INFUSING VIRTUAL REALITY WITHIN ENGLISH LEARNING: SENIOR HIGH SCHOOL STUDENT'S PERSPECTIVE

Dwi Ciptaningrum[1], Ifan Iskandar[2], and Siti Drivoka Sulistyaningrum[3]

[1], [2], [3] *Universitas Negeri Jakarta, Jakarta, Indonesia*
e-mail: dwi_1212822028@unj.ac.id

ABSTRACT

Virtual Reality (VR) as the technology within education has already become familiar in Indonesia. Online games have emerged in Gen-Z's (Senior High School students) lives. English teachers tried to infuse Virtual Reality (VR) as a learning media for enhancing students' motivation in English learning. This research explores the Virtual Reality can enhance student motivation in English classes of Senior High School students. This research uses a descriptive qualitative method, using a case study. The writer took an observation and interviewed the research data in the English Class of twelfth graders (year of study: 2024/2025). The findings reveal that Virtual Reality (VR) has an impact on enhancing students' motivation in English class. The reason is while students are learning English subjects using Virtual Reality (VR) they feel as interested as while they are playing an online game.

Keywords: virtual reality, english learning, senior high school, student's perspective

1. INTRODUCTION

Virtual reality (VR) has gained popularity in 21st-century learning. Due to its significance, virtual reality is becoming attractive for students in the classroom. In a learning process that is supported by technology, students will feel fun (Kropf, 2013). Moreover, a relationship exists between the intensity of playing games and students' learning motivation. Students who have high intensity in playing games will have low learning motivation in contrast students who have low intensity in playing games will have high learning motivation (Husna et al., 2017). Further, the instructor's pedagogical abilities, engagement, technology, and learning tools, the majority of students expressed satisfaction with online learning (Yasa et al., 2023).

There are several pedagogical theories supporting the use of interactive media such as virtual reality, including constructivist learning, situated learning, inquiry-based learning, game-based learning, and engagement theory (Jen Chen, 2009). Moreover, virtual reality can create immersive experiences that captivate students and make learning more dynamic and interesting. Virtual Reality (VR) has demonstrated enormous promise in revolutionizing education (Ironsi, 2023). Further, the way knowledge is accessible and presented in education can be revolutionized by virtual reality. Immersion in the virtual environment allows students to engage with it and increases their motivation to absorb the content (Allela, 2021).

The Virtual World's immense capacity gives teachers numerous possibilities in their classrooms for new projects (Utami et al., 2021). Also, Virtual reality (VR) gives a real situation in an artificial schema and provides visualization and interaction vibing into a learning focus (Piovesan et al., 2012). Furthermore, Bamodu and Ye (2013) state virtual reality (VR) has three features: immersion, interaction, and imagination (Bamodu & Ye, 2013). Moreover, in innovating the learning process, teachers must prioritize teaching their students creativity, critical thinking, and problem-solving skills while creating microlearning to help them build higher-order thinking skills (Yuniarsih

et al., 2022). Therefore, the writer intends to answer the research questions of this study;

1. How can virtual reality (VR) improve students' learning motivation?
2. How is the impact of virtual reality on English learning?

Virtual Reality for English Language Learning

In the English learning process, teachers can use the Virtual Reality media in the classroom. Virtual reality (VR) in the learning process can enhance attention, language, spatial, memory, higher reasoning, and information acquisition. Additionally, VR can help cognitive activity, spoken nonverbal communication, and social interaction skills development (Allela, 2021)There are many applications of Virtual Reality to support the English learning process, one of them is MilleaLab a Virtual Reality-Based Application. Teachers can be content creators to make content on the topic. Also, Allela (2021) emphasizes virtual reality (VR) in education can transform how content is delivered and accessed. By being immersed in the virtual world, learners can interact with it and are more motivated to understand the material (Allela, 2021).

Figure 1. An example of layout design using *Millealab* application

Enhancing Students' Learning Motivation Using Virtual Reality (VR)

Virtual reality (VR) in learning can enhance the students' motivation and become a fun learning (Budayawan & Asmara, 2023). Moreover, the impact of virtual reality (VR) in the classroom can improve the students' interest (Garduño et al., 2021). Furthermore, besides improving the students learning motivation, the potential advantages of virtual reality (VR) in enhancing language learners' general language proficiency as well as particular linguistic skills including speaking, listening, writing, interpreting, and vocabulary retention have been the subject of several research (Alfadil, 2020). Additionally, the learning process will run well if the students have positive emotions. On the other hand, the students feel comfortable and it will be easier to gain knowledge and skills (A. Pribadi, 2021). Therefore, by using virtual reality (VR) teachers can innovate their learning process in the classroom.

2. RESEARCH METODOLOGY

This research uses a descriptive qualitative method, using a case study. The writer observed in the classroom and interviewed middle school students classified as high-achievement and low-achievement through the Google Form application. The research focuses on the twelfth graders in English as a foreign language class and the target is learners about 17-18 years old. These questions are given to the students:

No.	Questions
1.	Have you ever heard about Virtual Reality?
2.	What do you know about it (Virtual Reality)?
3.	Do you imagine that Virtual Reality can be implemented in learning?
4.	What is your first impression when Virtual Reality can be implemented in learning, specifically in English Class (EC Class)?
5.	What do you think about learning the Procedure Text (How to make an Application Job Letter) using Virtual Reality in the classroom?
6.	Which one do you like using Virtual Reality in gyro, or non-gyro? Why?
7.	Did you feel motivated to learn English enthusiastically after using Virtual Reality as the learning media?
8.	Which is better Virtual Reality using Glasses or without Glasses? *) For not first-timer
9.	Was it ok without glasses?
10.	Please tell me something you still remember about using Virtual Reality in English Class (EC Class).
11.	Do you want to learn English using Virtual Reality again in English Class (EC Class)? Why?

3. RESULTS AND DISCUSSION

Based on the answers above 11 questions were delivered to the students. The writer chose four students, two with low achievement and two with high achievement. The responses from the low-achievement are that they are familiar with virtual reality (VR) but they do not understand it. Then, they responded that Virtual Reality (VR) could be implemented in learning, and in the first impression of using virtual reality (VR), they felt happy because it was a new experience for them. Surprisingly, they felt motivated to learn English after using Virtual Reality as the learning media. The impact of virtual reality is they still remember about materials or something that they practiced using Virtual Reality in English Class. Enthusiastically, they are excited about English learning using virtual reality (VR). So, it can be inferred that the low-achievement students felt motivated in English learning using virtual reality (VR).

Whereas, high-achievement students are that they are also familiar with virtual reality (VR) and they think that virtual reality is like the real environment. Then, one of them responded that Virtual Reality (VR) could be implemented in learning, and in the first impression of using virtual reality (VR), they are interested in English learning using virtual reality (VR) in the classroom as a new experience. Surprisingly, the high-achievement students also motivated in English learning use virtual reality (VR) as the learning media. The impact of the usage of virtual reality is they still remember materials or something that they practiced using Virtual Reality in English class and the layout design of virtual reality (VR) looked like the real one. Enthusiastically, learning using virtual reality (VR) will be exciting. Based on the statements above it can be inferred that the high-achievement students also felt motivated and interested motivated in English learning using virtual reality (VR). Based on the result is in line with the previous study that virtual reality (VR) can improve students' interest and motivation (Garduño et al., 2021).

4. CONCLUSION

The findings reveal based on the research question that Virtual Reality (VR) can improve students' learning motivation in English class. In this era, students or teenagers mostly become video game players, which has already become a social phenomenon in the digitally literate generation. That is why, the writer tries to use

virtual reality (VR) in English learning as an attractiveness. So, students feel as interested as while playing an online game. Moreover, virtual reality (VR) has an impact on English learning in terms of improvement of learning media, learning methodologies, and teacher's creativity. On one hand, teachers can improve their skills in enhancing the usage of technology, especially operating the Virtual Reality (VR) system. Also, the teacher can express the idea to the learner by using virtual reality (VR) and it is more efficient and effective rather than a picture or text explanation. On the other hand, teachers' creativity is needed to create an engaging learning activity in the classroom. For instance, combining the method, media, and learning strategy can improve students' motivation and encourage innovative English learning in this era.

REFERENCES

A. Pribadi, B. (2021). *Esensi Model Desain Sistem Pembelajaran (Menciptakan Pembelajaran Sukses)* (Cetakan 1). RajaGrafindo Persada.

Alfadil, M. (2020). Effectiveness of virtual reality game in foreign language vocabulary acquisition. *Computers and Education*. https://doi.org/https://doi.org/10.1016/j.compedu.2020.103893

Allela, M. (2021). *Introduction to Microlearning*. 85. www.col.org

Bamodu, O., & Ye, X. (2013). *Virtual Reality and Virtual Reality System Components*. 921–924. https://doi.org/10.2991/icsem.2013.192

Budayawan, K., & Asmara, D. (2023). *The Effect of Virtual Reality Learning on Students' Motivation, Interest, and Competence in Meeting the Needs of the Modern World of Work*. 342–348.

Garduño, H. A. S., Martínez, M. I. E., & Castro, M. P. (2021). Impact of Virtual Reality on Student Motivation in a High School Science Course. *Applied Sciences (Switzerland)*, *11*(20). https://doi.org/10.3390/app11209516

Husna, N., Normelani, E., & Adyatma, S. (2017). Hubungan Bermain Games dengan Motivasi Belajar Siswa Sekolah Menengah Pertama (SMP) di Kecamatan Banjarmasin Barat. *Jpg (Jurnal Pendidikan Geografi)*, *4*(3), 1–14.

Ironsi, C. S. (2023). Investigating the use of virtual reality to improve speaking skills: insights from students and teachers. *Smart Learning Environments*, *10*(1). https://doi.org/10.1186/s40561-023-00272-8

Jen Chen, C. (2009). Theoretical Bases for Using Virtual Reality in Education. *THEMES IN SCIENCE AND TECHNOLOGY EDUCATION Special Issue*, 71–90.

Kropf, D. C. (2013). Connectivism: 21st Century's New Learning Theory. *European Journal of Open, Distance and E-Learning*, *16*(2), 13–24. http://waldenu.edu/]

Piovesan, S. D., Passerino, L. M., & Pereira, A. S. (2012). Virtual Reality as a Tool in the Education. *2017 18th International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, ISEF 2017*, *CELDA*, 295–298. https://doi.org/10.1109/ISEF.2017.8090721

Utami, L. P. R. A., Suwastini, N. K. A., Dantes, G. R., Suprihatin, C. T., & Adnyani, K. E. K. (2021). Virtual reality for supporting authentic learning in 21-st century learning. *Jurnal Pendidikan Teknik Dan Kejuruan*, *18*(1), 132–141. https://ejournal.undiksha.ac.id/index.php/JPTK/article/viewFile/32376/17649

Yasa, I. G. B. K., Santosa, M. H., & Kusuma, I. P. I. (2023). Investigating Efl Students' Satisfaction and Expectation in Virtual Learning Environments. *Premise: Journal of English Education*, *12*(3), 855. https://doi.org/10.24127/pj.v12i3.7451

Yuniarsih, T., Sobandi, A., Meilani, R. I., Supardi, E., Indriarti, R., & Faldesiani, R. (2022). Analysis of Microlearning-Based Learning Media Needs: A Retrospective Study at Vocational High School. *Proceedings of the 6th Global Conference on Business, Management, and Entrepreneurship (GCBME 2021)*, *657*(Gcbme 2021), 3–6. https://doi.org/10.2991/aebmr.k.220701.002