Proceeding of 4th Corolla International Conference
Bali, Indonesia, November 24th, 2025
ISSN: 978-623-96548-7-0
Page: 163 – 174

Technology-Enhanced Project-Based Learning for EFL Learners: A Narrative Review of Digital Innovation in Speaking Instruction

Lisa Rakhmanina
Doctoral Program of Applied Linguistics of Universitas Bengkulu, Indonesia
English Education Study Program, Faculty of Teacher Training and Education,Universitas Pof Dr Hazairin SH, Indonesia
lisarakhmanina83@gmail.com

Arono
University of Bengkulu, Indonesia
arono@unib.ac.id

Abstract

This narrative literature review explores how Project-Based Learning (PBL) might improve EFL speaking abilities with technology. This review synthesizes twelve empirical and conceptual studies from 2019 to 2024 on how digital tools like mobile apps, video blogs, social media platforms, and audiovisual media enhance learner engagement and oral language development as PBL frameworks. Results show that technology-enhanced project-based learning improves students' spoken fluency, confidence, and vocabulary while creating more authentic and stimulating learning settings. Digital platforms improve learning outside of the classroom, stimulate cooperation, and let students use language in meaningful ways. However, the research highlights inconsistent assessment techniques, short-term solutions, and teacher preparedness and infrastructural issues. The studies use different methods and focus on different regions, highlighting the need for longitudinal and comparative research across educational contexts. The review concludes that technology-enhanced project-based learning requires careful pedagogical preparation, resources, and educator professional development. This synthesis shows how student-centered, project-driven, communications and engagement-focused digital innovation can improve language learning.

Keyword: Digital Innovation; English as a Foreign Language (EFL); Project-Based Learning (PBL); Speaking Skills; Technology-Enhanced Learning

Introduction

English language teaching (ELT) nowadays has been shifting from teacher-centered instruction toward more learner-centered, interactive, and technology-supported practices. Within this shift, Project-Based Learning (PBL) has emerged as an approach that promotes authentic communication, collaboration, and also learners' autonomy (Sirisrimangkorn, 2021, Burhan et al., 2025). PBL believes that language development is most effective when students construct meaning through real-world tasks and interaction. When digital tools are integrated into this framework, PBL turns and develops into Technology-Enhanced Project-Based Learning (TEPBL), allowing learning to become multimodal, interactive, and not limited to the classroom only (Nguyen & Tran, 2024).

Theoretically, constructivist and sociocultural frameworks are the most founded in TEPBL. It emphasizes learning through social engagement and collaborative constructing meaning. It also links with self-determination and communicative language teaching frameworks, which view speaking as

both cognitive and affective. TEPBL reacts to a persistent challenge in EFL education: limited meaningful speaking practice. Many classrooms still rely on controlled, teacher-led drills that restrict creativity and confidence (Huang & Sun, 2022). In contrast, TEPBL asks students to involve in authentic tasks such as multimedia presentations, videos production, and projects in online communication, which facilitate spontaneous and intentional speaking (Benlaghrissi & Ouahidi, 2024). Research in developing countries highlights the significance of integrating technology into PBL. In Indonesia, the integration of audiovisual resources with PBL has increased student participation, collaboration, and personal ownership of learning (Saputra et al., 2018). The use of video blogs (vlogs) encourages students to speak with intention and expresses their personal identity (Asnur et al., 2025). Studies across various EFL contexts indicates that TEPBL improves speaking fluency, confidence, vocabulary development, and engagement when learners interact with real audiences and communicative purposes (Hazaymeh*, 2023; Sirisrimangkorn, 2021).

However, there are still several limitations still exists. Many studies depend on self-reported perceptions rather than standardized speaking assessments, which limits measurement reliability (Gómez-Ortiz et al., 2023; Huang & Sun, 2022). Teachers also face challenges in digital planning, preparation workload, and balancing technology with pedagogy (Asnur et al., 2025). The differences in Infrastructure can further restrict equitable access to technology-enhanced learning, especially in under-resourced regions (Anwas et al., 2020). Moreover, most studies focus on outcomes in the short term, leaving sustainability insufficiently explored, and the wide range of tools used (vlogs, TikTok, Instagram, and multimedia platforms) makes it further complicate cross-study comparisons.

This literature review therefore examines and review how technology-enhanced project-based learning supports EFL speaking development, learner engagement, and classroom practice across differences educational contexts. The review synthesizes twelve empirical and conceptual studies published between 2019 and 2024 in secondary and tertiary EFL settings across Asia, the Middle East, and Europe, with attention to research design, technological tools, learning outcomes, and pedagogical implications. The article proceeds in the following format: Section 2 outlines the methodological approach and the selection criteria; Section 3 presents the thematic synthesis of findings part; Section 4 discusses theoretical and practical implications; and Section 5 concludes with recommendations for the sustainable application of TEPBL in EFL instruction.

Research Methodology

The current study utilized a narrative literature review methodology to explore how technology-enhanced project-based learning (TEPBL) facilitates the enhancement of English-speaking skills and promotes students' involvement in EFL contexts. A narrative review was chosen because it allows for interpretive and contextual synthesis, especially when the studies under examination vary widely in methodology, instructional settings, and technological tools (Heriyanto, 2018, Naeem et al., 2024, Hastuti & Malihah, 2024, Kushnir, 2025). While meta-analysis seeks

numerical generalization, a narrative review concentrates on comprehending about how and why instructional approaches work across different educational environments, making it suitable for examining pedagogical phenomena such as digitally mediated project-based learning (Fikria et al., 2025). The purpose of this review was therefore not only to summarize prior research but to analyze patterns, problems, challenges, and pedagogical insights emerging from the integration of project-based instruction and digital technologies.

The review mostly looked at peer-reviewed journal articles published between 2018 and 2025; a period shows that people are becoming more interested in combining digital tools with communicative learning practices in response to changing educational needs and technological growth. The population of interest comprised studies conducted in secondary and tertiary EFL contexts across Asia, the Middle East, and other regions with comparable educational backgrounds. To ensure conceptual consistency's, only studies that implemented project-based learning, incorporated digital platforms such as mobile apps, audiovisual media, video blogs, or social networking tools, and reported outcomes on speaking skills, engagement, or learner motivation were included. Studies that did not put technology or speaking improvement at the center of instruction were not included. Out of the 20 studies, twelve met the standards for inclusion and showed sufficient methodological clarity. Each chosen study functioned as a unit of analysis, representing one viewpoint within the broader conversation about how TEPBL shapes language learning. Data collection was executed through systematic database searches in Scopus, ERIC, SpringerLink, ResearchGate, and open-access education and applied linguistics journals, using keyword combinations such as "project-based learning," "technology-enhanced," "mobile-assisted," "social media," "video blog," "speaking," and "EFL." Search refinement employed a staged screening process, initiating with title and abstract relevance checks, followed by full-text evaluation, and concluding with quality assessment to ensure each study provided substantive pedagogical insight. Each selected article was then subsequently put in a data matrix that documented the research setting, participant characteristics, technological instruments utilized, instructional procedures and methodology, evaluation technique, learning outcomes, and problems faced.

The data analysis was conducted through a thematic narrative synthesis. The initial phase encompasses descriptive mapping to comprehend how different studies structured their project-based and technology integration. The second term or phase required inductive coding in identifying recurring conceptual patterns, particularly related to speaking development, interaction, digital and multimodal affordances, and evaluation complexities. The third phase involved interpretive integration, wherein thematic connections were established across studies. For example, while Sirisrimangkorn (2021) highlighted the significance of PBL in increasing presentation confidence, Benlaghrissi & Ouahidi (2024) ilustrated how mobile-supported projects enhanced lexical fluency. These complementing observation or insights illustrated how technology amplifies the communicative and experiential qualities of PBL when learners engage in meaningful tasks. Reflective notes were

employed during the analysis to clarify interpretive positions and maintain analytic transparency. This methodological approach corresponds with the review's objective: to provide a cohesive and evidence-based comprehension of how technology-enhanced project-based learning promotes speaking growth, learner engagement, and pedagogical innovation in EFL teaching.

Findings and Discussion

Findings

The analysis of 12 peer-reviewed studies that published from 2018 to 2025 has revealed four principal themes have been identified concerning the ways in which Technology-Enhanced Project-Based Learning (TEPBL) facilitates EFL speaking development: 1) augmentation or improvement of speaking performance, 2) enhanced learner engagement and motivation, 3) The potential of digital and multimodal tools, and 4) assessment and pedagogical issues. Overall, the studies indicated that integrating technology toward project-based learning can enhance students' fluency in speaking, encourage more active collaboration, and foster greater responsibility for their learning. However, the result also show ongoing tensions, including balancing creativity with linguistic accuracy, ensuring equitable access to digital resources, and maintaining motivation over time.

Theme : Enhancement of Speaking Skills and Performance

Across all 12 studies, students revealed notable improvements or enhancement in spoken fluency, confidence, and expressiveness when engaging in technology that supported project tasks. Benlaghrissi & Ouahidi (2024) reported significant gains in fluency, confidence, and expressiveness among Moroccan learners utilizing mobile devices for collaborative storytelling. Likewise, Sirisrimangkorn (2021) observed that Thai undergraduates became more articulate and confident after completing presentation based projects that simulated authentic communication setting. Nevertheless, progress was not uniform across linguistic dimensions. It is stated that although fluency and complexity showed improvement, grammatical accuracy did not progress at an equivalent rate, indicating that increased communicative confidence does not inherently result in precise language control (Huang & Sun, 2022).

Table 1: Key Findings on Speaking Improvement

Author	Context	Technology	Outcome Summary	Interpretation
Benlaghrissi & Ouahidi (2024)	Morocco (University)	Mobile devices	Fluency ↑; Lexical accuracy ↑ 21%	Mobile projects provided authentic communication opportunities
Sirisrimangkorn (2021)	Thailand (Undergrad)	Presentation projects	Pronunciation, pacing, confidence improved	Speaking to real audiences motivated clearer articulation
Huang & Sun (2022)	Taiwan (High school)	Video-based PBL	Fluency ↑; Grammar unchanged	Technology enhanced fluency but not grammatical control

Interpretation:

TEPBL helped students *find their voices* — speaking more naturally and meaningfully. Yet, these

improvements work best when teachers integrate explicit form-focused feedback alongside creative project work.

Theme 2 – Learner Engagement and Motivation

Nine of the twelve studies emphasized how TEPBL boosted learner motivation and emotional investment. Students enjoyed working on projects that had visible results, real audiences, and creative freedom. Zhong et al. (2025) documented higher behavioral and emotional engagement in digital projects, while Asnur et al., (2025) found that vlogging projects made learners more self-directed and proud of their achievements. However, Gómez-Ortiz et al. (2023) found that engagement could be fragile: motivation increased during the creative phase but dropped once the project ended, suggesting that continuous reflection and audience interaction are key to sustaining long-term motivation.

Table 2: Patterns of Learner Engagement

Study	Type of Engagement	Key Findings	Implication
Zhong et al. (2025)	Behavioral, Emotional	Active collaboration ↑; positive classroom atmosphere	Collaboration fuels emotional connection
Asnur et al. (2025)	Motivational, Reflective	Higher autonomy and confidence through vlogs	Ownership enhances intrinsic motivation
Gómez-Ortiz et al. (2023)	Affective	Motivation peaked mid-project, declined after completion	Engagement fades without ongoing feedback loop

Interpretation:

Learners thrive when technology connects them to *people*, not just screens. Engagement is sustained not by novelty but by community the sense of being seen, heard, and responded to.

Theme 3 – Digital and Multimodal Affordances

One of the strongest insights across the studies is that technology is not simply a medium, but a learning ecosystem. It extends classroom interaction into digital spaces where language can be practiced more authentically. For example, Wang et al. (2025) highlighted how social media comments provided immediate, multimodal feedback (text, emoji, voice) that encouraged self-expression. Nguyen & Tran (2024) showed how TikTok projects helped learners experiment with body language and intonation adding performance literacy to their linguistic repertoire.

Even outside the classroom, Anwas et al. (2020) found that students who actively consumed English content on social media improved across all language skills. This suggests that technology can blur the line between formal instruction and informal, self-directed learning.

Table 3: Technological Affordances and Pedagogical Benefits

Tool/Platform	Representative Study	Benefit Observed	Pedagogical Insight
Mobile Apps	Benlaghrissi & Ouahidi (2024)	Increased interaction and spontaneous speech	Supports learning anytime, anywhere
Social Media	Nguyen & Tran (2024), Wang et al. (2025)	Authentic audiences and peer feedback	Builds communicative confidence
Audiovisual Tools	Saputra et al. (2018)	Improved focus and classroom participation	Engages multiple learning modalities
Video Blogs	Asnur et al. (2025)	Reflection and self-	Encourages learner

		assessment	autonomy and digital literacy

Interpretation:

Technology transforms PBL from a classroom activity into a living communicative practice, connecting learners with authentic audiences and multimodal expression.

Theme 4 – Assessment and Pedagogical Challenges

While the benefits of TEPBL were clear, several challenges persist. Many teachers struggled with assessing multimedia outputs objectively. Hazaymeh (2023) noted that grading digital artifacts often emphasized design aesthetics rather than linguistic content. Similarly, Huang & Sun (2022) found that raters prioritized presentation style over language accuracy.

Infrastructure also played a role. Anwas et al. (2020) highlighted uneven access to devices and internet connectivity, especially in rural areas. Interestingly, Saputra et al. (2018) showed that even with minimal technology, just simple audio-visual media, student activity and collaboration increased significantly. This indicates that innovation is possible even under constraints.

Table 4: Pedagogical and Assessment Constraints

Issue	Example	Interpretation
Teacher Readiness	Lack of training for assessing digital tasks (Hazaymeh & Khasawneh, 2024)	Professional development is crucial
Assessment Validity	Aesthetic bias in video grading (Huang & Sun, 2022)	Rubrics must balance content and design
Technological Inequality	Limited access in low-resource schools (Anwas et al., 2020)	Context-sensitive solutions are needed
Teacher Workload	Heavy monitoring in PBL (Asnur et al., 2025)	Institutional support and co-teaching help

Interpretation:

For technology to empower rather than overwhelm teachers, institutions must invest in training, fair assessment tools, and equitable infrastructure.

Integrative Model

The four themes are interdependent rather than separate. Speaking improvement depends on engagement, which in turn is shaped by the technological environment and mediated by assessment practices (Christou, 2023).

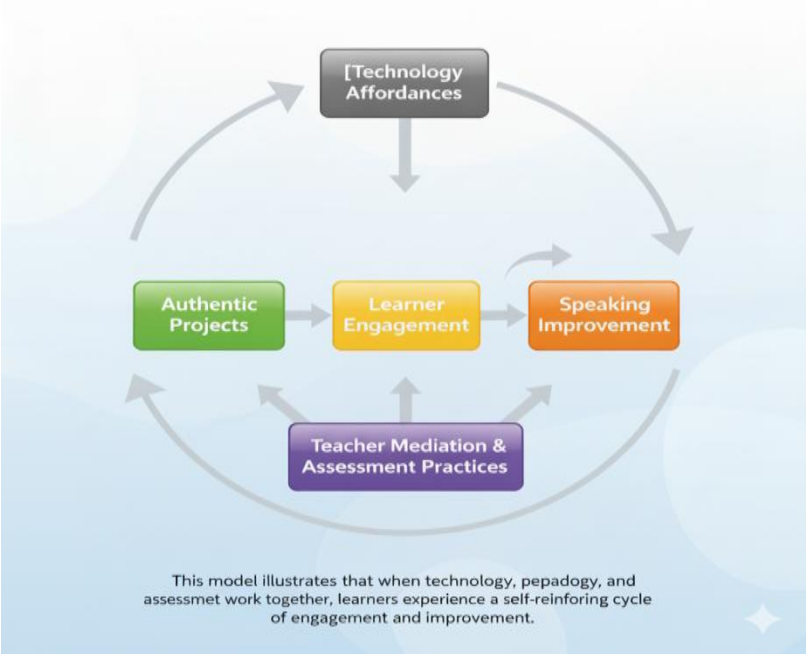

Figure 1: the technological environment and mediated by assessment practices

This model illustrates that when technology, pedagogy, and assessment work together, learners experience a self-reinforcing cycle of engagement and improvement.

Unexpected finding

There were two important findings. Gómez-Ortiz et al., (2023) discovered that motivation wanes once initiatives end, suggesting that engagement matters more than novelty. Huang & Sun (2022) found that some students spent more time manipulating visual effects than practicing their voice, suggesting that technology can distract if not properly supervised. These findings indicate that reflective and interpersonal learning must remain fundamental in technology-supported situations.

Synthesis of Key Findings

The twelve evaluated research show that Technology-Enhanced Project-Based Learning (TEPBL) can boost motivation, engagement, fluency, confidence, and interactional competence when project activities are socially relevant. Mobile and multimedia tools expand learning outside the classroom. Ensure teacher preparedness, develop effective assessment systems, and address unequal technology access remain concerns. Thus, TEPBL has great pedagogical value, but its success depends on balancing innovation and practicality so that technology supports learning rather than drives it.

Discussion

The synthesis of twelve studies indicates the integration of digital tools and PBL can significantly improve the results of EFL speaking. Researchers have found that using technology into project activities improves oral performance in Moroccan high schools and Spanish universities. Benlaghrissi & Ouahidi's controlled study in a Moroccan secondary school found that introducing

mobile phones to PBL "had an enormous impact on students' overall speaking performance" and all sub-skills. A Thai classroom research demonstrated a substantial improvement in students' speaking scores from 46.7 to 57.7 after a semester of presentation-based PBL ($p<0.01$). Creating posters, slide presentations, and movies required students to practice and produce English, giving them more chances to communicate in real life. One student said PBL "allowed me to speak a lot" and improved her pronunciation and confidence in relevant work.

Importantly, students overwhelmingly favored tech-enhanced PBL. High post-study survey scores in the mobile-assisted study above showed that learners highly agreed that the projects enabled them practice anytime/anywhere and made learning "innovative, enjoyable, and more effective" than traditional lessons. Instagram activities "helped me to increase my self-confidence and motivation because studying English has always been difficult for me," said a sports science student who developed fitness projects. I acquired numerous terms easily". According to Zhong et al., (2025) PBL improved students' test scores and all four classroom involvement dimensions (behavioral, emotional, cognitive, and agentic) compared to traditional education. Students enjoyed these student-centered, tech-rich projects, spoke more, participated actively, and acquired confidence.

The technologies used shaped learning. Mobile apps and smartphones (MALL) match PBL's anytime-anywhere philosophy. Moroccan students converted passive classroom drills into active projects by recording and sharing speaking tasks on their phones. These findings suggest that consistent speaking practice explains fluency increases. Also important were social media channels. Hazaymeh* (2023) discovered that a three-month YouTube and Instagram Live curriculum enhanced undergraduates' speaking fluency and pronunciation compared to a control group. They find that these familiar platforms provided "real-world applications" that made language learning more enjoyable. Gómez-Ortiz et al., (2023) found that ESP students learned technical language and felt part of an authentic community by creating and following professional Instagram accounts in their area. Students claimed Instagram's "dynamic" and trustworthy material made them feel more secure tying English to their careers. Overall, social media sites provided multimodal, contextual input—videos, photos, authentic dialogues—that supported learning better than textbooks.

Other digital affordances provided value. Vlogs seemed like a fun PBL variation. One design study proposed a six-phase PBL approach powered by vlogging to make hands-on learning more relevant and innovative. That methodology needs testing, but vlogs help students practice speaking about their interests, review them, and share with friends. The analyzed research found that "video blogs integrated vocabulary in authentic contexts", suggesting that making projects into videos naturally improved students' language use. Similar uses exist for TikTok. Nguyen & Tran (2024) observed that Vietnamese undergraduates liked practicing speaking on TikTok (duets, shadowing). Despite not measuring test scores, this study provides "contextual evidence" on how students utilize TikTok for self-study. Students scheduled content and mimicked speech on TikTok to improve their pronunciation, a low-stakes activity that can boost confidence.

Audio-visual tools in class also helped. A grassroots action research in Indonesia revealed that combining PBL with audio-visual media (films, animations, etc.) raised student engagement from 40–50% to over 80% by the second action cycle. Pre-treatment learning activity scores of 41% rose to 79% after one cycle and 83% after two. The authors attribute this to PBL's constructivism and AV tools' ability to make abstract topics vivid and class less tedious. Audio-visual technologies make PBL "more active and less monotonous" according to one summary. Video and audio resources scaffolded quieter students' project participation.

PBL and technology have emotional and cognitive effects across studies. When projects allowed helpful, collaborative speech, students felt less frightened and more driven. Moroccan students taught via mobile-PBL improved test results and felt more "motivated" and "autonomous" in studying. This supports the self-determination framework from multiple studies: choice, peer contact, and creative tasks encourage language risk-taking. One kid commented that project work encouraged them confident to speak up because their work had meaning, unlike drills. Tech-enhanced projects reduced boredom, anxiety, and passivity in EFL speaking practice. Despite these benefits, the literature highlights implementation issues. A recurring concern is teacher preparedness. Many teachers lack the ability to integrate new tools. Benlaghrissi & Ouahidi (2024) urge future research on instructors' mobile-assisted teaching training needs. Thus, without support, many instructors may struggle to develop tech-rich PBL units or troubleshoot gadgets, restricting its scope. Digital divide researchers say infrastructure can be a hindrance. Despite this, most studies assume all students have stable internet and capable devices. The Moroccan research slides state that equity concerns (device access, connection) were "not deeply discussed" in their work. Some noisy urban labs offered stable Wi-Fi, but not all schools do. Tech-enhanced PBL implementations may need to include offline choices or school regulations that provide devices.

Assessment requires prudence. Many research used self-report questionnaires or teacher-rated speech. Only learners' perceptions of speaking improvement were used in the TikTok study. Hazaymeh* (2023) used a standardized Foreign Service Institute (FSI) rubric but observed the lack of inter-rater reliability discussion in earlier work. For example, one slide cautions of "over-reliance on self-perception measures rather than objective tests" and advocates for stricter evaluation processes. In conclusion, numerous research claim positive results, but using validated speech evaluations with multiple raters would strengthen the evidence.

There were also other practical concerns that occurred. Student eagerness to read fascinating content in one Instagram-PBL project sometimes interrupted the class. Students can "surf the web for topics" beyond the objective without rigorous planning, delaying activities, educators said. They concluded that open-ended platforms require strict time management and task instructions. Although most children in these studies felt comfortable with technology, researchers noted that certain pupils or teachers may have technophobia. Without support, fear of new media may hinder PBL activities, according to one study. Technology-enhanced PBL is a promising, engaging EFL speaking method,

according to the examined study. It turned passive drills into lively workshops where students spoke meaningfully and enthusiastically when handled thoughtfully. Mobile devices, social media, vlogs, and AV technologies expanded practice outside of class, grounded projects in authentic content, and made learning more fun. To fulfill this promise, instructors must be taught, access hurdles removed, and assessment systems improved. Considering these problems, future programs can use PBL's authentic, collaborative, and stimulating nature and digital affordances to give students fluent, confident English voices.

Conclusion and Suggestion

TEPBL is being used in many EFL situations to enhance speaking development in creative, adaptable ways, according to this review. Mobile apps, vlogs, and social media allow learners speak meaningfully and engage naturally. TEPBL's wider use demands cautious study. Many studies are short-term, self-reported, or limited to specific circumstances, making generalization problematic. Poor digital infrastructure, uneven technological access, and teacher training remain major issues. Future study should determine which digital platforms best enhance specific speaking skills and how teachers may better integrate digital project-based approaches. Longitudinal research are needed to evaluate if speaking benefits last and translate to formal communication settings like presentations and academic discussions. In conclusion, TEPBL can improve EFL classrooms by improving communication and learner-centeredness, but its long-term effectiveness depends on careful implementation, teacher support, and continual learning outcome evaluation.

References

Anwas, E. O. M., Sugiarti, Y., Permatasari, A. D., Warsihna, J., Anas, Z., Alhapip, L., Siswanto, H. W., & Rivalina, R. (2020). Social media usage for enhancing english language skill. *International Journal of Interactive Mobile Technologies*, *14*(7), 41–57. https://doi.org/10.3991/IJIM.V14I07.11552.

Asnur, L., Jalinus, N., Faridah, A., Irfan, D., Mubai, A., & Utami, F. (2025). Empowering Project-Based Learning Model With Video Blog. *TEM Journal*, *14*(1), 707–715. https://doi.org/10.18421/TEM141-63.

Benlaghrissi, H., & Ouahidi, L. M. (2024). The impact of mobile-assisted project-based learning on developing EFL students' speaking skills. *Smart Learning Environments*, *11*(1), 18. https://doi.org/10.1186/s40561-024-00303-y.

Burhan, I., Yuliani, N. F., & Rachman, S. (2025). *Project-Based Learning in Elementary Social Studies : A Literature Review on Effectiveness and Learning Outcomes*. *3*(03), 508–516.

Christou, P. A. (2023). *How to use Thematic Analysis in Qualitative Research How to use thematic analysis in qualitative*. *January*. https://doi.org/10.4337/jqrt.2023.0006.

Fikria, A., Setiawan, S., & Munir, A. (2025). A Systematic Review of Technology-Enhanced Project-Based Language Learning: Theoretical Frameworks, Project Types, and Implications for Future Research and Practice. *F1000Research*, *14*, 775. https://doi.org/10.12688/f1000research.165491.1.

Gómez-Ortiz, M. J., Domínguez Romero, E., & Bobkina, J. (2023). Instagram as a learning tool to improve technical vocabulary for sports science students. *Journal of Hospitality, Leisure, Sport and Tourism Education*, *32*(July 2022). https://doi.org/10.1016/j.jhlste.2022.100416.

Hastuti, D., & Malihah, N. (2024). *Systematic Literature Review (SLR): Implementation of The*

Project- Based Learning (PJBL) Approach To Improve Students ' Speaking Skills. *01*(01), 88–107.

Hazaymeh*, W. A. M. K. A. (2023). The Effectiveness of Visual Mind Mapping Strategy for Improving English Language Learners' Critical Thinking Skills and Reading Ability. *European Journal of Educational Research*, *12*(1), 145–158.

Heriyanto. (2018). *Thematic Analysis sebagai Metode Menganalisa Data untuk Penelitian Kualitatif*. *2*(3), 317–324.

Huang, H., & Sun, C. (2022). Exploring the Effectiveness of Project-Based Learning on Speaking Test Performance. *Proceedings of the 2022 8th International Conference on Humanities and Social Science Research (ICHSSR 2022)*, *664*(Ichssr), 2221–2227. https://doi.org/10.2991/assehr.k.220504.403.

Kushnir, I. (2025). Thematic analysis in the area of education : a practical guide. *Cogent Education*, *12*(1). https://doi.org/10.1080/2331186X.2025.2471645.

Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2024). *A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research*. *22*(October), 1–18. https://doi.org/10.1177/16094069231205789.

Nguyen, T. T. Van, & Tran, T. T. M. (2024). Exploring Student's Perspectives and Practices: Using TikTok in the Context of Sophomore EFL Speaking 4 Learning at Van Lang University. *International Journal of TESOL & Education*, *4*(2), 160–182. https://doi.org/10.54855/ijte.24429.

Saputra, I. G. N. H., Joyoatmojo, S., & Harini, H. (2018). International Journal of Multicultural and Multireligious Understanding The Implementation of Project-Based Learning Model and Audio Media Visual Can Increase Students ' Activities. *International Journal of Multicultural and Multireligious Understanding (IJMMU)*, *5*(4), 166–174.

Sirisrimangkorn, L. (2021). Improving EFL Undergraduate Learners' Speaking Skills Through Project-Based Learning Using Presentation. *Advances in Language and Literary Studies*. https://api.semanticscholar.org/CorpusID:237394475.

Wang, Z., Abdullah, Z., & Hu, W. (2025). A Systematic Review of the Impact of Social Media on Project-Based Learning. *Sustainability (Switzerland)*, *17*(8), 1–27. https://doi.org/10.3390/su17083680.

Zhong, J., Ismail, L., & Lin, Y. (2025). Investigating EFL students' engagement in project-based speaking activities: from a multi-dimensional perspective. *Frontiers in Psychology*, *16*(June), 1–13. https://doi.org/10.3389/fpsyg.2025.1598513.

-----EMPTY PAGE-----