurapu, L., Koppula, V., Rani, P. E., & Sreehari, V. (2023). Developing learners' english speaking skills using ict and ai tools. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 32(2), 142-153.  
<https://doi.org/10.37934/araset.32.2.142153>
- Mahmood, I., Memon, S. S., & Qureshi, S. (2023). An Action Research to Improve Speaking Skills of English Language Learners Through Technology Mediated Language Learning. *Academy of Education and Social Sciences Review*, 3(4), 429-439.  
<https://doi.org/10.48112/aessr.v3i4.633>
- Majid, S. N. A., & Salam, A. R. (2021). A Systematic Review of Augmented Reality Applications in Language Learning. *International Journal of Emerging Technologies in Learning (IJET)*, 16(10), 18.  
<https://doi.org/10.3991/ijet.v16i10.17273>
- Neupane, B. P., Paudel, P., Dahal, N., Karki, S., Paudel, G. R., Ghimire, P., & Thapa, B. (2025). English Language Teaching in the Age of Artificial Intelligence: Tools, Techniques, and Methodologies. *Advances in Mobile Learning Educational Research*, 5(1), 1356-1369.  
<https://doi.org/10.25082/amler.2025.01.011>
- Nguyen, T. T. T. (2024). Using Flipgrid Videos to Enhance Speaking and Presenting in English for Non-Native Learners. *International Journal of Engineering Pedagogy (IJEP)*, 14(2), 100-111.  
<https://doi.org/10.3991/ijep.v14i2.43813>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., . . . Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, n71.  
<https://doi.org/10.1136/bmj.n71>
- PRISMA Statement. (n.d.). PRISMA 2020 checklist.  
<https://www.prisma-statement.org/prisma-2020-checklist>
- PRISMA Statement. (n.d.). PRISMA statement.  
<https://www.prisma-statement.org>
- Shrestha, P. (1970). The Potential of Mobile Technologies for (English) Language Learning in Nepal. *Journal of NELTA*, 16(1-2), 107-113.  
<https://doi.org/10.3126/nelta.v16i1-2.6134>
- Shrestha, S. (2016). Exploring mobile learning opportunities and challenges in Nepal: The potential of open-source platforms [Doctoral thesis], University of West London.  
<https://repository.uwl.ac.uk/id/eprint/2962>
- Singh, R. (2019). Students' perspectives on technology integration in ELT. *Journal of NELTA*, 24(1-2), 95-106.  
<https://doi.org/10.3126/nelta.v24i1-2.27682>
- Sumartono, S. (2023). Empowering Gen Z: Enhancing English Speaking Skills Through Technology and Authentic Communication. *NextGen Education Review Journal*, 1(2), 1-9.  
<https://doi.org/10.58660/nextgen.v1i2.34>
- Tiwari, H. P. (2023). English Proficiency Aspirations among Nepalese EFL Students. *Tamaddun*, 22(2), 239-247.  
<https://doi.org/10.33096/tamaddun.v22i2.577>
- Toleuzhan, A., Sarzhanova, G., Romanenko, S., Uteubayeva, E., & Karbozova, G. (2022). The Educational Use of YouTube Videos in Communication Fluency Development in English: Digital Learning and Oral Skills in Secondary Education. *International Journal of Education in Mathematics, Science and Technology*, 11(1), 198-221.  
<https://doi.org/10.46328/ijemst.2983>
- Wang, W., Zou, B., & Xue, S. (2023). AI technology used as a tool for enhancing university students' English speaking skills: perceptions and practices. *Seventh International Conference on Mechatronics and Intelligent Robotics (ICMIR 2023)*, 97.  
<https://doi.org/10.1117/12.2689728>
- Wati, S. O., Budiyaniti, K., Mizkat, E., Juita, N., & Ardi, H. (2024). Exploring the Benefits and Challenges of Social Media in English Language Learning: Insights from English Education Students. *Journal of English Language and Education*, 9(3), 38-45.  
<https://doi.org/10.31004/jele.v9i3.505>
- Yirci, R., Karakose, T., Kocabas, I., Tülübaş, T., & Papadakis, S. (2023). A Bibliometric Review of the Knowledge Base on Mentoring for the Professional Development of School Administrators. *Sustainability*, 15(4), 3027.  
<https://doi.org/10.3390/su15043027>