



Using Virtual Reality to Help Teachers Improve Learning: A Review

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Abstract

Virtual Reality (VR) is no longer a new concept in today's digital world. This technology has developed quite rapidly and can now be applied in many fields. The first and most important aspect of everyday life is education. In this article, researchers review current research and previous research to understand the specifics of the use of virtual reality (VR) technology as a substitute for traditional learning media. The A Review (SLR) method was used. utilizes defining the research question as the primary methodology. Search procedures were carried out using Scopus data as the basis and tool. Publish or Perish 8 and article creation are based on inclusive and exclusive criteria. which relate to the research questions above. The findings are in the form of a study of several aspects regarding the use of virtual reality as an educational medium, such as types. The technology used, the location of educational institutions using virtual reality, the domain of education, teacher preparation, virtual reality educational techniques, and the purpose and benefits of its use.

Keywords: virtual reality, education, and a thorough examination of the literature

Acknowledgments: Thank you to LP2M Indonesian College of Health Sciences, Padang, West Sumatra, Indonesia for supporting research funds.

For citation: Indriati, G. (2023). Using Virtual Reality to Help Teachers Improve Learning: A Review. *Journal of Digital Learning and Distance Education*, 2(6), 635-638. <https://doi.org/10.56778/jdlde.v2i6.286>.

Introduction

In the novel, cyberspace is described as cyberspace. reality with a higher sense of immersion where cyberspace offers a more immersive experience for humanity to access data and can depict the world clearly without any obstacles. (Fealy et al., 2019), the inherent qualities of virtual reality, however, are largely unknown. All three levels of quality are achieved by using a computer, which makes the user feel that way and remains motionless in a physical sense within that environment (Rauschnabel et al., 2022). Virtual Reality (VR) Technology describes the virtual world as one that is unambiguous for users to guide what is realistic (Perifanis & Kitsios, 2023). In general, virtual reality has been applied in various areas of daily life (Tyng et al., 2017); (Marougkas et al., 2023) starting from entertainment industry, health, education, manufacturing, e-commerce [6], and maybe

even Some cases, such as the one in (X. Zhao et al., 2023), show that virtual reality can help overcome grief a mental state or anxiety that helps the user understand himself better when in a state of inactivity OK, so. The reason is, that virtual reality can display graphics or visuals with 3D quality.

Moreover, it can respond to every action taken by the user to develop a clear perspective [(Dwivedi et al., 2022);(Kharoub et al., 2019); (Y. Zhao et al., 2022)]. About education, learning is described as a means of reducing feelings of frustration a process of individual interaction with the surrounding environment (Novak et al., 2023). So, education is not just about being smart. not only as a place of learning but also as a medium for forming human character. In this research, we used the Review method, where we assembled articles with predetermined keywords. Journal writing is complete. The journal is then mentioned review to provide insight into the questions included in the methodology section part II of this research. This research aims to understand how beneficial it is Virtual reality technology as an alternative teaching medium in educational institutions.

Method

Research methodology is a set of techniques used to describe and collect data. use of ChatGPT in educational programs based on moral principles. As for this research, the first and second summaries are very rare, especially in Indonesia. Thus, researchers produce initial and secondary samples based on similar research variables. However, in international journals, the literature used comes from journals. The A Review (SLR) method was used. utilizes defining the research question as the primary methodology. Search procedures were carried out using Scopus data as the basis and tool. Publish or Perish 8 and article creation are based on inclusive and exclusive criteria. which relate to the research questions above.

Results and Discussion

To achieve educational goals, effective learning materials are needed. In Indonesia itself, Currently, many people still use traditional educational media which describes the learning process carried out in one room by teachers with their consent and supervised by a clock (Makar et al., 1975). The initial method is not very effective because it only works in one direction and is monotonous, and women only focus on one thing. understand what the instructor teaches so that a feeling of calm and peace arises. During the learning process, women become somewhat inactive (Sankalaite et al., 2023). So, from there something needs to be done. Transforming teaching methods to become more contemporary and effective by utilizing technological advances, especially through the use of virtual reality media (Almufarreh & Arshad, 2023); (Nicholas Ogbonna, 2021); (Wang et al., 2024); (Lee & Hwang, 2022). Due to virtual reality, the use of this education method is more effective. can be done anywhere and anytime without requiring a certain time and space while it VR and networking have the potential to make the world seem real (Al-Ansi et al., 2023). Several similar cases have been reported making VR one of the media that gets the most positive responses from the female community (Appel et al., 2020). The reason is, that virtual reality (VR) can display the entire world, including dynamic images or videos can influence the younger generation living in that world, making education something important and interesting (Radianti et al., 2020).

In this research, we used the Systematic Literature Review method, where we assembled articles with predetermined keywords. Journal writing is complete. use the Perish 8 tool published in the Scopus database. The journal is then mentioned review to provide insight into the questions included in the methodology section part II of this research. This research aims to understand how beneficial it is Virtual reality technology as an alternative teaching medium in educational institutions. This paper is divided into four main parts. The first part is the back of the paper. Part II is a research methodology that completes the techniques used, along with their implementation. Section 3 of the study contains the results and discussion of the reviewed papers, as well as discussing the limitations and conclusions of our paper.

Conclusion

Virtual reality technology is already used in many areas of daily life. recreation, health, manufacturing, e-commerce, and education. Related to regional coverage. According to research, virtual reality technology can be a new approach to improve teaching methods. Classes are a more interesting teaching method. VR technology such as VR headgear and smartphones can be used for studying; Often this is done by master's students to increase their understanding. both ability and understanding. Apart from that, students are now more enthusiastic about taking part in activities. So that education can improve students' learning understanding, and memory. VR can be used as a tool in the learning process so that students' abilities can increase. analog techniques, understanding, and punishment. This article discusses the virtual reality technologies most widely used in education. biology. This is because biology requires a more complex visualization model. So that students can see learning concepts more clearly and not just focus on books or just provide an explanation of the material.

Conflicts of Interest

No conflicts of interest

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