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Roblox as Media for Students' Language Output in Daily Conversation

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ABSTRACT

This study investigates the use of Roblox as a digital platform for enhancing students' spoken language output in EFL conversation classes. Unlike most existing studies on digital game-based learning and metaverse platforms, which primarily focus on motivation, engagement, or learner perceptions, this research foregrounds observable improvements in learners' oral performance. A mixed-methods design was implemented with six intermediate-level learners aged 10–12 at BBC Semarang. Quantitative data were gathered through pre- and post-test speaking assessments using a standardized rubric measuring content, pronunciation, vocabulary, and grammar. Results demonstrated measurable gains across all assessed components. Complementary qualitative data from observations, questionnaires, and interviews revealed increased confidence, reduced anxiety, and positive attitudes toward language use within the Roblox environment. The convergence of findings indicates that open-ended, multiplayer game spaces can support both linguistic development and affective engagement. Despite its small sample and limited setting, the study contributes novel evidence demonstrating that Roblox can facilitate not only motivation but also tangible improvements in oral proficiency, offering a foundation for future, larger-scale investigations.

Introduction

It is widely recognized that the acquisition of speaking skills presents significant challenges for learners of English as a Foreign Language (EFL). In contrast to receptive skills, which include reading and listening, and productive skills like writing, which afford learners additional time for planning, speaking requires individuals to produce accurate, fluent, and meaningful utterances spontaneously and in real time. The immediacy of such contexts frequently results in elevated anxiety and hesitation, particularly among learners who have limited experience with genuine communicative scenarios. Across various studies, it has been observed that EFL learners often encounter challenges such as restricted vocabulary, diminished self-assurance, and obstacles in sustaining interaction, all of which impede the

advancement of communicative competence (Sari, 2023). In the context of globalization, where English has emerged as a common language in fields such as education, technology, and business, a lack of fluency presents a significant barrier for individuals seeking to engage with international academic and professional networks.

In Indonesia, the challenges are especially evident as a result of various contextual and systemic factors. Instruction in the English language within educational institutions and language programs frequently prioritizes grammatical precision and reading comprehension, indicative of the prevailing influence of assessment-oriented curricula. Oral communication is often regarded as a subordinate skill, frequently developed through structured exercises instead of genuine interaction. Teacher-centered practices significantly restrict students' opportunities for meaningful interaction, resulting in many learners feeling hesitant to speak, fearful of making errors, and struggling to maintain conversations, even after years of English language instruction. The absence of genuine, low-anxiety speaking opportunities underscores the pressing necessity for creative strategies that can enhance learner confidence, motivation, and oral proficiency.

Recent advancements in digital technology have provided new ways to tackle these challenges. Learning environments that utilize technology enable students to engage in interactive, multimodal contexts that closely resemble real-life communication scenarios (Chen & Hsu, 2020). Research indicates that immersive learning environments enhance both authenticity and learner autonomy (Ramanujam & Ismail, 2024). The concept of Digital Game-Based Learning (DGBL) has garnered significant attention for its ability to enhance learner motivation, alleviate speaking anxiety, and maintain attention through immersive, task-oriented scenarios (Alsawaier, 2018; Reinders & Wattana, 2014; Zhai, 2024). In this context, Digital Game-Based Language Learning (DGBLL) highlights the role of games as more than mere entertainment; they serve as organized settings in which learners engage with the target language to achieve specific communicative objectives. Recent investigations indicate that game-based environments notably improve user engagement in educational activities (Paraskeva et al., 2025). Investigations in this domain indicate that games may facilitate active engagement, improve vocabulary learning, and encourage a readiness to communicate, all of which are essential for the advancement of speaking skills.

Roblox has emerged as a multifaceted platform with considerable potential for language education. As a user-generated, multiplayer environment, Roblox enables learners to engage collaboratively in immersive scenarios that resemble real-life communicative situations. Previous studies have reported positive outcomes related to creativity, engagement, and collaboration (Han et al., 2023; Alhasan et al., 2023), as well as vocabulary development (Manrique García et al., 2023), multimodal literacy (Sinar et al., 2023), and reduced speaking anxiety (Fan & Chiang, 2023). Despite these promising findings, existing research has largely emphasized attitudinal, affective, or literacy-related outcomes. Empirical evidence examining the impact of Roblox and other digital game-based language

learning (DGBLL) environments on learners' spontaneous oral language production remains limited. While DGBLL studies frequently report increased motivation and willingness to communicate (Alsawaier, 2018; Reinders & Wattana, 2014), fewer investigations have employed performance-based measures to assess speaking development, particularly in task-driven conversational contexts. Consequently, there is a clear gap in research exploring how immersive, metaverse-based platforms such as Roblox support measurable improvements in EFL learners' speaking performance.

This research investigates the integration of Roblox into routine conversation classes at BBC Semarang with the aim of improving learners' speaking performance. Departing from studies that have primarily examined learners' motivation, affective responses, or general perceptions of game use, the present study introduces a novel perspective by incorporating objective assessments of oral proficiency within a Roblox-supported instructional setting. By applying standardized speaking rubrics to measure observable gains across content, fluency, vocabulary, pronunciation, and grammar, this study contributes to emerging work on metaverse-based learning environments (Han, Liu, & Gao, 2023) and extends the literature that connects immersive digital engagement with quantifiable linguistic outcomes. Employing a mixed-methods design, quantitative score analyses are triangulated with qualitative findings related to motivation, confidence, and willingness to communicate, providing measurable indicators of development while concurrently illuminating learners' experiences during gameplay-based interaction.

To address the existing research gap, it is essential to highlight the specific pedagogical affordances of the platform employed. Roblox is theoretically and pedagogically distinct from many digital or game-based language tools due to its open-ended, user-generated, and multiplayer architecture. Whereas fixed-content language learning applications and scripted educational games typically guide learners through predetermined linguistic input or closed-ended tasks, Roblox affords unscripted, real-time social interaction within immersive virtual worlds. These affordances closely align with principles of Communicative Language Teaching (CLT), Task-Based Language Teaching (TBLT) (Ellis, 2003, 2019), and Swain's Output Hypothesis (2005), as learners are required to negotiate meaning, produce spontaneous language, and manage communication breakdowns while collaboratively pursuing shared goals. The platform's emphasis on agency, collaboration, and social presence positions Roblox not merely as a learning tool, but as a metaverse-based environment capable of facilitating authentic language output rather than constrained or controlled practice..

This study is grounded in two key theoretical frameworks: Swain's Output Hypothesis (2005) and Ellis's Task-Based Language Teaching (TBLT) framework (2003, 2019, 2021). Together, these perspectives provide a robust foundation for examining how digital platforms can facilitate communicative language learning. Within this study, Roblox-supported tasks are expected to yield measurable improvements in learners' speaking

performance across key components of oral production, including content, pronunciation, vocabulary, and grammatical accuracy. Beyond linguistic gains, the intervention is anticipated to produce positive affective outcomes, such as reduced speaking anxiety, increased confidence, and greater willingness to communicate. Accordingly, the study assumes that the affordances of Roblox—namely interaction, collaboration, and spontaneous language use—have the potential to generate both quantifiable improvements in oral proficiency and complementary qualitative benefits that strengthen learners' communicative competence in English as a Foreign Language (EFL) contexts.

Based on this theoretical foundation, the present study seeks to examine the role of Roblox in supporting EFL learners' oral production in classroom settings. Specifically, the study aims to determine the extent to which the integration of Roblox improves students' speaking performance in EFL conversation classes, and to describe learners' perceptions of Roblox as a learning tool, particularly in relation to motivation, confidence, and willingness to communicate in English.

Research Methods

This study employed a mixed-methods design to gain a comprehensive understanding of how Roblox can enhance students' language output in daily conversation. Mixed methods allow researchers to draw on the strengths of both quantitative and qualitative approaches to build a more complete picture of the research problem (Johnson & Onwuegbuzie, 2004). A convergent parallel approach (Creswell & Plano Clark, 2018) was applied, in which quantitative and qualitative data were collected and analyzed independently and then integrated through triangulation.

The study involved six intermediate-level EFL learners aged 10–12 years enrolled in the Dynamic Conversation Class at BBC Semarang, Indonesia. Given the small sample size and the exploratory nature of the research, findings are interpreted as indicative rather than generalizable.

Data collection incorporated both quantitative assessments and qualitative explorations. The quantitative component examined students' speaking performance through pre- and post-tests using the BBC English Course rubric, which assessed content, pronunciation, vocabulary, and grammar. In line with De Jong (2023), the assessment emphasized observable indicators of speaking proficiency, particularly fluency, accuracy, and linguistic complexity. Reliability of the speaking assessments was strengthened through double scoring: two raters independently evaluated all recordings, and discrepancies were resolved through consensus discussion.

The qualitative component consisted of classroom observations, Likert-scale questionnaires, and semi-structured interviews designed to examine learners' engagement, motivation, and perceptions of Roblox-based activities. Rather than functioning solely as

descriptive supplements, these instruments were employed to help explain patterns emerging from the quantitative findings—particularly gains in fluency, vocabulary, and confidence. Qualitative data were analyzed thematically following Braun and Clarke's (2006) framework.

Implementation followed structured stages, beginning with the design of task-based conversational scenarios in Roblox that reflected real-life contexts such as greetings, ordering food, and asking for directions. Students participated in multiple virtual task sessions, during which their oral production and behavior were observed and recorded. Quantitative data were analyzed descriptively to capture changes in speaking scores, while qualitative themes were examined to provide insight into learner experience.

Finally, results from both data strands were integrated to form a holistic interpretation of how Roblox supported learners' communicative competence—combining measurable performance gains with deeper understanding of engagement and affective responses. This methodological approach carries limitations, including the small cohort, single institutional context, and short intervention duration. Nonetheless, the study contributes initial evidence of the pedagogical potential of Roblox for EFL speaking development and offers a foundation for future research with larger or more diverse populations.

Findings

This section presents the findings derived from the study, which utilized data obtained through speaking tests, classroom observations, questionnaires, and interviews. The findings are systematically categorized into two sections: the quantitative results, emphasizing test scores and statistical analyses, and the qualitative results, which offer insights into learners' motivation, confidence, vocabulary, fluency, and collaborative skills.

Quantitative Findings

The quantitative component examined students' speaking performance through pre- and post-tests using the BBC English Course rubric, which assessed content, pronunciation, vocabulary, and grammar proficiency, which emphasizes the importance of fluency and accuracy as primary indicators of oral language development. The evaluation was conducted in accordance with the criteria established by the BBC English Course, which delineates four key components of oral performance: Content (50%), Pronunciation (15%), Vocabulary (15%), and Grammar (20%). The pre-test results indicated a class mean score of 63.30, categorizing performance as Poor. This suggests that learners faced challenges in generating extended oral output with adequate accuracy and fluency. Subsequent to the introduction of task-based scenarios within the Roblox platform, the mean score of the class in the post-test increased to 75.83. This indicates an enhancement of 12.53 points, thereby elevating the class average into the Average to Good category.

Figure 1 summarizes the students' speaking performance across both Phase. The comparison highlights a clear improvement in total scores from the pre-test to the post-test.

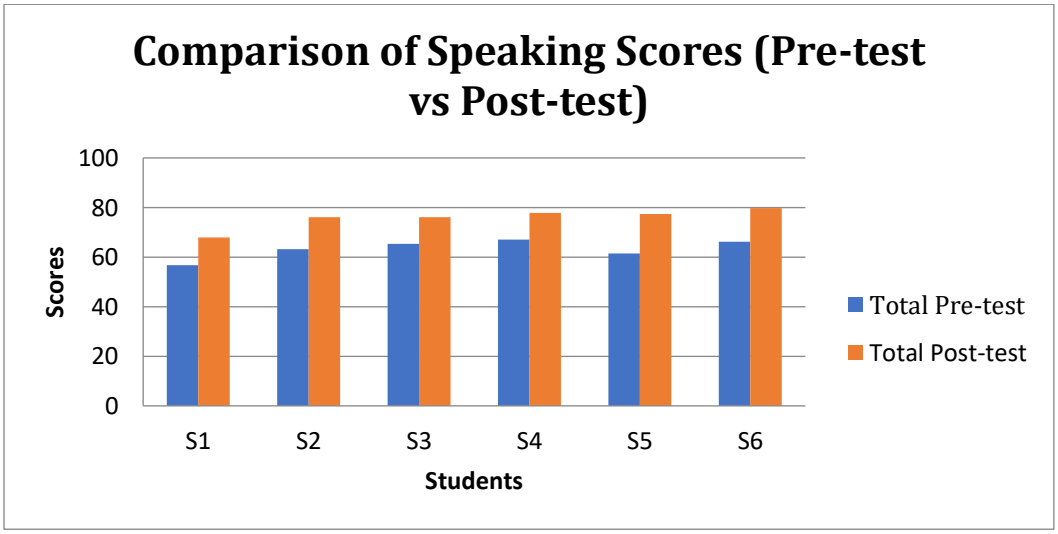

Figure 1. Comparison of Speaking Scores

The data presented in Table 1 indicate that the class average experienced an increase from 63.30 in the pre-test to 75.84 in the post-test, resulting in a total gain of +12.54 points. The results suggest that the intervention had a beneficial effect on all participants involved in the study.

The improvement that was observed was not confined to the overall mean; rather, it was consistently evident across individual participants. Each of the six students demonstrated measurable progress, with improvements varying from +10.6 to +15.8 points. The observed consistency indicates that the intervention was effective across a small yet diverse sample of learners, rather than exclusively benefiting specific individuals. For example, a student who had previously shown an inability to engage in verbal communication and frequently depended on one-word answers exhibited an improvement of nearly 15 points, indicating significant advancement in the ability to generate longer and more cohesive statements. A different student exhibiting a higher initial proficiency demonstrated notable improvements, suggesting that the tasks within Roblox effectively facilitated learning across varying baseline levels.

An analysis of the scores according to the rubric components yields additional insights. Significant enhancements were noted in the areas of Content and Vocabulary, with students demonstrating an increased ability to generate pertinent ideas and employing a broader spectrum of lexical items for self-expression. This corresponds with the genuine, context-driven activities present in Roblox, including ordering food in a virtual dining establishment or seeking directions within a simulated urban setting, which inherently necessitate that learners access and utilize vocabulary pertinent to everyday interactions. The enhancements

in pronunciation and grammar were observed, albeit to a lesser extent. For instance, a subset of students exhibited the ability to self-correct their pronunciation errors during interactions, whereas others showed an improved application of simple sentence structures.

The quantitative findings indicate that tasks utilizing Roblox not only facilitated improved scores but also a more equitable development across various dimensions of speaking skills. The observed gains establish a robust basis for the analysis of qualitative data, which elucidates the learners' experiences with the intervention and identifies the factors that facilitated their improvement.

Qualitative Findings

The quantitative data indicate measurable improvements in speaking scores, whereas the qualitative findings offer a more nuanced understanding of students' experiences with Roblox and identify the particular elements of oral performance that were enhanced. The methodology employed involved the collection of data via classroom observations, questionnaires, and interviews, facilitating triangulation across diverse sources. The findings underscore several significant themes: motivation and engagement, speaking confidence, vocabulary development, fluency, collaboration, and technical barriers.

Motivation and Engagement

One of the most consistent findings across observations and questionnaires was the increase in learner motivation. During Phase 1, students were often hesitant, with several remaining passive during group activities. However, by Phase 2, engagement levels rose significantly as students became more familiar with the Roblox platform and the scenarios designed for practice. Learners frequently described the activities as more interesting compared to traditional speaking tasks, with one student commenting, *"It is more interesting compared to the usual method."* The novelty of using a game-based platform not only captured their attention but also sustained their involvement throughout the lessons. Observation notes confirmed that students were more willing to initiate conversations, respond promptly to teacher prompts, and participate in role-play scenarios without prolonged hesitation.

Speaking Confidence

The intervention demonstrated a significant effect on students' confidence in their English speaking abilities. Initially, a significant number of participants demonstrated a tendency towards shyness and exhibited considerable apprehension regarding the possibility of making errors, which frequently resulted in either silence or limited engagement in discussions. At the conclusion of Phase 2, it was observed that students exhibited an increased propensity to engage in risk-taking behaviors concerning the language. One participant stated, "Initially shy, now more confident," while another explained, "I dared to try even if mistaken." The observations indicate that Roblox created

an environment characterized by low stakes, which facilitated learners' comfort in experimenting with novel vocabulary and linguistic structures. The role-play nature of the tasks encouraged learners to focus more on communication than on perfection, thereby reducing anxiety and fostering confidence.

Vocabulary Development

A notable theme identified was the expansion of vocabulary. The contextualized tasks within Roblox provided students with exposure to practical, real-world expressions that were directly relevant to conversational English. In a restaurant context, participants engaged in the acquisition and application of phrases pertinent to the processes of ordering food, inquiring about prices, and articulating preferences. A participant noted, “Ordering food helped with new vocabulary,” demonstrating how real-world contexts enhanced vocabulary retention and application. In contrast to rote memorization, these tasks necessitated that learners utilize new lexical items in a spontaneous manner, thereby embedding vocabulary acquisition within the context of meaningful communication.

Fluency

The progression of fluency was clearly demonstrated through observational data and self-reported assessments from students. During Phase 1, it was observed that learners frequently interrupted their speech mid-sentence, exhibited hesitations while attempting to retrieve specific vocabulary, or completely abandoned their utterances. During Phase 2, there was a notable reduction in the frequency of pauses among students, accompanied by a more natural intonation and enhanced continuity in their speech patterns. Educators observed that students started to generate more extended utterances and participated in reciprocal dialogues with their peers with greater fluidity. The observed enhancements indicate that frequent chances for spontaneous interaction within Roblox have facilitated an increased automatization of language production.

Collaboration and Social Interaction

Roblox has been shown to enhance collaborative efforts among students. In Phase 2, participants engaged in collaborative efforts to accomplish tasks, facilitated meaning-making through group interactions, and provided mutual support in the production of the target language. One student noted, “It is easier to interact with friends,” while another commented, “It is more enjoyable when collaborating.” The observations presented here demonstrate the ways in which the multiplayer functionalities of Roblox facilitated peer scaffolding and collaborative learning experiences. The social dimension contributed significantly to increased engagement and facilitated a greater number of opportunities for genuine communicative interactions.

Technical Barriers

Despite these positive findings, learners did have several technological difficulties, especially when the installation was taking place. Problems included erratic internet connections, trouble signing in, and sporadic platform unfamiliarity. The results of the questionnaire showed that the technical preparedness mean score during Phase 1 was a comparatively low 2.2/5. However, as students acquired experience and teachers offered more technical support, these issues subsided in Phase 2. Technical obstacles did not stop learning, but they did draw attention to how crucial planning and troubleshooting are in technology-mediated education.

When combined, the qualitative results enhance the quantitative statistics by demonstrating not just that students made progress but also how and why. While technical obstacles were the primary obstacles, the most commonly mentioned areas of growth were motivation, confidence, vocabulary development, fluency, and teamwork. These revelations offer a deeper comprehension of Roblox's educational influence and open the door to a more thorough examination of how the results relate to current theories and research.

Table 1 summarizes the findings from classroom observations, questionnaires, and student interviews. The data highlight changes in learners' motivation, confidence, vocabulary, fluency, collaboration, and technical challenges between the pre-test and the post-test.

Table 1. Questionnaire and Interview

Aspect Observed	Observation (Phase 1 → Phase 2)	Questionnaire (Score & Perception)	Interview (Student Responses)	Interpretation
Motivation & Activeness	Phase 1**:** Initially, some students were passive; significantly increased in the Phase 2 (more frequent questioning & interaction).	P1 (Motivation) average 4.0 → students felt motivated.	"Very enthusiastic", "more interesting compared to the usual method".	Roblox increases motivation through interactive activities and an enjoyable learning atmosphere.
Speaking Confidence	Phase 1: Students were hesitant/shy. Phase 2: more confident, started trying	P3 (Confidence) average 4.2 → students felt braver to speak.	"Initially shy, now more confident", "dared to try even if mistaken".	The game environment reduces anxiety and increases willingness to communicate.

	new vocabulary.			
Vocabulary & Expressions	Phase 1: limited to basic vocabulary. Phase 2: tried more new expressions according to scenarios.	P2 & P7 average 4.1 → Roblox helped enrich vocabulary & fluency.	"Ordering food helped with new vocabulary", "asking directions added practical expressions".	Authentic tasks in Roblox facilitated contextual vocabulary learning.
Fluency	Phase 1: many pauses, not fluent. Phase 2: conversations are more fluent, with fewer pauses.	P7 (Fluency) average 4.3.	"Speaking more fluently", "could chat with friends more naturally".	Roblox activities provided real-time practice opportunities that improved fluency.
Collaboration & Social Interaction	Phase 1: Some students were less engaged in groups. Phase 2: more actively collaborated.	P6 average 4.0.	"Easier to interact with friends", "more fun when working together".	Roblox encourages collaboration and social interaction, supporting language output.
Technical Barriers	Phase 1: Login & internet issues. Phase 2: barriers decreased.	P5 average 2.2 (some students still experienced obstacles).	"Login difficulties", "slow internet" (especially at the beginning).	Initial technical barriers can be overcome with guidance & practice, without reducing long-term benefits.

The findings from several instruments constantly demonstrate positive developments, especially in vocabulary, fluency, motivation, confidence, and teamwork, as indicated in Table 1. Even while there were still some technological difficulties, they decreased in importance in Phase 2, indicating that Roblox-based activities offered a fun and encouraging setting for language learning.

In conclusion, the results show steady gains in students' speaking abilities on both quantitative and qualitative assessments, especially when it comes to motivation, self-assurance, vocabulary, fluency, and teamwork. These findings necessitate a more thorough examination in order to relate the observed results to accepted theories and earlier studies in the domains of digital game-based learning and second language acquisition.

Discussion

The integrated quantitative and qualitative findings demonstrate that participation in Roblox-based activities enhanced learners' speaking performance while simultaneously strengthening communicative, cognitive, and affective competencies. These results can be interpreted through core theories of second language acquisition. The improvements observed in fluency, content development, and vocabulary use provide empirical validation for Swain's Output Hypothesis (2005), which asserts that language production drives learning through hypothesis testing, noticing gaps, and self-monitoring. Unlike traditional speaking exercises, often limited to controlled drills, memorized dialogues, or teacher-led exchanges, Roblox environments required students to generate spontaneous language in response to unpredictable peer actions and in-game challenges. These conditions created natural pressure for learners to retrieve, assemble, and revise utterances in real time, thereby operationalizing Swain's claim that meaningful output is both the product and the mechanism of acquisition.

The findings are also strongly aligned with Ellis's Task-Based Language Teaching framework (2003, 2019, 2021). Task design embedded communicative goals such as locating objects, navigating spaces, or completing missions, all of which compelled learners to exchange information and negotiate meaning. Rather than rehearsing target structures, learners co-constructed discourse while pursuing shared goals—illustrating the core TBLT principle that linguistic development emerges from purposeful interaction rather than form-focused instruction. The fact that improvements were detected across fluency, accuracy, and complexity also resonates with De Jong's (2023) performance-based model of speaking proficiency, suggesting that Roblox affords a rich environment for activating multiple dimensions of oral production simultaneously.

From a DGBLL perspective, Roblox's design features appear to introduce pedagogical affordances absent in classroom-based role-play. Whereas traditional speaking tasks often produce rehearsed language, the open-ended, multiplayer nature of Roblox fostered authentic communicative unpredictability. Learners frequently needed to clarify meaning, respond to emergent peer contributions, and collaboratively address misunderstandings—interaction patterns typical of real-world communication but rarely replicated in textbooks. Qualitative data indicating lower anxiety and heightened confidence support claims from Reinders and Wattana (2014) and Alsawaier (2018) that digital play reduces evaluative pressure. However, this study extends such work by linking affective outcomes with measurable oral performance, demonstrating that engagement in a virtual environment can translate into observable linguistic growth.

At the same time, caution is warranted in attributing gains solely to Roblox. Motivational novelty, close peer relationships, and teacher scaffolding may have amplified participation and risk-taking. The small sample and supportive micro-context likely produced

interactional dynamics that cannot be assumed in larger or more heterogeneous settings. Technical issues, such as intermittent connectivity, also shaped how smoothly learners could participate. These contextual influences suggest that while Roblox provided generative learning affordances, improvements likely emerged from the interplay between platform design, pedagogical structuring, and classroom culture.

Taken together, the findings demonstrate that Roblox mediates the intersection of output-driven learning, task-based pedagogy, and digital engagement. The platform not only sustains willingness to communicate and collaboration but also enables spontaneous oral production that is difficult to cultivate in conventional speaking tasks. Although exploratory in scope, the study provides productive evidence that immersive, learner-driven game environments can support measurable EFL speaking development and merit further investigation through longitudinal and comparative inquiry.

Conclusion

This study demonstrates that integrating Roblox into EFL conversation classes can enhance learners' speaking performance, evidenced by measurable gains in fluency, vocabulary, grammar, and content, alongside greater confidence and willingness to communicate. Unlike studies that focus primarily on motivation, this research contributes performance-based evidence to international discussions on digital game-based and immersive learning by showing that open-ended virtual environments can support spontaneous oral production within low-anxiety, collaborative spaces that extend beyond the limits of traditional speaking tasks.

As an exploratory study with a small cohort and short intervention period, the findings should be interpreted cautiously. Future work should involve larger and more diverse participants, longer implementation periods, and comparisons with other immersive or AI-supported platforms to determine whether gains are Roblox-specific or indicative of broader affordances of interactive technologies. Even so, the study highlights the pedagogical potential of virtual platforms to enrich EFL learning through meaningful, task-based communication supported by real-time peer interaction and digital engagement.

References

Alhasan, K., Alhasan, K., & Al Hashimi, S. (2023). Roblox in higher education: Opportunities, challenges and future directions for multimedia learning. *International Journal of Emerging Technologies in Learning, 18*(19), 32–46. https://doi.org/10.3991/ijet.v18i19.43133

Alsawaier, R. S. (2018). The effect of gamification on motivation and engagement. *The International Journal of Information and Learning Technology, 35*(1), 56–79. https://doi.org/10.1108/ijilt-02-2017-0009

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage.

De Jong, N. H. (2023). *Assessing second language speaking proficiency*. *Annual Review of Linguistics, 9*, 541–560. https://doi.org/10.1146/annurev-linguistics-030521-052114

Ellis, R. (2003). *Task-based language learning and teaching.* Oxford University Press.

Ellis, R. (2021). *Reflections on task-based language teaching.* Multilingual Matters.

Ellis, R., Skehan, P., Li, S., Shintani, N., & Lambert, C. (2019). *Task-based language teaching: Theory and practice.* Cambridge University Press. https://www.cambridge.org/core/books/taskbased-language-teaching/taskbased-language-teaching/D240518178E1175569E34013B238BD1F?utm_source=chatgpt.com

Fan, L. & Chiang, J. (2023). A systematic review of the application of metaverse in language education: Prominent themes, research methods, impacts, and future challenges. *Journal of Language Teaching*, 3(10), 1-14. DOI: 10.54475/jlt.2023.026. URL: https://doi.org/10.54475/jlt.2023.026

Govender, T., & Arnedo-Moreno, J. (2021). An Analysis of Game Design Elements Used in Digital Game-Based Language Learning. *Sustainability*, 13 (12), 6679. https://doi.org/10.3390/su13126679

Han, J., Liu, G., & Gao, Y. (2023). Learners in the metaverse: A systematic review on the use of Roblox in learning. *Education Sciences, 13*(3), 296. https://doi.org/10.3390/educsci13030296

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14–26. https://doi.org/10.3102/0013189X033007014

Leeming, P., & Harris, R. (2022). *Measuring speaking proficiency growth in the language classroom*. *Language Teaching Research*, 26(4), 521–538. https://doi.org/10.1177/13621688221130856

Paraskeva, N., Haywood, S., Anquandah, J., White, P., Budhraja, M., Diedrichs, P. C., & Williamson, H. (2025). Evaluating the effectiveness of a Roblox video game (Super U Story) in improving body image among children and adolescents in the United States: Randomized controlled trial. *Journal of Medical Internet Research, 27,* e66625. https://doi.org/10.2196/66625

Ramanujam, R., & Ismail, H. H. (2024). The realities of Roblox and metaverse technologies: Emerging potential for enhancing English language learning. *St. Theresa Journal of Humanities and Social Sciences, 10*(2), 1–15. https://so19.tci-thaijo.org/index.php/sjhs/article/view/1060

Reinders, H., & Wattana, S. (2014). Can I say something? The effects of digital game play on willingness to communicate. *Language Learning & Technology, 18*(2), 101–123. https://www.lltjournal.org/item/2875

Manrique García, J. S., Orjuela López, A. D., Pardo Muete, K. E., & Niño Huertas, K. J. (2023). *Uso del MMORPG Roblox para la construcción de vocabulario en una clase de 11 a 13 años de inglés como lengua extranjera.* [Licenciatura en Educación Bilingüe con Énfasis en la Enseñanza del Inglés, Universidad El Bosque]. Repositorio Unbosque. URL: https://hdl.handle.net/20.500.12495/10665

Sari, R., Evianty, R., Hafniati, & Syahrin, E. (2025). Exploring the metaverse: Enhancing German language learning with Roblox. In *Proceedings of the 6th International Conference on Innovation in Education, Science and Culture (ICIESC 2024).* EAI. https://doi.org/10.4108/eai.17-9-2024.2353028

Sinar, T. S., Budiman, M. A., Ganie, R., & Rosa, R. N. (2023). Students' perceptions of using Roblox in multimodal literacy practices in teaching and learning English. *World Journal of English Language, 13*(7), 146. https://doi.org/10.5430/wjel.v13n7p146

Swain, M. (2005). *The Output Hypothesis: Theory and Research*. In E. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning*. Routledge.

Syarifudin, A. (2019). *An instructional model for enhancing EFL learners' speaking proficiency*. *EduLangue: Journal of English Language Education*, 2(2), 45–56. https://journal.uinmataram.ac.id/index.php/edulangue/article/view/922

Choi, Y., Choi, J., & Seering, J. (2025). Leveling up together: Fostering positive growth and safe online spaces for teen Roblox developers. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25)* (Article 691, pp. 1–18). Association for Computing Machinery. https://doi.org/10.1145/3706598.3713969

Zhai, J. (2024). The use of Roblox in elementary school science education during pandemics. *Open Journal of Social Sciences, 12,* 462–472. https://doi.org/10.4236/jss.2024.125025