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Virtual Reality Transforms ESL Learners' Verbal Communication Experiences

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ABSTRACT

Verbal communication remains one of the most challenging areas for English as a Second Language (ESL) learners, particularly in secondary education contexts where speaking opportunities are often constrained by exam-oriented instruction, anxiety, and limited exposure to authentic language use. Virtual Reality (VR) has emerged as a promising pedagogical tool capable of addressing these limitations through immersive, interactive, and context-rich learning experiences. This study explores how secondary school ESL learners perceive the advantages of VR in enhancing their verbal communication skills. Adopting a qualitative case study design, data were collected through two methods: semi-structured interviews and reflective journals. The participants were secondary school learners who engaged in VR-based English-speaking tasks over an intervention period using realistic communicative scenarios. Thematic analysis revealed four major perceived advantages of VR: heightened engagement, immersive contextual learning, customised speaking support, and improved accessibility to authentic communication practice. Learners described VR as motivating, less intimidating than conventional speaking activities, and helpful in building confidence, fluency, and willingness to communicate. The findings suggest that VR can function as a meaningful supplement to classroom-based ESL instruction by creating a psychologically safe and experientially rich environment for oral language use. The study has practical implications for ESL teachers seeking innovative ways to support speaking development, pedagogical implications for integrating immersive technologies into communicative language teaching, and policy implications for schools and education systems interested in future-ready language learning. The paper concludes that VR, when used purposefully and supported pedagogically, can enhance not only speaking performance but also learners' emotional readiness to use English in real-life contexts.

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1. Introduction

Secondary school learners are often expected to use English for presentations, discussions, interviews, and future academic mobility, yet many still find speaking the language difficult. In many ESL classrooms, students read, write, and memorise far more than they actually speak. They may know grammar rules and examination formats, but hesitate when asked to respond spontaneously. This gap between knowledge and use remains one of the most pressing contemporary issues in secondary language education. Virtual reality (VR) has recently been proposed as one way to narrow that gap because it can place learners inside meaningful communicative situations rather than asking them to speak in the abstract [1-4].

Recent scholarship has shown that immersive environments can support motivation, presence, self-efficacy, and contextualised practice when they are tied to sound pedagogy [3-6]. In language learning, VR allows students to order food in a restaurant, answer questions in an interview, ask for help in a public place, or introduce themselves to unfamiliar speakers. Instead of speaking only for the teacher, they speak to complete a communicative purpose. This matters because verbal communication develops most effectively when language is used in context and when learners feel psychologically safe enough to take risks [8-11].

Even so, the present evidence base is still developing. Many studies have examined performance gains, motivation, or anxiety reduction. Still, fewer have examined how school-age ESL learners themselves perceive the advantages of VR for verbal communication development. This is an important gap. Learner perceptions shape participation, effort, and transfer. If students experience VR as engaging, realistic, and supportive, they are more likely to use the language actively. If they see it as confusing or artificial, its pedagogical value will be limited. Moreover, there is a need for context-sensitive evidence from secondary education in Asia, where examination pressure and communication anxiety often shape classroom practice differently from university settings in Europe or North America [1,2,12].

This study, therefore, explores how Malaysian secondary school ESL learners perceive the advantages of VR for developing verbal communication. The focus is not on technology adoption for its own sake. Rather, it is on how learners make sense of VR as a communicative environment. The significance of the study lies in three areas. First, it contributes school-based evidence to a field still dominated by short-term or higher-education studies. Second, it foregrounds learners' voices in understanding what makes VR meaningful for speaking development. Third, it offers practical guidance for teachers and decision-makers who are considering immersive tools in secondary language education. The objective of the study is to identify and interpret the main advantages learners associate with VR when using English for spoken interaction.

2. Methodology

2.1 Research Design

A qualitative case study design was used because the study sought to understand learners' experiences in depth rather than test a causal intervention effect. The case was bounded by a secondary school ESL context in Malaysia and by a set of VR-based speaking activities designed around everyday communicative situations. A qualitative design was appropriate because the research question focused on perceived advantages, emotional responses, and meaning-making, all of which are best captured through learners' own accounts.

2.2 Context and Participants

The participants were fifteen Malaysian secondary school learners who had direct experience using VR to complete English speaking tasks. They represented mixed proficiency levels and came from a context in which English was learned as a second language but not always used spontaneously outside the classroom. The VR activities included scenarios such as ordering food, responding in an interview, asking for information, and managing simple social interactions. These situations were chosen because they required functional speaking and mirrored verbal demands learners may encounter beyond school.

Table 1

Data sources and analytical purpose

Data source	Purpose of the study
Semi-structured interviews	To explore learners' views on how VR shaped confidence, speaking behaviour, and communicative experience
Reflective journals	To capture immediate personal responses, perceived benefits, and develop awareness across the intervention period

2.3 Data Collection Methods

Two methods were used to collect data. The first was semi-structured interviews. These interviews allowed the learners to explain what they found helpful, difficult, or memorable in the VR experience. The second was reflective journals. After completing VR-based speaking tasks, learners wrote short reflections on how they felt, what they noticed about their speech, and how the virtual environment shaped their participation. Using both methods strengthened the study because interviews generated rich retrospective insight while journals captured perceptions close to the experience itself.

2.4 Procedure

ImmerseMe was founded by Scott Cardwell in 2015 with an initiative to provide language teachers with a variety of practical lessons in order to enhance learners' speaking and pronunciation skills through interactions with virtual objects and avatars. This platform enables students to communicate easily with avatars in a simulated real-life environment, such as buying beverages from a store, interviewing, inquiring about the product, planning a holiday, and other communicative situations. The lessons have been designed creatively and interactively to cater to the learners based on their proficiency level (beginner, intermediate, and advanced). Basically, it is a tool that learners use to practise and enhance their fluency and accuracy in a real-life scenario by connecting with the outside world instead of having learning practices in the four walls of a classroom.

In the beginning, the teacher selected lessons that were aligned with the school syllabus. The topics chosen for the 8-week lessons were Lesson 1: Checking in to a hotel, Lesson 2: Ordering a coffee, Lesson 3: Reporting a stolen item, Lesson 4: Recommending a movie, Lesson 5: Deciding when to go on holidays, Lesson 6: Describing a traditional celebration, Lesson 7: Describing a good environmental practice, and Lesson 8: Reaching conclusions. The application has been set up with prerecorded interlocutors for each conversation. Students interacted with the interlocutors virtually, and their responses were analyzed and graded by the application.

The integration of VR is explained in chronological order below.

Step 1

Students logged in to the application, ImmerseMe (Figure 1)

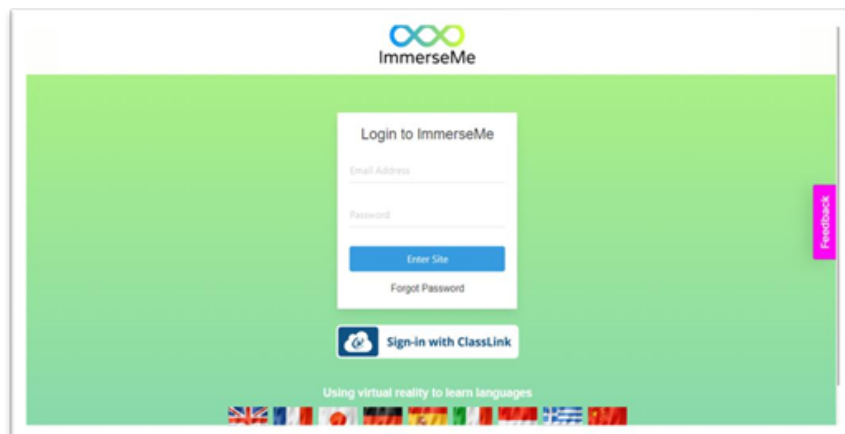


Fig. 1. ImmerseMe log-in page

Step 2

Students chose the target language. As this study focused on the enhancement of English verbal communication skills, learners chose the English language (Figure 2).

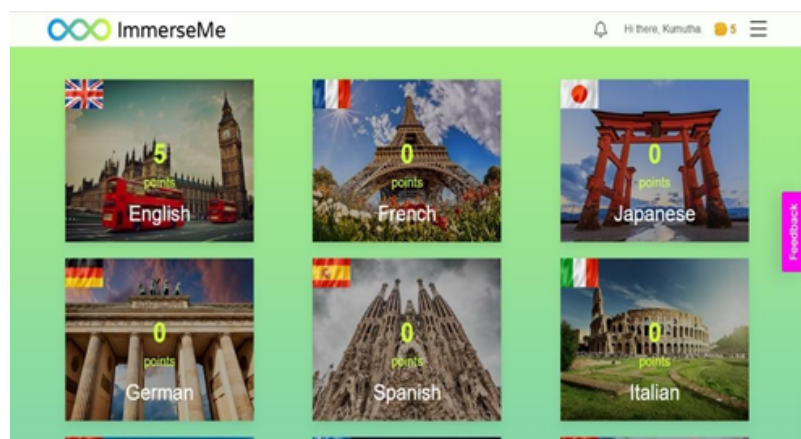


Fig. 2. ImmerseMe target languages

Step 3

The teacher chose the situations that were aligned with the current school syllabus, learners clicked on the required topic (Figure 3). Based on the results from the speaking assessment, the majority of the participants are at the B1 level, thus the intermediate transcripts were selected.

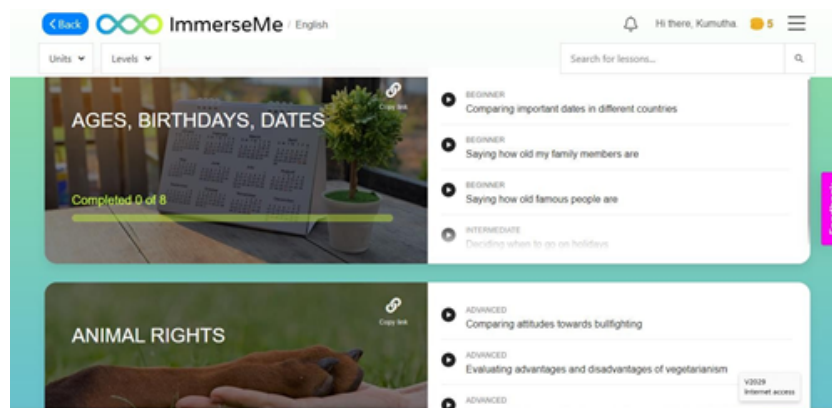


Fig. 3. ImmerseMe topics of conversational situations

Step 4

A transcript of the interaction appeared on the chosen topic based on the level of difficulty (Figure 4). This allowed participants to preview the required vocabulary to communicate successfully in the selected context.

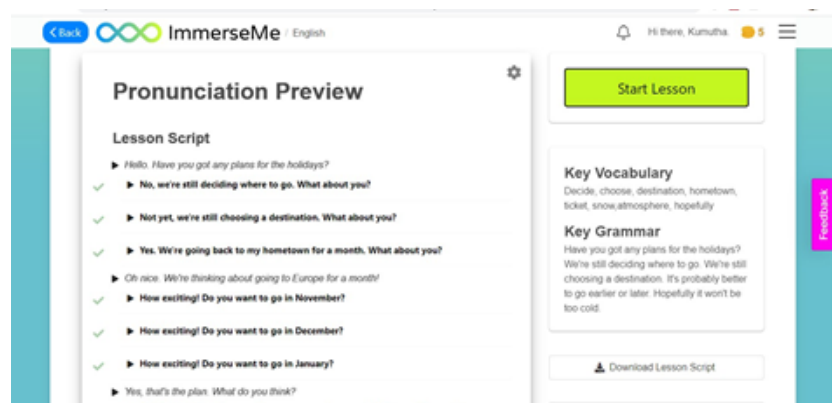


Fig. 4. ImmerseMe lesson script

Step 5

Participants put on their VR goggles. The goggles are Google Cardboards and Virtual Reality Glasses (VRGs). Upon clicking the start lesson button, a 360-degree video representing a real-life interactive scenario (Figure 5) appeared. As the interlocutor spoke, his/her transcript appeared at the top of the screen. The learner then could choose a possible response and say it out by clicking the microphone. The learner's speech was automatically recorded and evaluated. The speech must match the expected pronunciation, or else the learners must repeat the response until they have pronounced it perfectly and satisfactorily.

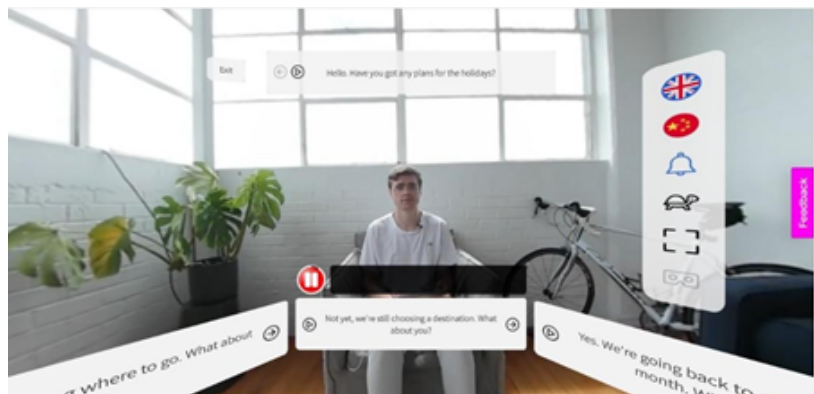


Fig. 5. ImmerseMe interlocutor's dialogue and options of responses

Step 6

The researcher could track students' progress in her dashboard (Figure 6). A thorough evaluation, together with results on accuracy, appeared on the dashboard. The thorough evaluation included students' accuracy sentence by sentence and overall completion. Along with that, personalized feedback (Did the student go slow and produce highly accurate language? Did they rush and miss out on a few key sentences? Did they manage to complete a full dialogue in one go? Did they break it down?) was provided for researchers' further reference.

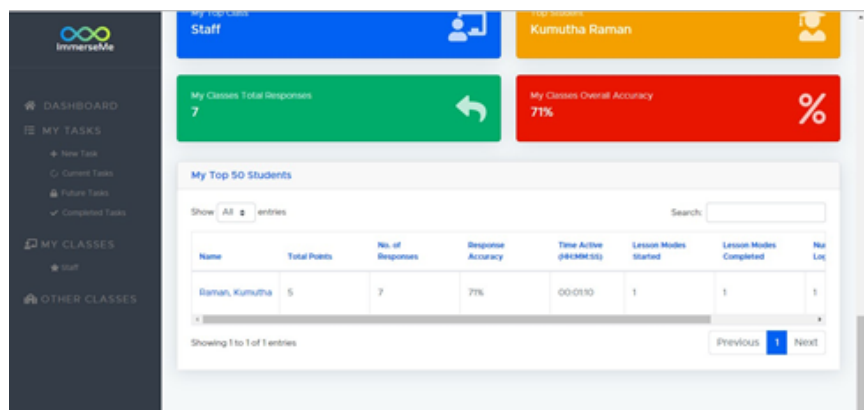


Fig. 6. ImmerseMe teacher's dashboard

The 8 weeks of lessons were successfully completed with the intended intervention. Although there were some technical barriers, the backup plans, such as using laptops and personal computers in the ICT labs, were helpful. The absentees during the intervention were able to complete the missed lessons on alternative days. In terms of manpower, the researcher was assisted not only by one assistant teacher, but also by the other 2 assistant teachers who came voluntarily to provide some essential assistance.

2.5 Data Analysis and Trustworthiness

All interview transcripts and reflective journals were analysed using thematic analysis. The data were read repeatedly, coded line by line, and grouped into broader categories based on recurring patterns. Particular attention was given to comments about confidence, realism, difficulty, participation, feedback, and practice opportunities. To strengthen trustworthiness, coding decisions were reviewed iteratively and themes were refined by comparing evidence across both data sources. The final analysis produced four major themes: engagement, immersion, customised speaking support, and access to authentic communication practice.

3. Results and Discussion

The findings show that learners perceived VR as advantageous for verbal communication in four interrelated ways. First, VR increased engagement by making speaking tasks more appealing and purposeful. Second, it created a sense of immersion that made language use feel more natural and less classroom-bound. Third, it offered a form of customised speaking support through repeatable practice and response-based feedback. Fourth, it provided access to authentic communication situations that many learners had rarely experienced before. These themes are summarised in Figure 7 and Table 2.

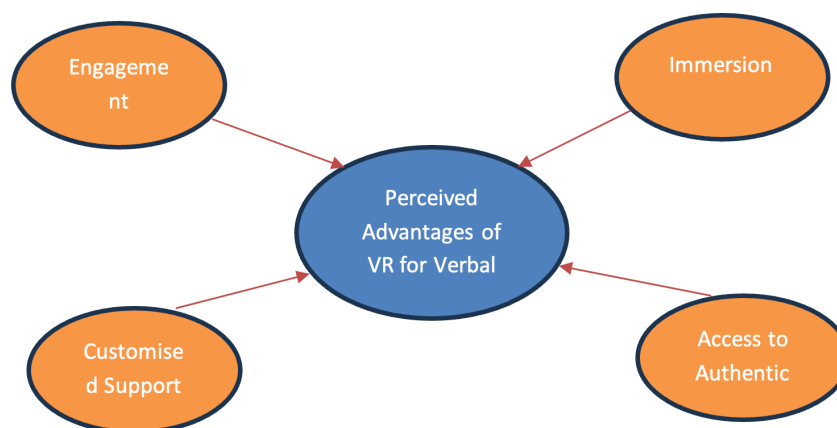


Fig. 7. Thematic model of perceived advantages of VR for verbal communication development

3.1 Engagement

Engagement emerged as the strongest and most immediate perceived advantage. Many learners contrasted VR with ordinary speaking activities, which they described as repetitive, embarrassing, or easy to ignore. In the virtual tasks, however, they reported wanting to participate because the experience felt active and eventful. One learner explained in interview that speaking in VR felt less like answering a classroom question and more like trying to complete something real. Another wrote in the journal that the task was enjoyable because it felt like entering a place rather than reading a dialogue from a worksheet.

This pattern suggests that engagement in VR was not driven by novelty alone. It was tied to communicative purpose. Learners were not simply watching animations. They were responding to situations, solving immediate verbal problems, and trying to make themselves understood. Similar observations have been made in VR language studies, where motivation rises when learners feel agency within the scenario [1,3,4,16]. In the present case, this engagement also translated into persistence. Learners often repeated speaking tasks voluntarily, not because they were instructed to, but because they wanted to improve their performance or complete the scenario more successfully.

3.2 Immersion and Contextualisation

Immersion was the second major advantage. Learners repeatedly described the VR environment as realistic, vivid, or close to real life. This mattered because it reduced the abstraction often associated with classroom speaking. Instead of being told to imagine a restaurant or an interview

room, they were placed inside one. The visual and situational cues helped them understand what kind of language was needed and when to use it. Learners said that they remembered expressions more easily because they could connect them with a place, a scene, or a communicative purpose.

Immersion also appeared to lower self-consciousness. Several learners explained that they worried less about classmates' reactions when they were focused on the virtual task. This supports earlier work suggesting that immersive environments can reduce anxiety and increase willingness to communicate by drawing attention away from social evaluation and toward situated action [6,11, 13]. In the present study, learners often said they felt busy with the task. That busyness was pedagogically valuable. It created the conditions for speaking to become more spontaneous and less performative.

3.3 Customised Speaking Support

The third theme was customised speaking support. Learners valued the fact that VR let them move at a pace that suited them. In a whole-class lesson, hesitant learners often lose their turn or withdraw before they speak. In the VR environment, they could try, pause, repeat, and adjust. This made the practice feel more private and more manageable. Journal entries frequently mentioned the benefit of being able to repeat lines, improve pronunciation, or try another wording without immediate classroom embarrassment.

Customised support did not mean the technology replaced the teacher. Rather, VR created conditions for self-monitoring. Learners became more aware of their speech because they had to listen to themselves closely in order to respond within the scenario. This aligns with design recommendations in recent VR language research, which stress the importance of adaptive feedback, user control, and low-pressure repetition [4,6]. For lower-proficiency learners especially, the chance to rehearse speech privately was experienced as empowering.

3.4 Access to Authentic Communication Practice

The fourth theme was access to authentic communication practice. Many learners explained that they had few chances to use English in realistic situations outside class. Some had never participated in a job interview, a service interaction, or a public enquiry exchange. VR gave them access to these situations without requiring travel, native-speaker contact, or artificial classroom role-play. It opened a doorway to functional language use.

This form of access was both practical and psychological. Practically, VR exposes learners to settings they might not otherwise encounter. Psychologically, it offered a safe entry point into those settings. Learners could try out language in a simulated but meaningful context before facing similar situations in real life. This is especially important in secondary education, where learners are still forming their communicative identity in English. In this sense, VR was experienced not only as a teaching tool but also as a bridge between school English and life English.

Table 2

Summary of themes and their contribution to verbal communication development

Theme	Contribution to verbal communication development
Engagement	Encouraged sustained participation, repetition, and willingness to speak
Immersion	Made language use feel realistic, purposeful, and less classroom-bound
Customised support	Allowed self-paced practice, repetition, and increased self-monitoring
Authentic practice access	Exposed learners to functional speaking situations rarely available in ordinary lessons

3.5 Discussion

Taken together, the findings suggest that learners valued VR because it changed the conditions of speaking. It made speaking more purposeful, more contextualised, and less threatening. The four themes are closely connected rather than separate. Engagement encouraged repeated participation. Immersion made language feel real. Customised support gave learners control. Access to authentic practice linked classroom learning to future communication needs. These patterns resonate with the wider literature on immersive learning, which argues that presence, agency, and contextual meaning play an important role in motivation and learning transfer [3,11,14].

The findings also have particular relevance for secondary education. School learners often need support not only with language form but also with emotional readiness to speak. In such contexts, VR seems to function as a transition space. It is safer than real-life communication, but more meaningful than decontextualised classroom drills. That positioning may explain why learners in this study associated VR so strongly with confidence and willingness to communicate. The results do not suggest that VR should replace teachers or communicative teaching. Instead, they indicate that VR can strengthen speaking pedagogy when it is tied to clear language goals, careful scaffolding, and opportunities for reflection.

4. Conclusions

This study set out to examine how secondary school ESL learners perceive the advantages of using VR to develop verbal communication skills. Through semi-structured interviews and reflective journals, it was found that learners viewed VR as engaging, immersive, supportive, and capable of giving them access to authentic communication practice. These perceived advantages matter because they influence how willingly and how confidently learners speak.

The study contributes to current discussions on immersive language learning by showing that the value of VR lies not only in technological novelty but in how learners experience the communicative environment it creates. When VR tasks are purposeful and pedagogically supported, students do not simply practise language forms. They speak with intent, take risks, and begin to see English as usable in life beyond the classroom. Future work should continue to explore how these perceived advantages develop over longer periods and across more diverse secondary school contexts.

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