Chapter 8

Role of AR and VR in the Context of Technical Education

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ABSTRACT

In recent years, the primary research subjects for improving the lives of future generation youngsters have been excellence and creativity in the existing pedagogical system. Virtual reality plays an important part in introducing new educational ideas. To enhance the quality of teaching in aspects of relevant and interactive learning, the recent trend in educational technology is mostly centered on e - learning and mobile-based learning approaches. Virtual reality is now widely utilized in a variety of fields, including education, healthcare, training, and entertainment. This study paper examines the influence of virtual reality on the pedagogical sector, as well as its current and future.

INTRODUCTION

Virtual Reality is a new advancement which is mostly used in creating a virtual environment that is similar to the real world. This technology is a direct substitute for conventional physical reality in the vast majority of situations where cost, energy, and other safety forecasts are critical. Virtual reality technology has increased its vertical in numerous types of education sectors in today's technical viewpoint, such as
    1. Medicine 2. Technology education 3. History 4. Architecture 5. Natural sciences
    The fundamental advantage of virtual reality (Sarkady D. et al. 2021) beyond conventional education is that the student can experience the subject in a more engaging manner when it is tied to the context. Virtual reality ensures that the many aspects or methods of the topic under teaching are accurately shown. It gives the student a close-up look at a certain item in various settings, giving them a superb immersive sense and educational experience throughout the learning phase. Despite the fact that the phrase "virtual reality" was created in the 1980s, the technological revolution has occurred in recent decades as a result of growing cutting-edge technologies. Virtual reality is more suitable to its core because of the complete technology era's upside down a lot of smart conduct. Education has an important role in human development. Since ancient times, a variety of approaches have been used to disseminate information. In the present day, the learning phase in well-established classroom-based institutions such as schools and training facilities must be modernised. A lot of study has been done to influence the relevance of pedagogy in associated with knowledge acquisition in the digital tech community, which employs a variety of smart devices. Virtual reality connects all of the smart devices in the education area with the strength of a highly engaging and novel format for the peer group, ensuring that they are never bored throughout the learning process. The Covid-19 problem has already resulted in several adjustments in all

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