Chapter 5 Virtual Reality in Process for Children With Autism Disability

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ABSTRACT

For more than half a century, educators for normal as well as special children have used virtual reality in the classroom. Systematic analysis and metanlysis of virtual reality in teaching were conducted in order to understand these difficulties and what educators want to gain from employing these innovations in the first place. The researcher picked 250 articles for systematic literature review and select 6 using Prism flowchart. For the purpose of metanlysis, compare the results with six relevant articles. Looked into the potential uses and reported motivations for creating virtual reality learning environments supplied by educators in scholarly papers, and then looked into the potential drawbacks of doing so. Most academics employ virtual reality to boost students' intrinsic motivation, and they focus on a few characteristics, such as instructional practices, engagement, and ramification, in their design of experience, according to these findings. The great majority of instructional virtual reality deployments are found in significant number of educational fields.

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INTRODUCTION

Virtual reality (VR) system includes head-mounted displays (HMDs), motionsensing or haptic gloves, and VR input devices or motion-sensing tools. But VR is much more than a bunch of tools and gadgets. It also has an element of experience (Carreon et al., 2020).

VR is a digital version, usually in three dimensions (3D), with which the instructor engages physically using hardware or software (Oigara, 2018). VR has been used in education for interactive learning, which gives the student the feeling of being in a real-world situation and being able to interact with it. Students can use VR to go on virtual ground trips all over the globe, to space, and to develop skills with simulations that look like real-world problems and how to solve them.

Using virtual reality as an educational tool to enhance students' experiential learning is the goal of this review study. One of the many uses of VR technology in education is as a teaching resource, which is the focus of this study. Six articles on virtual reality research were reviewed in this paper. Many people today are using the term "virtual" to refer to innovation or a computer-based system, which focuses the listener's concentration. The term "virtual" is used to describe imagined things and activities that are not carried out or witnessed in the real world. Although this term was coined in the 1980s, it was originally used as a way to denote the ability of modern technology to create an artificial world. The concept virtual reality, on the other hand, has drawn public's attention to the internet in recent years. It has taken some time for the general public to connect vitality with technology, but it is now well-known on a global scale.

Students at the elementary and secondary levels do not have enough accessibility to internet and technology in educational settings. If kids have access to computers and other technology, it is possible that they may be unable to receive adequate help from their teachers in order to develop technological competencies. As a result, their technological abilities are determined to be lacking at the university level (Asad et al., 2021).

There is a wide range of applications for virtual environments in special education, just as there is a wide range of students served by the profession. Attention, language, spatial ability, memory, higher thinking, and effective learning are some of the difficulties faced by people with special needs. Cognitive as well as behavioral aspects of VLE use are the focus of current research. Using virtual environments encourages active learning and provides a wide range of options for the learner to take related to the learning procedure. Technologies based on virtual reality (VR) provide interesting tools for transferring information between the virtual and physical worlds in a secure and supportive context. This technology allows people with

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