Teaching English For Hospitality Through Virtual-Reality Based Learning To Improve Students' Speaking Achievement

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Abstract:
This Research Aimed To Determine If There Is A Significant Increase In Students' Speaking Achievement After Being Taught Using A Developed Teaching Procedure Through VR Based Learning. A Quantitative Research Methodology Was Employed To Evaluate The Effectiveness Of The VR-Based Learning Approach. The Study Utilized A One-Group Pretest-Posttest Design And Was Conducted At Politeknik Negeri Lampung (Polinela) In Bandarlampung. The Sample Comprised 23 Students Enrolled In The English For Hospitality Class During The 2022/2023 Academic Year. Speaking Achievement Was Measured Through A Speaking Test. The Findings Revealed A Significant Improvement In Speaking Achievement, As Indicated By The Mean Score Increase From 116.74 In The Pretest To 198.70 In The Posttest. In Conclusion, VR-Based Learning Effectively Enhances Students' Speaking Achievement In The Hospitality Context By Immersing Them In Virtual Hotel Environments.
Keywords: *Teaching English For Hospitality, Virtual-Reality Based Learning, Speaking Achievement*

I. INTRODUCTION

English has become universal language that is used all over the world and in fact, being able to speak English is a necessity nowadays (Carmen, 2010). Often people look down on someone who is unable to speak English especially those who work in big companies.

Speaking is one of the essential skills to master for successful communication. Therefore, being able to speak well will lead the students to the effective communication intercourse in the real life. Despite its importance, teaching speaking has long been underestimated, and English teachers continued to teach speaking only as repetition of drills and memorization of dialogues without utilization of the latest technology (Bahadorfar & Omidvar, 2014).

Hotel and tourism are one of the industries that requires quality workers with high English-speaking fluency especially those who work as frontliner. Foreign people who visit other countries will be more likely to spend their time mostly in the hotel. They do many activities such as checking-in, checking-out, requesting transportation, ordering food, complaining, and other experiences that involves interactive communication. Employees are required to follow and use professional conversations, vocabulary, and speech when dealing with guests. However, many hotel employees are still lack of English-speaking proficiency (Guntoro, 2021).

The use of English in Hotel and Tourism field have some differences related to vocabularies, terms, expressions, and meanings compared to General English (GE). Hence, for international tourism and service industry, English for Tourism and Hospitality is used which is considered under the category of English for specific purposes (ESP) (Cravotta, 2010).

English for Specific Purposes (ESP) refers to an approach in English language teaching that focuses on necessary language, genres, communicative skills used particular field or occupation for learners and facilitate them through relevant material and methods for their academic or occupational needs (Anthony, 2018).

English language teachers are demanded to give contextual learning and real-life experience to the students especially those who has specific needs for their future jobs. However, in teaching in classrooms, we have limited time and space, and teachers have a responsibility to prepare the students as much as possible to be able to speak in English in the real world outside the classroom. To overcome this issue, teachers are encouraged to utilize modern technology as media in teaching to help them bring real-life situation into the classroom. The use of technology as a media in English language teaching will not only help the teachers but also students will benefit from it as many students especially young learners are interested in modern technology.

One of the most popular technologies nowadays and is still in serious development by many big technology companies such as Google, Microsoft, Meta (Facebook) is Virtual Reality (VR). Virtual Reality is the

most advanced technology in which you can experience real-life simulation in virtual world. Virtual reality (VR), which can be described as immersive or computer-simulated multimedia reality, recreates environments that simulate physical presence in real-world or imaginary locations object, allowing users to interact in virtual world (Velev & Zlateva, 2017). VR used tools which led people to feel another experience in visual in the form of 3D images. VR is one of the immersive media that can bring realistic learning experiences. VR interfaces provide sensory immersion, focusing on visual and audio stimuli with some haptic (touch) interfaces. The participant can move as they do in the real world, and the digital setting responds to maintain the illusion of presence of one's body in a simulated setting (Dede, Jacobson, & Richards, 2017).

Virtual reality may become a solution for the teachers to take the students anywhere virtually without leaving the classroom. This is what mostly differ VR with just watching videos. In watching videos, the students just observe from the devices and cannot interact with it. Using virtual reality, you can experience any kind of simulation, and interact with the environment in virtual world. It gives you the sense of being there. The experience of using VR is immersive. Virtual reality is something that are genuine. It brings students an authentic learning experience and there are many ways that teachers can create to guide the students to learn what they need in relation to the syllabus and curriculum. VR also has scaffolding elements to help students construct their knowledge and is very contextual because it simulates the real world.

The use of VR to bring realistic experiences to teaching and learning is in line with constructivism theories. It is stated that learning is a process that involves active construction and not passive acquisition (Duffy, Cunningham, & Jonassen, 1996). It equates learning with creating meaning from experience. Learning is more meaningful for students when they can interact with a problem or concept. Based on the research conducted by Kassim, Witkin, and Stone (2019), The use of VR in speaking activity brings great enjoyment to the students and according to students' perception, it can possibly help them improve their speaking abilities more effectively.

Against this backdrop, the primary research question guiding this study is: " Is there any significant increase of the students' speaking achievement after they are taught with developed teaching procedure through VR Based Learning?"

In this investigation, we aim to examine the impact of incorporating VR-based learning activities into the English language curriculum for hospitality students. By assessing students' speaking achievement before and after the intervention, we seek to determine the effectiveness of this innovative pedagogical approach in improving their communicative competence in English.

II. LITERATURE REVIEW

Speaking

Speaking is regarded as the most important active skill in learning a foreign language. It is about generating utterances to convey the message. It begins in infancy and develops through childhood and into adulthood (Zarifa, 2020). In today's world, speaking English has become a necessity. Not only that, but today's generation also looks down on people who are unable to speak English. It has become more of a status symbol (Carmen, 2010).

Good speaking skills are needed for many reasons. International companies and organizations want staff who can speak English fluently. Educators, governments, ministries of education and employers need people who speak English well.

Speaking is a complex skill that requires the simultaneous use of different skills that often develop at different rates. According to Harris (1969), analysis of speech processes generally recognizes five components which are pronunciation, grammar, vocabulary, fluency and comprehension. Kurniati, Eliwarti, & Novitri (2015) provides further explanation to the terms as follows:

a. Pronunciation

Pronunciation is how students produce clearer speech when speaking. Phonological processes refer to grammatical constructs made up of elements and principles that determine how sounds and patterns change within a language. Pronunciation is the knowledge of how the words of a particular language are produced unambiguously when people speak. It plays a significant role in making the process easier to understand.

b. Grammar

It is needed for speakers to form correct sentences in conversation. The usefulness of grammar is also to learn the correct ways to acquire language expertise, both oral and written.

c. Vocabulary

Vocabulary means the appropriate diction used in communication. Without proper vocabulary, you cannot communicate or express your thoughts effectively verbally or in writing. A limited vocabulary is also a barrier that prevents learners from learning a language and expressing it.

d. Fluency

Fluency is the ability to read, speak or write easily, fluently, and expressively. In other words, speakers are able to read, understand and respond to language clearly and concisely while relating meaning and context. It is about the ease and speed of the flow of speech. Speaking fluently is the goal of many language learners.

e. Comprehension

Comprehension is needed in oral communication as during conversation, one must respond to a speech as well as initiate it.

English for Specific Purposes

English for Specific Purposes (ESP) can be defined as an approach to language teaching that targets on academic or occupational needs of the learners, focuses on necessary language, genres, and skills to fulfill those needs through the use of specific teaching materials and methods (Anthony, 2018). Another definition of ESP by Woodrow (2018) is that ESP can be viewed as an approach to course design and teaching aimed at a group of learners who share common goals or objectives in learning English. This could be an academic or professional focus. The most important feature of ESP courses is that they are based on an analysis of the learner's needs.

There are many subdivisions under the umbrella term of ESP. For example, English for Business Purposes (EBP), English for Academic Purposes (EAP), English for Occupational Purposes (EOP), English for Medical Purposes (EMP), and new ones are added in the list every year. EOP, known as English for Occupational needs, is more general and common compared to ESP (Zahedpisheh, Abu Bakar, & Narges, 2017).

English that is used in international tourism and hospitality industry falls into the category of English for Specific Purposes (ESP) and it is English for Tourism and Hospitality Purposes (ETP) (Zahedpisheh, Abu Bakar, & Narges, 2017). It requires the understanding of the teachers and educators about the practical application of this approach.

ESP is actively utilizing technology as a pedagogic tool. It can play a central role in the delivery of ESP courses and provide the link between the context of language learning and the context of authentic communication. Some ESP courses have a computer-assisted language learning (CALL) component as a central strand as it helps teachers and learners to engage with authentic communication.

However, selecting appropriate sources and media is a challenge for both teachers and students. The use of technology depends on the social and economic environment of the ESP learner. In some countries, technology is not widely available and internet connectivity may be unreliable. For example, mobile phone coverage is not available in many areas, even in developed countries. This also means that an ESP learner in a developing country may not have the necessary computer and technology skills to attend an ESP course in a developing country. Another consideration is the ESP practitioner's expertise. Teachers may resist adopting new technology due to lack of confidence or lack of time. These issues cause many ESP practitioners not utilize the technology as pedagogical tool. Instead, they still depend upon traditional printed materials in teaching. ESP practitioners need to consider using technology as it may bring unique contributions to teaching and learning. There is perhaps also an expectation from students to use technology (Woodrow, 2018).

Virtual Reality

Virtual reality (VR), which can be described as immersive or computer-simulated multimedia reality, recreates environments that simulate physical presence in real-world or imaginary locations object, allowing users to interact in virtual world. Michael R. Heim in his famous book, The Metaphysics of Virtual Reality, identified seven different concepts of VR: simulation, interaction, artificiality, immersion, telepresence, full-body immersion and network communication (Velev & Zlateva, 2017). Virtual reality gives us the immersive experience and the illusion of 'being there'. In the virtual world we can do various things that we do in real-life such us exploring places, go into the virtual theaters, or play sports. There is no other technology that has ever enabled us to do this kind of thing (Slater, 2017).

Virtual reality has been shown to be a very effective medium for learning procedural tasks, in which students learn a sequence of steps to complete a task that requires maneuvering in three-dimensional space. Utilizing advanced technology in language learning is very important. As the need for the integration of technology into language learning is inevitable, future teachers of education and training need to focus on it. Technology-enhanced language learning, the integration of information and communication technologies, and online language learning courses should be incorporated into the curriculum. (Atmojo & Nugroho, 2020).

Chuah, Chen, and Teh (2011) conducted research using a desktop virtual reality-based learning environment by employing Kansei Engineering concepts. They focused on a case study called Virtual Simulated Traffics for Road Safety Education (ViSTREET), which taught road safety skills to young learners aged 13 to 15. The study involved 90 randomly selected participants from lower-secondary classes in three daily schools.

The findings highlighted the significance of the appeal factor and guiding elements in influencing learners' emotions. The quality of the 3D environment, interface design, and support tools had a positive impact on emotions such as "fun," "motivated," and "lively." The study demonstrated the potential of using Kansei Engineering to investigate emotional aspects in VR-based learning environments. The identified relationships between emotions and design elements can guide the development of emotionally-engaging VR-based learning environments.

Graeske & Sjöberg (2021) conducted research related to the implementation of VR Technology to teach Swedish in upper-secondary school. They used action-based research methods, focusing on TPACK competency and design principles for gamified learning. The study found that VR technology offers opportunities for engaging and immersive learning experiences. Students showed high levels of engagement and completion rates. However, software specific to VR in upper secondary education was limited. The study emphasized the importance of integrating VR with the curriculum and regulatory requirements. Collaboration among teachers, students, and researchers was suggested to explore further possibilities and knowledge in VR-based education.

Santosa, Putra, Banjar, & Permana (2020) developed English learning media through Virtual Reality-Based for teaching young learners in EFL context. The research utilized Design and Development Design Research (DDR) methodology, including need analysis, design, development, implementation, and evaluation. The study involved elementary students in North Bali, Indonesia.

The results indicated that both teachers and students desired engaging and authentic media that could enhance English skills and motivate students through technology. VR was identified as a technology that could provide interesting and visually stimulating learning experiences. The implementation of the VR-based learning media was well-received by students, who expressed satisfaction and readiness to use it for self-directed learning. Experts also evaluated the VR media as excellent learning material. Future studies should focus on aligning activities with the developed VR-based learning media and making innovative and authentic learning resources more accessible to teachers and students.

III. METHODOLOGY

The research adopted a quantitative approach to assess the effectiveness of a VR-based learning procedure in teaching English for Hospitality and improving students' speaking achievement. A one-group pretest-posttest design was implemented to measure the impact of the intervention.

The study was conducted at Politeknik Negeri Lampung (Polinela), located in Bandarlampung, Indonesia, which provided the setting for the research. The sample comprised 23 students enrolled in the English for Hospitality class during the 2022/2023 academic year, representing the target population for the study.

To evaluate the students' speaking achievement, a speaking test was administered both before and after the intervention. The speaking test assessed various aspects of the students' oral proficiency, including fluency, accuracy, pronunciation, and coherence.

By utilizing this methodology, the study aimed to determine the extent to which the VR-based learning approach contributed to the students' speaking achievement in the English for Hospitality context at Polinela.

IV. RESULT AND DISCUSSION

Table 4.1 Paired Samples Statistics of Students' Speaking Achievement

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Post_Test	198,70	23	39,174	8,168
	Pre_Test	116,74	23	32,002	6,673

The paired sample statistics indicate that the mean score for the pretest is 116.74, while the mean score for the posttest is 198.70. This suggests that, on average, there was a significant increase in scores from the pretest to the posttest. The difference between the means indicates the amount of change observed in the measured variable. In this case, the data suggests a considerable improvement or change in the speaking achievement after the treatment.

Table 4.2 The Result of Students' Speaking Achievement

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post_Test Pre_Test	-81,957	17,105	3,567	74,560	89,353	22,978	22	,000

Based on the paired sample test, the mean difference between the pretest and posttest scores is 81.957. The standard deviation of the differences is 17.105, indicating the variability of the scores within the sample. The standard error of the mean difference is 3.567, which estimates the precision of the mean difference.

The p-value (Sig. 2-tailed) of 0.000 suggests that the observed mean difference is statistically significant. In other words, there is strong evidence to reject the null hypothesis and conclude that there is a significant difference between the pretest and posttest scores.

The analysis of the data reveals a significant improvement in the speaking achievement of hotel management students in the hospitality context through the implementation of VR-based learning. This finding aligns with previous research that highlights the effectiveness of virtual reality in enhancing language learning outcomes.

VR technology offers a unique and immersive learning experience, allowing students to simulate real-life scenarios and interact with virtual environments. By creating a virtual hotel setting, students can practice and refine their speaking skills in a realistic context, which may contribute to improved performance. This finding is consistent with the study conducted by Gazel & Aydin (2016), who demonstrated the positive impact of Second Life (SE) as virtual language learning on students' speaking proficiency. The interactive nature of VR facilitates active engagement and provides students with valuable opportunities to practice and receive immediate feedback. Guzel and Aydin's research suggests that integrating Second Life as a virtual language learning tool can positively influence speaking achievement. The study contributes to the growing body of literature supporting the effectiveness of virtual environments in language learning.

The utilization of VR in language learning also addresses the limitations of traditional instructional methods by providing a dynamic and engaging learning environment. As stated by Atmojo & Nugroho (2020), The incorporation of advanced technology in language learning holds significant importance. Given the unavoidable need for integrating technology into language education, it becomes crucial for future educators and trainers to prioritize this aspect. It is imperative to include technology-enhanced language learning, the integration of information and communication technologies, and online language learning courses as part of the curriculum.

V. CONCLUSION

In conclusion, the findings of this research highlight the positive impact of VR-based learning on students' speaking achievement in the context of hospitality education. By immersing students in virtual hotel environments and providing realistic scenarios, VR technology enhances their speaking skills and proficiency.

The results of the study indicate that VR-based learning offers unique opportunities for students to practice and develop their English-speaking abilities. The immersive nature of VR simulations allows students to engage in realistic conversations with virtual guests, enabling them to apply their language skills in a practical and authentic context. This experiential learning approach fosters improved fluency, accuracy, pronunciation, and coherence in their spoken English.

VI. SUGGESTION

English teachers can enhance their teaching and support students' language learning by exploring virtual reality (VR)-based learning. Incorporating interactive VR activities related to hospitality can provide students with engaging opportunities to improve their speaking skills. Creating virtual hotel scenarios where students can engage in realistic conversations can make learning more exciting and boost comprehension. Additionally, providing feedback and encouragement tailored to each student's needs can support their individual speaking development. By fostering a supportive and positive learning environment, teachers can help students feel comfortable taking risks and learning from their mistakes.

Future research can contribute to the field by exploring the long-term effects of using VR in language learning. Conducting studies that track students' speaking skills and motivation over an extended period can provide insights into the lasting benefits of VR technology in language education. Additionally, investigating the use of VR in different language learning settings, such as business English or medical English, can shed light on its effectiveness across various contexts. Furthermore, exploring the combination of VR with other instructional methods or approaches, such as task-based learning or project-based learning, can offer valuable insights into how different approaches can be integrated to create more engaging and effective language learning experiences.

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