Virtual Reality and Language Learning in Hospitality: An Investigation of Students' Perceptions

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ABSTRACT: This research investigates the perceptions of students within the hospitality management program at Politeknik Negeri Lampung (Polinela) regarding the utilization of Virtual Reality (VR)-based learning in English for Hospitality, a specialized branch of English for Specific Purposes (ESP). With a qualitative approach, the study aims to uncover students' perspectives on both the challenges encountered and the aspects appreciated in the context of VR-based language learning. The participants, comprising 23 individuals, responded to open-ended questions that aimed to delve into their experiences. The findings shed light on the feasibility and effectiveness of VR-based learning, with the majority of participants reporting minimal difficulties. Appreciation for the immersive learning experience, novelty, realism, and engagement factors were evident in their responses. This research contributes to the understanding of incorporating innovative technologies like VR in ESP contexts, highlighting the need to address technical challenges and optimize language support for a diverse learner population. The outcomes offer insights into the potential of VR-based learning to enhance language acquisition within specific vocational domains.

KEYWORDS: English for Specific Purposes, ESP, hospitality management, language learning, students' perceptions, Virtual Reality.

I. INTRODUCTION

In recent years, technological advancements have significantly transformed various aspects of education, including language learning. One such cutting-edge technology that has gained increasing attention in the field of language education is Virtual Reality (VR) (Li & Ma, 2017). The integration of VR in educational settings offers promising opportunities to enhance language learning experiences, particularly in specialized domains such as the hospitality industry. As a sector that relies heavily on effective communication and language proficiency, the hospitality industry requires professionals who possess strong language skills to cater to an international clientele and deliver exceptional customer service.

In the context of language learning, understanding students' perceptions is crucial in evaluating the effectiveness and acceptance of innovative instructional approaches. Students' perceptions, attitudes, and experiences play a pivotal role in shaping the success of any language learning program (MacIntyre & Charos, 1996). Therefore, this research aims to investigate the perceptions of hospitality management students after receiving English for Hospitality instruction using VR-based learning. By exploring the students' perspectives, this study seeks to provide valuable insights into the effectiveness and potential benefits of integrating VR technology in language learning within the context of hospitality education.

English for Hospitality is a specialized language program designed to equip hospitality management students with the necessary language skills and terminology to thrive in the industry. English usage within the Hotel and Tourism sector encompasses distinct variations in vocabulary, terms, expressions, and interpretations when compared to General English (GE). As a result, the specialized language for the international tourism and service industry is referred to as "English for Tourism and Hospitality," falling within the domain of English for Specific Purposes (ESP) (Cravotta J. S., 2010). Communication plays a vital role in the hospitality sector, where effective interactions with guests, colleagues, and supervisors are essential for delivering high-quality services. As English is widely recognized as the global lingua franca, it becomes indispensable for hospitality professionals to possess proficient English language skills. Hence, the focus on English for Hospitality instruction is of paramount importance to prepare students for successful careers in the globalized hospitality industry.

Based on this background, the researcher seeks to assess the perceptions of hospitality management students regarding the effectiveness of VR-based English for Hospitality instruction.

II. LITERATURE REVIEW

Virtual Reality (VR) has emerged as an innovative and immersive technology with vast potential in the field of education, particularly in language learning. VR-based learning environments create simulated and interactive experiences that offer learners the opportunity to engage with language content in dynamic and realistic settings (Chen & Wang, 2021).

Li, Ying, and Chen (2022) carried out a study that utilized an experiential learning-based virtual reality method to facilitate students' vocabulary acquisition and increase their level of engagement in English for geography. The research findings revealed that VR-based learning positively contributed to students' vocabulary acquisition, leading to improved vocabulary output. Furthermore, the incorporation of VR experiences, along with reflection, abstract conceptualization, and experimentation, demonstrated the potential to enhance students' cognitive, behavioral, and social aspects of engagement in the learning process.

It can be seen that VR based learning could help learners to improve their language skills such as vocabulary and communication skills. Teachers and ESP practitioners are also interested in using this technology as learning media in the classroom as it can give the learners immersive experience while still being physically in the classroom.

The field of English for Specific Purposes (ESP) has garnered substantial attention in language education, particularly in vocational and professional contexts such as hospitality. ESP tailors language instruction to address the specific needs and communication demands of particular domains, catering to learners' practical language requirements (Hutchinson & Waters, 1987; Dudley-Evans & St. John, 1998). Within the realm of hospitality, English for Hospitality and Tourism has emerged as a specialized branch of ESP, focusing on vocabulary, expressions, and communication skills relevant to the industry (Cravotta, 2010). This sector-specific approach acknowledges that language acquisition is most effective when it aligns with the distinct language demands encountered in hospitality settings, facilitating seamless interactions with international guests and colleagues.

Students' perceptions constitute a pivotal aspect in language learning program efficacy. Students' attitudes, motivation, and engagement significantly influence the learning process and outcomes (Dörnyei, 2005; Mercer, 2011). Their perceptions can shape their learning experiences, reflecting on their participation, effort, and subsequent language acquisition. Positive perceptions have been linked to enhanced motivation and engagement, leading to improved learning outcomes (Li, Zhu, & Li, 2021). Considering the significance of these factors, understanding students' perceptions regarding language learning approaches, especially emerging technologies like Virtual Reality (VR), becomes crucial. Investigating how learners perceive VR-based learning in the context of ESP can provide valuable insights into the effectiveness and potential challenges associated with this innovative instructional method, contributing to the ongoing refinement of language education strategies within specific vocational domains.

III. RESEARCH METHOD

The research employed a qualitative approach, utilizing two open-ended questions within a questionnaire as the primary instruments for data collection. The sample comprised 23 participants from the hospitality management program at Politeknik Negeri Lampung (Polinela) in Bandar Lampung. The open-ended questions aimed to gather in-depth insights into participants' perceptions of VR-based learning in English for Hospitality. The qualitative nature of the study allowed for a comprehensive exploration of participants' experiences and challenges, offering valuable qualitative data to enhance the understanding of the phenomenon.

IV. RESULTS

Based on the analysis of responses provided by the 23 participants to the open-ended question "What difficulties did you encounter while learning to use VR?", distinct themes and patterns can be discerned:

Firstly, 17 out of 23 respondents indicated that they did not encounter any difficulties while using VR. This predominant sentiment suggests a positive reception among the majority, reflecting a sense of ease and comfort in their interactions with technology.

Secondly, 5 out of 23 participants specifically pointed out technical challenges. These challenges primarily revolved around device compatibility issues, particularly regarding the compatibility of their smartphones with the VR equipment. Some also noted issues related to sound and dual cameras.

Furthermore, 4 out of 23 respondents shared that using VR for the first time introduced initial challenges. These included adjusting to the novel visual experience and grappling with understanding the content presented within the VR environment.

Language proficiency emerged as another noteworthy theme, with 3 out of 23 respondents expressing that their English language skills posed challenges. These participants indicated that their limited English proficiency hindered their ability to fully comprehend and engage with the VR content.

Lastly, 2 out of 23 participants reported experiencing physical discomfort. They mentioned experiencing adverse physical effects such as headaches or dizziness after engaging with the VR content.

Analyzing the responses provided by all 23 participants to the question "What do you like about learning using VR?", several distinct patterns and themes emerged from their feedback.

A significant portion of participants, precisely 17 out of 23, expressed their appreciation for the enhanced learning experience that VR-based learning offers. They found that VR facilitated their ability to draw more informed conclusions from visual content, attributing this to the immersive nature of the technology that provided them with a comprehensive understanding of the subject matter.

Around 14 participants emphasized the novelty and uniqueness of learning through VR. They described it as an engaging and captivating method, appreciating the newness it brought to their learning journey. The interactive and visually engaging nature of VR made the learning process more enjoyable and intriguing for them.

Moreover, 5 participants specifically highlighted how VR expanded their understanding. They shared how the technology took them from a state of unfamiliarity to a place of comprehension, allowing them to grasp concepts and environments more effectively.

In addition, 15 participants spoke about the engagement and interaction that VR-based learning provided. They enjoyed the direct and clear visual experience that VR offered, and they found this particularly beneficial in group learning settings.

For 13 participants, the joy of virtually experiencing various environments was a highlight. They described how VR allowed them to explore landscapes, cities, and hotels in a realistic and immersive manner, as if they were physically present.

A sense of newness was shared by 7 participants who appreciated the unique learning experience that VR introduced. Learning through VR was seen as a novel and exciting challenge, sparking their curiosity and enthusiasm.

Eight participants mentioned the advantage of detailed exploration offered by VR. They enjoyed the opportunity to thoroughly examine objects and environments from different angles, enhancing their learning engagement.

Around 9 participants noted the modern and contemporary nature of VR-based learning. They valued its cutting-edge approach, considering it an up-to-date and relevant method for their learning needs.

For 6 participants, the concept of virtual travel stood out as a positive aspect of VR-based learning. They enjoyed virtually exploring different areas through VR, which contributed to their geographical awareness and understanding.

Similarly, 6 participants found the gamified elements of VR engaging. They appreciated the interactive and dynamic features that VR added to their learning process, making it more enjoyable and immersive.

Finally, 17 participants highlighted the realism of the VR experience. They described how VR allowed them to directly immerse themselves in the content being taught, resulting in a more authentic and engaging learning journey.

V. DISCUSSION

The analysis of participants' responses regarding their perceptions of VR-based learning revealed two main aspects: their difficulties encountered during the learning process and the aspects of VR-based learning they found appealing.

In terms of challenges, it's noteworthy that the majority of participants reported either minimal difficulties or none at all. This finding resonates with studies that highlight the user-friendly nature of VR technology (Chang et al., 2018; Dascal et al., 2017). The technical challenges mentioned, such as compatibility issues and discomfort, are consistent with existing literature that emphasizes the importance of refining VR technology to optimize user experiences (Valmaggia et al., 2016; Li et al., 2018). The limited language proficiency issues mentioned by some participants also reflect the need for clear instructions and language support in VR modules (Abuhassna & Al-Samarraie, 2020).

On the positive side, participants expressed appreciation for various aspects of VR-based learning. The enhanced learning experience through immersion aligns with research suggesting that VR can improve engagement and knowledge retention (Liu et al., 2017; Fominykh et al., 2018). The novelty and uniqueness of VR-based learning, coupled with its modernity, resonate with studies highlighting the positive impact of innovative learning approaches on motivation and engagement (Chittaro & Ranon, 2007; Kizilcec

et al., 2017). The appeal of realistic experiences and virtual exploration aligns with the concept of "presence" in VR, where users feel as if they are physically present in the virtual environment (Slater & Wilbur, 1997).

VI. CONCLUSION AND SUGGESTION

This research provided valuable insights into the perceptions of 20 hotel management students at Politeknik Negeri Lampung (Polinela) regarding VR-based learning in the context of English for Hospitality. The study revealed that the majority of participants encountered minimal challenges while using VR technology, indicating its user-friendly nature. Technical issues and language proficiency were minor concerns for a subset of participants.

On a positive note, participants appreciated the immersive experience of VR-based learning, which enhanced their ability to comprehend visual content. The novelty and uniqueness of VR were motivating factors, aligning with modern learning trends. Realistic experiences enabled participants to virtually explore environments, fostering deeper subject understanding.

These findings underscore the potential of VR-based learning in enhancing language acquisition within the hospitality sector. As educators and curriculum developers continue to explore innovative teaching methods, addressing technical challenges and ensuring language support will be crucial for optimal integration. This study contributes to the ongoing conversation about the transformative impact of technology on education, encouraging further research in this promising field.

For future research, it is recommended to conduct a longitudinal study to assess the long-term impact of VR-based learning on English language proficiency and communication skills among hospitality students. Additionally, investigating the effectiveness of tailored language support strategies within VR modules could enhance the learning experience for diverse language proficiency levels. Furthermore, exploring the integration of real-time feedback mechanisms and personalized learning paths could provide insights into optimizing VR-based language learning environments.

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APPENDIX

Respondents' Answer

Respondent	What difficulties did you encounter in learning using VR?	What do you like about learning using VR?
Respondent 1	None	It's easier to draw conclusions from what is seen.
Respondent 2	While using VR, the challenge I faced was the compatibility of my smartphone with the VR device, which posed a separate constraint.	Using VR provides a highly unique and interesting experience, as it's a new and enjoyable method. Additionally, VR allows for a more immersive understanding of the environment being studied.
Respondent 3	No sound to describe the objects in the video.	From not knowing what VR is to gaining knowledge about it.
Respondent 4	No difficulties.	Learning using VR is intriguing.
Respondent 5	There might be a slight difficulty in obtaining a complete visual experience, as this is also my first-time experience in learning using VR.	Seeing beautiful things like landscapes, cities, and hotels that appear lifelike and immediate.
Respondent 6	Understanding its content.	It's engaging when done in groups, and the learning is clearer as we directly observe through videos.
Respondent 7	None.	It's a new experience.
Respondent 8	None.	Understanding objects shown comprehensively.
Respondent 9	None.	It's more modern.
Respondent 10	Looking for the dual camera.	Being able to perceive the entire area seen through VR.
Respondent 11	None	It's interesting because I'm trying to learn something new.

Respondent 12	My phone cannot be used for VR.	It's clearer and more detailed, as if we're directly immersing ourselves in the location.
Respondent 13	None.	There are numerous games and other elements that become more exciting when played with VR, as we can feel the game firsthand.
Respondent 14	None.	It's a new experience for me.
Respondent 15	Sometimes causes a headache.	Feels like seeing things directly when using VR.
Respondent 16	Slight dizziness when used.	As if entering into the video.
Respondent 17	No difficulties, just not very proficient in English.	It's highly engaging, providing fresh learning references.
Respondent 18	A bit in English.	Watching videos using VR feels real.
Respondent 19	Difficulty in viewing the content or lack of understanding.	Being able to directly observe the subject matter.
Respondent 20	None.	Experiencing it without having to be physically present at the location.
Respondent 21	None.	What's learned can be felt and seen more vividly, and the learning process also feels enjoyable and not rigid.
Respondent 22	None.	Appears realistic when wearing VR.
Respondent 23	No difficulties.	The learning is enjoyable and seeing it in a more vivid manner makes it more pleasurable.