Clarivate
Web of Science
Zoological Record:

## Pakistan Journal of Life and Social Sciences

www.pjlss.edu.pk



https://doi.org/10.57239/PJLSS-2025-23.1.0022

#### RESEARCH ARTICLE

# Effectiveness of Immersive Learning in Enhancing Language Skills among Primary School Children

Abdelrahim Fathy Ismail\*

Curriculum and Instruction Department, Faculty of Education, King Faisal University, Al Ahsa, Saudi Arabia

ARTICLE INFO	ABSTRACT						
	This study aimed to explore the effectiveness of immersive learning in						
Received: Aug 19, 2024	enhancing listening and speaking skills among fourth-grade primary school students. The study employed an experimental methodology with a quasi- experimental design based on one group of participants. The research sample						
Accepted: Oct 10, 2024							
Keywords	included 40 students from a school in Al-Ahsa, Saudi Arabia. To achieve the study's objectives, an oral language skills test was prepared, focusing on both listening and speaking skills. Additionally, an immersive learning-based						
Immersive learning	educational content was designed, consisting of 20 educational sessions for the						
Language skills	participating students. The results indicated the effectiveness of immersive						
Listening	learning in improving listening skills such as auditory discrimination of words,						
Speaking	extracting the main idea from auditory content, identifying sub-ideas, deriving						
Primary school students	the meaning of new vocabulary from context, recognizing the sequence of						
	ideas, reordering events, and discriminating details in auditory content.						
	Similarly, the speaking skills that improved included expressing ideas clearly						
*Corresponding Author	and avoiding colloquial language, delivering a clear oral message, narrating						
afismail@kfu.edu.sa	stories using formal expressions, sharing personal experiences, organizing and maintaining continuity of ideas in speech, demonstrating expressive						
	performance with body language, and observing proper speech speed and						
	accuracy. Statistically significant differences were found at the 0.05 level in						
	favor of the post-test of language skills.						

## INTRODUCTION AND LITERATURE REVIEW

The primary school stage is crucial in establishing linguistic foundations for children. During this sensitive period of growth, language skills are primarily formed. Choosing innovative and effective teaching methods at this stage represents a long-term investment in developing children's linguistic abilities by providing a language-rich environment and diversifying activities that encourage linguistic interaction. Educationally, language comprises listening, speaking, reading, and writing skills. In the early years of a child's life, especially in primary school, these skills are significantly developed. It is vital during this stage to explore teaching and learning methods that suit the instruction of these skills.

Language acquisition is a fundamental component of early education, playing a crucial role in shaping children's cognitive development, communication skills, and overall academic success (Prins et al., 2023). As educators continually seek innovative curricula to enhance language learning, immersive learning has emerged as a powerful pedagogical tool. Immersive learning, characterized by the use of interactive, sensory-rich environments, aims to engage students more deeply in the learning process. This approach allows children to experience language in a way that reflects real-life situations, making the learning process more intuitive and impactful (Weng et al., 2024).

In recent years, immersive learning has gained significant attention, especially in primary education, where it facilitates the development of foundational language skills and creates dynamic learning experiences that captivate young learners. Immersive learning not only makes language acquisition

more engaging but also fosters a deeper connection to the material, enabling children to practice and apply their language skills in various contexts (Palamar et al., 2024).

Porter & Castillo (2023) noted that what distinguishes immersive learning from traditional classroom learning is that immersive learning involves exposing learners to the practical aspects of using the target language in everyday life. This includes engaging in authentic communication with native speakers regarding grammar, vocabulary, and pronunciation.

To enhance children's language skills, it is essential to provide suitable linguistic learning experiences that offer opportunities for genuine linguistic interaction, free from colloquial dialects (Kilag et al., 2023). One such experience is language immersion-based learning, which enables children to be immersed in language learning situations that use formal language throughout their learning time, completely isolating them from colloquial dialects (Robbani et al., 2024).

The term "immersion" in language learning dates back to the bilingual curriculum implemented at Saint Lambert School in Canada, where English was the native language and French was the target language to be learned through immersion. This approach has achieved considerable success in Canadian schools due to its unconventional nature, the dedication of educators to making the experience successful, and the ample opportunities it provides for exposure to and practice of the language, along with the acquisition of its skills and cultural context (Bautista, 2016).

Immersive learning is an educational approach that aims to fully immerse the learner in a new linguistic environment. In this method, the target language is used across all aspects of the educational process (Kannan & Meenakshi, 2023). In other words, teachers and students communicate in the target language within the classroom, read books and articles, and write in the target language. The primary goal of this approach is to develop learners' overall language proficiency, encompassing listening, speaking, reading, writing, and cultural understanding (Savage & Hughes, 2014).

In primary education, we can make the language learning process enjoyable and engaging for children through linguistic immersion in various activities. Instead of traditional rote memorization and lecturing, we can employ stories, narratives, games, and interactive activities that utilize formal language. This approach enables children to associate the formal language with positive meanings (Fernandes et al., 2024).

Wei & Zhang (2022) noted that integrating immersive language learning in primary education can provide opportunities for practical, interactive learning and create a rich, stimulating, and realistic linguistic learning environment. Furthermore, educators can leverage these activities to develop foundational language skills and build children's confidence in their ability to communicate. Children engage with activities through direct experiences, acquiring new linguistic and manual skills, while expressing their thoughts and feelings both physically and verbally during the planning and execution of these activities.

In line with immersive learning, the language skills that children need to develop in primary school are diverse and essential for becoming proficient users of structured and cohesive language. Among these foundational skills are (Andrä et al., 2020; Redondo et al., 2020; Hadley et al., 2023; Colognesi et al., 2023; Amiruddin et al., 2023; Syahputri & Arianti, 2024):

Basic Listening Skills: These refer to the ability to distinguish between sounds, words, phrases, and sentences, as well as the capacity to understand, interact with, and analyze spoken language.

Basic Phonological Awareness Skills: These skills include recognizing that letters, sounds, and spoken words have written counterparts. They also involve analyzing and constructing sentences into words, words into syllables, and syllables into sounds, in addition to recognizing rhythm, intonation, and phonetic manipulation.

Basic Oral Expression Skills (Speaking): These skills pertain to the accurate pronunciation of sounds, words, and sentences, as well as the ability to express needs, thoughts, and feelings effectively.

Basic Reading Skills: This refers to the child's ability to correctly pronounce letters and their sounds, understand how to combine them to form words, read short words and sentences, and interact with and analyze written texts.

Basic Vocabulary Acquisition Skills: These encompass the ability to acquire new words, structures, styles, and expressions, along with understanding their meanings and nuances in linguistic context.

Basic Writing Skills: These involve teaching children how to write Arabic letters correctly while ensuring proper visual-motor coordination, forming letters to build words, and writing short words and sentences. Additionally, it includes expressing needs, thoughts, and feelings through writing.

Basic Language Proficiency Skills: These refer to the ability to communicate effectively through language, fostering self-confidence to express oneself clearly, boldly, and fluently in both spoken and written forms.

The study by Rafieyan & Rozycki (2019) focused on research questions within the context of an immersion language program in an English as a Foreign Language (EFL) setting: Does instruction in an immersion language program have a significant impact on the overall language proficiency of language learners? Is there a significant relationship between the overall language proficiency of language learners and their pragmatic competence? Is there a significant relationship between the level of language learners' exposure to the language and their pragmatic competence? The results of this study demonstrated a significant positive effect of the immersion language program on overall language proficiency. However, the findings did not reveal any significant correlation between overall language proficiency and pragmatic competence, and only a weak correlation between language exposure and pragmatic competence. This suggests that the development of overall language proficiency and immersive language exposure does not automatically guarantee the acquisition of pragmatic competence.

The study by Altun & Lee (2020) examined immersive learning techniques such as virtual reality (VR) and augmented reality (AR) in English language teaching. Data were collected from 59 academic articles, and the studies were analyzed using a content analysis approach. The findings indicated that immersive learning techniques in English language teaching emerged prominently in 2017, with mixed-method research being the most frequently utilized approach. The most studied language skill was vocabulary for AR and speaking for VR. The results also revealed advantages and challenges regarding the use of immersive learning techniques in English language teaching. Another analysis highlighted the findings related to the characteristics of immersive learning techniques in English language education. Based on this review, implications for research and design are presented for researchers and practitioners.

Porter & Castillo (2023) investigated the effectiveness of traditional classroom learning versus immersion learning in acquiring English. Using a sample of 60 non-native English learners, the study aimed to measure the impact of these two methodologies on language proficiency, as measured by the TOEFL (Test of English as a Foreign Language). This indicates that those in the immersion learning group achieved significantly higher TOEFL scores after training compared to their counterparts in traditional classroom settings. Such findings help to clarify the fact that while immersion learning significantly enhances English proficiency, it also suggests that this experiential environment can be extremely beneficial for learners aiming to acquire the language effectively.

The study by Fitrianto & Saif (2024) explored the role of virtual reality in enhancing experiential learning and compared traditional and immersive learning environments through qualitative descriptive design. The results revealed that virtual reality significantly increases student engagement and understanding by providing immersive, interactive, and practical educational experiences. Students exhibited higher levels of engagement and a deeper understanding of complex

concepts, along with improved knowledge retention in virtual reality environments compared to traditional methods. The study also identifies technical and pedagogical challenges, including the need for robust infrastructure, teacher training, and curriculum alignment. Based on these insights, recommendations are offered for curriculum design, professional development for educators, and equitable access to virtual reality technology.

The current study focuses on exploring how immersive learning activities can enhance the development of these foundational language skills among primary school children. Given that language is a fundamental skill for academic achievement and social interaction, it is essential to investigate innovative approaches that extend beyond traditional teaching methods. This research aims to evaluate the effectiveness of immersive learning in improving specific language skills, namely listening and speaking. By employing immersive techniques, the study seeks to determine their potential to foster a more engaging and effective learning environment, ultimately leading to enhanced language proficiency among young learners.

## **Research Objective and Main Question**

The present study aims to enhance specific language skills (listening and speaking) among primary school students through immersive learning. The main question guiding this research can be framed as follows: What is the effectiveness of immersive learning in enhancing language skills among primary school students?

This inquiry is critical as it seeks to explore the potential of immersive learning environments to not only improve language proficiency but also to foster a deeper engagement with the language. Given the significant role that effective communication plays in academic success and social interaction, understanding the impact of immersive methods on language development in early education settings is essential. This study will contribute to the existing body of knowledge by evaluating how immersive learning strategies can be systematically integrated into primary education to address the challenges of traditional language teaching methods.

#### **METHODOLOGY**

#### Research design

The present study adopts an experimental design, utilizing a quasi-experimental approach with a single group of fourth-grade students. This design was selected to achieve the research objective of enhancing specific language skills-namely listening and speaking-among primary school students through immersive learning techniques. The immersive learning method aims to expose students to a rich linguistic environment that closely mirrors real-world language use, enabling active engagement and practical application of the target skills. To measure the impact of immersive learning, the study implemented pre- and post-intervention assessments that evaluated the students' language skills in listening and speaking. This design was chosen for its ability to capture the effectiveness of the intervention in promoting measurable improvements over time. The single-group approach was ideal given the focus on internal consistency, allowing the comparison of students' performance before and after the intervention without the need for a control group. This experimental framework was chosen to maximize the study's ability to establish a clear link between the immersive learning approach and language skill development.

## **Research participants**

The study involved 40 fourth-grade students from Al-Hufuf, Al-Ahsa, Kingdom of Saudi Arabia, selected using simple random sampling from the 15th Intermediate School. The participants were carefully chosen based on several criteria to ensure consistency and comparability across the group. These criteria included:

Age proximity: All students were of similar age, ensuring that developmental differences would not skew the results.

Similar social conditions: The students shared relatively similar socioeconomic backgrounds, which helped minimize external variables that could impact language learning outcomes.

Comparable academic achievement: Based on teacher recommendations and school records, the students exhibited comparable levels of academic performance. This was critical to ensure that any improvements in language skills could be attributed primarily to the intervention rather than prior abilities.

This selection approach was designed to establish a homogeneous group, reducing confounding variables and enabling a clearer evaluation of the immersive learning method's effectiveness. Additionally, all participants had no prior experience with immersive learning environments, making this a controlled introduction to the method being studied. By selecting a group that shared these common characteristics, the study aimed to create conditions conducive to evaluating how immersive learning can enhance listening and speaking skills, ensuring that observed changes were likely due to the educational intervention rather than external factors.

#### **Ethical Considerations**

This study adhered to the highest ethical standards to ensure the integrity and safety of all participants involved. Prior to the commencement of data collection, the research proposal was submitted to and approved by the King Faisal University Research Ethics Committee under approval number KFU-REC-2024-ETHICS1984. This ethical approval confirms that the study met the guidelines and principles set by the university for the responsible conduct of research.

## The following ethical precautions were taken:

**Informed Consent:** All participants, along with their guardians, were fully informed of the study's objectives, procedures, potential risks, and benefits. This ensured that their involvement was completely voluntary and based on a clear understanding of the study's scope.

**Confidentiality:** Participants' identities and personal information were kept strictly confidential. All data were anonymized to ensure that individual participants could not be identified in the analysis or in the publication of the study's results. Data were stored securely and only accessible to the research team.

**Right to Withdraw:** Participants were informed of their right to withdraw from the study at any stage without any consequences. This freedom was emphasized throughout the research process to ensure that participation remained voluntary.

**Minimal Risk:** The nature of the study posed minimal risk to the participants. The activities were age-appropriate and aligned with their regular educational experiences, ensuring a safe and comfortable learning environment.

#### **Study Tools**

## 1. The Oral Test for Listening and Speaking Skills:

Objective of the Test Preparation: The test was designed to measure specific listening and speaking skills, as outlined in the current study, based on immersive learning procedures.

**Description of the Preliminary Version of the Test**: The test was constructed to be administered orally, with each participant individually assessed. In its initial version, the test consisted of the

following areas, ensuring that the items were appropriate for the cognitive and linguistic characteristics of the students' age group:

## a) Listening Section:

This section included eight (8) multiple-choice oral questions aimed at measuring the following subskills:

Auditory discrimination of words

Extracting the main idea from the auditory content

Identifying sub-ideas in the auditory content

Deriving the meaning of new vocabulary from the auditory context

Following auditory instructions and directions

Recognizing the sequence of ideas in the auditory content

Reordering events from the auditory content

Discriminating details in the auditory content

## b) Speaking Section:

This section required the students to speak freely on a given topic, assessing four (4) open-ended questions designed to measure targeted skills. These skills were assessed using a performance-recording card that evaluated the responses across three levels. The targeted speaking skills included:

Describing objects/events using proper, formal expressions

Expressing ideas in eloquent words and phrases, avoiding colloquial language

Delivering a clear oral message to the listener

Narrating stories with precise, formal expressions

Sharing personal experiences clearly, avoiding colloquial language

Organizing and maintaining continuity of ideas in speech

Demonstrating expressive performance with appropriate body language

Observing proper speech speed and accuracy

**Test Validation:** to ensure the validity of the test, five academic reviewers who assessed its suitability for measuring the intended skills reviewed it. Some reviewers suggested slight modifications in the wording of certain questions without eliminating any items. Additionally, they recommended that the speaking section should be assessed using a graded performance card in formal language. To verify internal consistency, the test was administered to a pilot sample of ten (10) fourth-grade students from the same school, who were not part of the main study sample. Correlation coefficients were calculated between each question's score and the overall score of its respective section. The correlations ranged between 0.81 and 0.87. The correlations between each

question's score and the overall test score ranged from 0.82 to 0.87, all of which were statistically significant at the 0.05 level, indicating strong internal consistency of the test items. Internal consistency was further confirmed by calculating the correlation coefficients between the total score for each section and the overall test score, all of which were statistically significant at the 0.05 level.

**Test Reliability:** To ensure the reliability of the test, Cronbach's Alpha coefficient was used. The overall reliability coefficient for the test was 0.87, indicating high reliability. The reliability coefficients for the sub-sections were as follows: Listening Section: 0.82, Speaking Section: 0.86, all of which were statistically significant.

#### 2. Immersive Learning-Based Educational Content

**Background for Preparing the Proposed Content**: The primary aim of the proposed content was to enhance specific listening and speaking skills among students, guided by the principles of immersive learning. Detailed objectives were developed and presented at the start of each session to provide clear learning outcomes for both students and educators.

**Content Structure:** The educational content was structured into a series of sessions, each carefully designed to align with the immersive learning approach. The following components were included:

- **a) Theoretical Introduction:** A theoretical introduction was provided for elementary school teachers, outlining the general and specific objectives of the content. This introduction also clarified the key terminologies related to immersive learning and its application in language education. Teachers were made aware of how the content would help foster the development of linguistic skills, specifically listening and speaking, through active and engaged learning experiences.
- **b) Teaching and Learning Methods:** The content incorporated teaching strategies based on the principles of linguistic immersion, where students are fully engaged in the target language. These methods encouraged students to naturally acquire language skills by experiencing the language in a practical and contextualized manner, simulating real-world use of language.
- **c) Targeted Linguistic Skills:** The focus of the content was on developing both listening and speaking skills. The specific sub-skills within these areas were clearly identified, including auditory discrimination, identifying main and supporting ideas, vocabulary acquisition through context, and effective verbal expression. The content aimed to build these skills through a scaffolded approach, where each session reinforced the learning outcomes of the previous ones.
- **d) Guidelines for Content Delivery:** Detailed instructions were provided to the teachers on how to deliver the content to children, ensuring that the immersive learning strategies were effectively implemented. Teachers were encouraged to create an engaging and interactive classroom environment that promotes active participation and language use.
- **e) Suggested Tools and Activities:** The content offered a variety of educational tools and interactive activities that align with the immersive learning framework. These included role-playing, storytelling, and interactive listening exercises that engage students in meaningful language use. The activities were designed to be age-appropriate and cognitively stimulating, allowing students to practice their listening and speaking skills in an engaging manner.
- **f) Proposed Roles for Teachers:** Teachers were given clearly defined roles for each session, ensuring that they facilitate the learning process effectively. These roles included guiding discussions, providing feedback, and encouraging student participation. The content emphasized the importance of the teacher's role in creating a supportive learning environment that fosters linguistic immersion.
- **g)** Assessment Methods: The content also included recommended assessment methods for evaluating student progress throughout the sessions. These assessments were both formative and

summative, allowing teachers to continuously monitor and adjust instruction to meet the needs of individual students. Assessment methods included observation of student participation, oral quizzes, and performance tasks that measured the development of listening and speaking skills.

**h) Detailed Session Content**: The content comprised a total of 20 educational sessions, each focusing on specific learning outcomes. The key elements of each session included:

Session Topic: Clearly defined themes for each session that guided the learning activities.

**Duration:** The time allocated for each session to ensure effective delivery.

**Detailed Learning Objectives:** Specific objectives for each session that align with the overall goal of enhancing listening and speaking skills.

**Teaching Techniques and Methods:** Recommended teaching strategies for immersive learning, such as using authentic language materials, engaging in discussions, and promoting student interaction.

**Suggested Activities:** Activities tailored to the session's objectives, including role-playing, group discussions, and listening exercises.

**Learning Tools:** Suggested educational tools, such as audio materials, visual aids, and manipulatives, to support immersive learning.

**Assessment Methods:** Assessment strategies to measure student performance and progress in listening and speaking skills, using both direct and observational methods.

Furthermore, the immersive learning activities were carefully designed to integrate listening and speaking tasks in a way that reflects natural communication contexts. These tasks included interactive storytelling, role-playing exercises, and language games, providing students with opportunities to practice the target skills in a dynamic and engaging manner. Throughout the intervention, the learning environment was structured to promote constant exposure to the target language, ensuring the effectiveness of the immersive experience.

#### **Data Collection and Analysis**

The current study employed a quasi-experimental design, with the educational content based on immersive learning applied to a sample of 40 fourth-grade students. To achieve the study's objective of enhancing specific language skills (listening and speaking), data were collected using a pre- and post-test model that measured the students' performance on the targeted skills through the oral language test developed for this study.

The oral test, designed to assess both listening and speaking skills, was conducted to the students prior to the intervention (pre-test) and then again after the completion of the immersive learning sessions (post-test). This pre- and post-comparative approach aimed to measure the effectiveness of the intervention by observing any improvements in the students' language abilities.

To analyze the collected data, a paired samples t-test was conducted to compare the students' preand post-test scores. The use of the paired t-test is appropriate in this context because it allows for the analysis of changes in the same group of students across two time points—before and after the intervention—thereby assessing the impact of the immersive learning content on their language skills.

The t-test analysis provided statistical insights into the significance of the observed differences between pre- and post-test scores, enabling the researchers to evaluate the effectiveness of the

immersive learning content in enhancing listening and speaking skills. The results, along with effect sizes and p-values, were used to determine whether the intervention led to statistically significant improvements in the students' performance.

## **RESULTS AND DISCUSSIONS**

To answer the research question, "What is the effectiveness of immersive learning in enhancing language skills among primary school students?", the Oral Test for Listening and Speaking Skills was administered to the students before and after the implementation of the educational content. The results are illustrated in Table 1 below.

Table 1: Results of the oral test for listening and speaking skills (N = 40)

Skills	Measurement	Average	Standard deviation	value (T)	Significance level	Direction of differences
Auditory discrimination of words	Pre-Test	1.75	1.2	7.65	*0.00	Post-test
	Post-Test	3.50	0.89			
Extracting the main idea from the auditory content	Pre-Test	2.25	1.6	8.14	*0.00	Post-test
	Post-Test	4.5	0.74			
Identifying sub-	Pre-Test	2.5	0.74		*0.00	Post-test
ideas in the auditory content	Post-Test	4.75	1.4	6.99		
Deriving the	Pre-Test	2	2.2			
meaning of new vocabulary from the auditory context	Post-Test	4.5	0.74	8.45	*0.00	Post-test
Following auditory	Pre-Test	2.25	1.2	5.63	*0.00	Post-test
instructions and directions	Post-Test	4.75	0.96			
Recognizing the	Pre-Test	2.5	0.74		*0.00	Post-test
sequence of ideas in the auditory content	Post-Test	4.5	0.65	6.77		
Reordering events	Pre-Test	1.5	1.3		*0.00	Post-test
from the auditory content	Post-Test	4.5	0.56	8.65		
Discriminating	Pre-Test	2	0.34		*0.00	Post-test
details in the auditory content	Post-Test	4.75	0.69	11.65		
Describing	Pre-Test	1.75	1.4		*0.00	Post-test
objects/events using proper, formal expressions	Post-Test	4.5	0.45	8.69		
Expressing ideas in	Pre-Test	1.5	1.69	9.25	*0.00	Post-test
eloquent words and phrases, avoiding colloquial language	Post-Test	4	0.45			
Delivering a clear	Pre-Test	2	1.4	8.47	*0.00	Post-test
oral message to the listener	Post-Test	4.5	1.69			
	Pre-Test	2	0.54	7.96	*0.00	Post-test

Skills	Measurement	Average	Standard deviation	value (T)	Significance level	Direction of differences
Narrating stories with precise, formal expressions	Post-Test	4	0.68			
Sharing personal	Pre-Test	1.5	1.4			
experiences clearly, avoiding colloquial language	Post-Test	4.75	0.47	6.98	*0.00	Post-test
Demonstrating	Pre-Test	1.5	0.96			
expressive performance with appropriate body language	Post-Test	4.25	1.85	7.58	*0.00	Post-test
Observing proper	Pre-Test	1.25	0.96	10.69	*0.00	Post-test
speech speed and accuracy	Post-Test	4.5	0.48			
Total Test Score	Pre-Test	28.25	1.78	8.91	*0.00	Post-test
	Post-Test	66.25	1.2			

<sup>\*</sup>Significance level at (0.05).

The quantitative results presented in Table 1 indicate statistically significant differences in the scores of the participating students regarding both listening and speaking skills. The differences in mean scores favor the post-test, as indicated by the higher average values. The overall t-test score was 8.91 at a significance level of 0.05. These findings provide strong evidence for the effectiveness of immersive learning in enhancing the language skills of the students involved in the study.

The notable improvement in the post-test scores, as compared to the pre-test, suggests that immersive learning had a substantial impact on the students' ability to develop essential language skills. This result highlights the method's ability to support auditory learning and interactive engagement, both of which are critical for language acquisition. For listening skills, the students showed a marked improvement in auditory discrimination, understanding main and sub-ideas in auditory content, and recognizing new vocabulary from context, all of which are integral components of language comprehension.

Similarly, for speaking skills, the students demonstrated enhanced clarity in expressing ideas, improved organization of thoughts, and an ability to maintain formal language, avoiding colloquialisms. These findings suggest that immersive learning also contributed to better narrative structuring, the use of body language for expressive communication, and a more accurate and fluent delivery of speech. Such improvements in communication skills are crucial for fostering both academic success and social interaction at this stage of the students' development.

This statistically significant difference, indicated by the t-value, further supports the argument that immersive learning methodologies can play a transformative role in language education, particularly in primary school contexts. The evidence gathered from this study points to the broad applicability of immersive learning, not just as a tool for language skill development but also as a method that could be replicated in other subject areas where active and engaging learning environments are required.

#### CONCLUSIONS

This study has demonstrated the significant effectiveness of immersive learning in enhancing listening and speaking skills among primary school students. Through the application of an experimental design involving a single group of fourth-grade students, the research found that

immersive learning environments can substantially improve students' abilities to process auditory information and communicate clearly in a structured manner. The results, indicated by statistically significant improvements in both listening and speaking post-test scores, emphasize the value of integrating immersive learning into educational practices.

In terms of listening skills, the immersive learning approach helped students improve their auditory discrimination, comprehension of main and sub-ideas, and ability to infer the meaning of new vocabulary from context. These skills are vital for overall language proficiency and support the development of more advanced cognitive processes related to listening and comprehension.

For speaking skills, the study revealed that immersive learning facilitated greater fluency in oral expression, allowing students to convey ideas in a more organized, clear, and formal manner. The use of body language, the avoidance of colloquial language, and the ability to narrate stories or personal experiences effectively were significantly enhanced.

These results highlight the potential for broader application of immersive learning in other educational contexts, suggesting that this approach could be instrumental in developing a wide range of skills across different subject areas. Future research could explore the long-term impact of immersive learning on language retention and whether similar improvements can be observed in other domains of learning.

In conclusion, the study validates immersive learning as an effective tool for language skill development in primary education, reinforcing the need for innovative educational strategies that prioritize active participation and real-world language application.

#### Limitations

While this study has provided valuable insights into the effectiveness of immersive learning in enhancing language skills among primary school students, several limitations must be acknowledged.

**Sample Size and Generalizability:** The study was conducted with a relatively small sample of 40 fourth-grade students from a single school in Al-Ahsa, Saudi Arabia. This limits the generalizability of the findings to other contexts, schools, or regions. Future research with larger and more diverse samples would help to verify whether the same effects can be observed in different educational settings.

**Single Group Design:** The use of a quasi-experimental design with only one group limits the ability to compare the outcomes with a control group. Without a control group, it's difficult to determine whether the observed improvements in language skills are solely attributable to the immersive learning approach or if other external factors might have influenced the results.

**Short Duration:** The intervention was limited to 20 sessions, which may not be sufficient to capture the long-term effects of immersive learning on language skill development. Longitudinal studies that track the progress of students over an extended period would provide more robust evidence of the sustainability of the learning gains.

Despite these limitations, the study contributes valuable findings that underline the potential of immersive learning in language education and provides a foundation for further investigation in this area.

## **Acknowledgments**

This work was supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia (GRANT KFU242061).

#### **REFERENCES**

- Altun, H. K., & Lee, J. (2020). Immersive Learning Technologies in English Language Teaching: A Systematic Review. Educational Technology International, 21(2), 155-191.
- Amiruddin, A. N., Azam, A., Lim, G. F., Zakaria, N., & Hashim, H. (2023). Language learning strategies used for enhancing receptive skills among Malaysian ESL primary school pupils. International Journal of Academic Research in Business and Social Sciences, 13, 12.
- Andrä, C., Mathias, B., Schwager, A., Macedonia, M., & Von Kriegstein, K. (2020). Learning foreign language vocabulary with gestures and pictures enhances vocabulary memory for several months post-learning in eight-year-old school children. Educational Psychology Review, 32(3), 815-850.
- Bautista, M. D. P. M. (2016). An immersive learning environment to develop english speaking skills: Second life in efl. Virtu@ lmente, 1(2), 4-14.
- Colognesi, S., Coppe, T., & Lucchini, S. (2023). Improving the oral language skills of elementary school students through video-recorded performances. Teaching and Teacher Education, 128, 104141.
- Fernandes, F. A., Rodrigues, C. S. C., Teixeira, E. N., & Werner, C. M. (2023). Immersive learning frameworks: A systematic literature review. IEEE Transactions on Learning Technologies, 16(5), 736-747.
- Fitrianto, I., & Saif, A. (2024). The Role of Virtual Reality in Enhancing Experiential Learning: A Comparative Study of Traditional and Immersive Learning Environments. International Journal of Post Axial: Futuristic Teaching and Learning, 97-110.
- Hadley, E. B., Barnes, E. M., & Hwang, H. (2023). Purposes, places, and participants: A systematic review of teacher language practices and child oral language outcomes in early childhood classrooms. Early Education and Development, 34(4), 862-884.
- Kannan, M., & Meenakshi, S. (2023). A Critical Overview of the Implementation of Language-Immersion Through the Use of Mobile Apps. Theory and Practice in Language Studies, 13(1), 186-191.
- Kilag, O. K. T., Heyrosa-Malbas, M., Arcillo, M. T., & Barcena, M. C. (2023). The role of YouTube children's educational videos in enhancing early childhood English language proficiency: An investigation of parental perceptions. International Journal of Scientific Multidisciplinary Research, 1(7), 833-846.
- Palamar, S. P., Brovko, K., & Semerikov, S. O. (2024). Enhancing Foreign Language Learning in Ukraine: Immersive Technologies as Catalysts for Cognitive Interest and Achievement. In Selected Papers of the X International Scientific Conference" Information Technology and Implementation"(IT&I-2023). Conference Proceedings. Kyiv, Ukraine, November 20-21, 2023 (No. 3624, pp. 69-81). CEUR Workshop Proceedings.
- Porter, S., & Castillo, M. S. (2023). The Effectiveness of Immersive Language Learning: An Investigation into English Language Acquisition in Immersion Environments versus Traditional Classroom Settings. Research Studies in English Language Teaching and Learning, 1(3), 155-165.
- Prins, J., van der Wilt, F., van Santen, S., van der Veen, C., & Hovinga, D. (2023). The importance of play in natural environments for children's language development: an explorative study in early childhood education. International Journal of Early Years Education, 31(2), 450-466.
- Rafieyan, V., & Rozycki, W. (2019). Development of language proficiency and pragmatic competence in an immersive language program. World, 9(1).
- Redondo, B., Cózar-Gutiérrez, R., González-Calero, J. A., & Sánchez Ruiz, R. (2020). Integration of augmented reality in the teaching of English as a foreign language in early childhood education. Early Childhood Education Journal, 48(2), 147-155.
- Robbani, A. S., Baroroh, U., Musthofa, T., Purnama, S., Sugiyono, S., & Annafiri, A. Z. (2024). The role of technology in language immersion: a systematic. Int J Eval & Res Educ, 13(2), 705-713.
- Savage, B. L., & Hughes, H. Z. (2014). How does short-term foreign language immersion stimulate language learning?. Frontiers: The Interdisciplinary Journal of Study Abroad, 24(1), 103-120.
- Syahputri, D. R., & Arianti, L. (2024). A Whole Language Approach to Improving Reading Skills in Low Class Primary Students. Journal of General Education Science, 93-98.

- Wei, X., & Zhang, M. (2022, July). Experimental Research and Analysis of Immersive Virtual Reality Technology on Children's Language Teaching. In 2022 International Symposium on Educational Technology (ISET) (pp. 186-188). IEEE.
- Weng, Y., Schmidt, M., Huang, W., & Hao, Y. (2024). The effectiveness of immersive learning technologies in K–12 English as second language learning: A systematic review. ReCALL, 1-20.
- Yolla Margaretha, Popo Suryana, (2023). The Effect of Market Orientation, Entrepreneurial Orientation, and Learning Orientation on Marketing Innovations and their Implications on the Marketing Performance of Micro Actors in Bandung Metropolitan Area. Pakistan Journal of Life and Social Sciences. E-ISSN: 2221-7630; P-ISSN: 1727-4915, Pak. j. life soc. Sci. (2023), 21(1): 478-498. <a href="https://www.pjlss.edu.pk/pdf">https://www.pjlss.edu.pk/pdf</a> files/2023 1/478-498.pdf