



Impact of Virtual Reality on Education

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ABSTRACT

Virtual reality in current scenario has become very essential part in every sector. Due to its importance it has emerged significantly in education sector also after COVID-19. It has got tremendous growth in India. This study examined the usage, impact and expansion of virtual reality in villages. Study was based on secondary data and it is found that there is need for expansion of virtual reality in villages and for this purpose step for digitalization with affordable price is required. After that there is need to educate the students about the use of virtual reality for their studies. The growth of usage of virtual reality has seen significant boost in cities but it is still not up to the mark in villages.

KEY WORDS

Artificial, Virtual, Education, Technology, 3-D.

INTRODUCTION

There is a technique where by creating an artificial environment it is presented in front of us exactly like the real environment.

In Virtual Reality you can be anyone and anywhere you want to be. Virtual Reality makes the unreal real through computer software and hardware.

Virtual reality is an imaginary world, which is created through a computer system and a person is shown in it in such a way that the concerned person starts experiencing the real environment. Virtual reality is experienced on a computer mainly through two of the five senses – vision (eyes) and aural sound.

Virtual reality is typically a three-dimensional (3-D) landscape that the person operating it can alter or interfere with. Actually it is a virtual world which looks exactly like the real world.

Statement of the Problem

Motivation for the study of this topic comes from the changing scenario of study, as so many online portal providing study free or in very nominal charges, and changes in this area has been seen post Covid-19. This study focus on study of the impact of virtual reality which may be positive or negative. Study also focus on to know the degree of expansion of virtual reality in villages and backward areas.

Literature Review

Supriana, Iping & Victor (2007) according to them virtual reality can be also implement in education field also which is better for rural area for practical session and different training programs.

Mandal, Sharmistha. (2013) in his paper explained that virtual reality is a way from where human being specially student interact with simulated environment where they can feel, touch and experience the real world which is very helpful to solve the problem and analyse the different situation for both presence and distance learning programs.

Brian W. Sloboda Study (2016) says that distance learning which include 3-D virtual learning has got high demand among students. This method of learning provides evaluation of students through measurement of their performance through virtual technology. Study reveals that 3-D virtual learning environment has become paramount. With this educator gets better idea about carefully assessment of students learning and outcomes.

Ahmed Al-Gindy, Chema Felix, (2020) in his study author explained that student can study fundamental study of lives with experience. They not only study they can feel and live with study. They can easily understand what they are learning and what they will do in future.

Chamekh, Y., & Amin Hammami, M. (2020) Virtual reality in education takes center stage. For students to acquire relevant skills, it is necessary to introduce a virtual world to achieve the practical aspect needed in the work environment. Memorizing facts bores students; therefore, virtual reality is needed to help students acquire expertise. This paper will discuss the impact of virtual reality on modern education. To understand the impact of virtual reality on the education sector, a theoretical approach and quantitative research were used. The results of the study show that virtual reality helps students with special educational needs and ensures that skills are acquired. Virtual reality improves students' self-esteem.

Objective of Study

1. To know about usage of Virtual Reality in education.
2. To determine impact of virtual reality in education.
3. To study the expansion of virtual reality in educational sectors in villages.

Research Methodology

This study is based on the secondary data collected from various books, websites, newspaper, journals and magazines etc.

Scope of the Study

Study of the impact of virtual reality in education can be helpful for understanding the role of virtual reality not only in education sector but in other sectors too. Study will be useful for determining the usage of virtual reality in various sectors and how it can be implemented in rural areas, specially for educational purpose. Extensive study of this topic can open the door for further research.

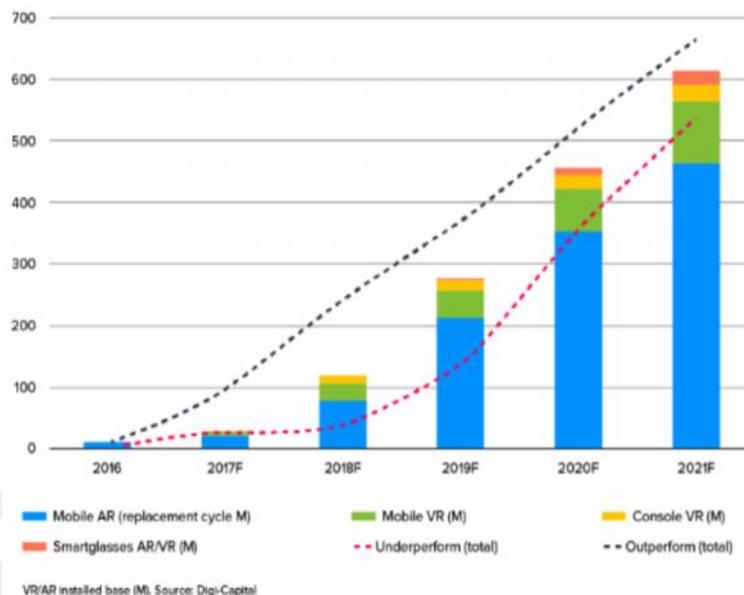
Augmented and Virtual Reality in Education Market Size

In education sector virtual reality is expected to get growth at CAGR value of 18.5% from year 2022 to year 2027. According to report of LinkedIn Virtual Reality (VR) in Education Market is valued at USD 873.2 million in 2018 and is expected to reach USD 10,941.5 million by 2025 with a CAGR of 43.5% over the forecast period.

Under Artificial Intelligence various software's were used in educational purpose through which the students are capable to acquire knowledge and skills. While experiencing the technology, various kind of games, and Practice 3-D presentation are the key part of this method of education. Through illusion by 3-D technology students can explore the real environment of different sector and events. This technology is widely used in primary and secondary E-education and for language learning programs, class test preparation etc.

Demand of this technology has improved in metro cities of India and some small cities also. This method of teaching learning has opened opportunities for distance education also, but in rural areas still this kind of technology is not expanded at its best. In country like India where more than 70% population live in villages and depend on agriculture for quality education, this segment of society should be focused so that the advantages of virtual reality can be taken by mass number of students.

Growth of Virtual Reality in Education Sector



(Source: <https://appinventiv.com/blog/role-of-ar-in-education/>)

Above graph shows the growth of virtual reality in education sector. Total value of the AR industry in education was \$3.33 billion, with the development of smart phones, AR apps has increased the numbers and the industry got the growth rate of 46.6% from 2019 to 2024. With this estimate, the industry will be worth \$72.7 billion by 2024. Although healthcare is being propped to play the most substantial role in AR-adoption, education management will not be too far off.

Impacts on Rural Areas: It is very difficult to facilitates well equipped lab and different learning material due remotely situated place, as well as historical subject which is quite boring. By Virtual reality students can get easily understand the subject by practical, as well as they can feel reality of history which very effective and not so burden for students they can enjoy also, which is very cost effective and reliable.

A planetarium or a museum can be created as a virtual environment using a VR technology. Furthermore, since we can incorporate real-time interactions, events, and information into it, this virtual environment can convey more information than a genuine museum or planetarium.

Impacts on Education: People typically prefer playing over learning. This is due to the fact that playing is more likely to be exciting, whilst learning is more likely to be boring. The process of fusing entertainment and education is known as edutainment. The learning process can be made enjoyable by using Virtual reality.

Since VR systems are represented in 3D visual environments, they can convey learning information as an appealing visual presentation.

CONCLUSION

Virtual reality is the novel concept of modern learning with growing digitization, in metro cities it is getting high growth for education but in village it is need recognition for educational sector, usage of virtual reality can bring more advanced learning for villages talent as it consist the major part of youth population.

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