

# Education System Influenced by Virtual Reality

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**Abstract**— Education system has changed in recent years with the development of technology. Knowledge enhancement and sharing is the prime factor in education system. Development of technology in education sector have improved the knowledge sharing concept. Introduction of Virtual Reality in education system have brought a new life to the subject and their idea. Virtual reality is branch in computer technology that simulates the person physical presence in virtual totality. The paper describes about the change in education system due to virtual reality.

**Key words:** Virtual Reality, Ed Reality

## I. INTRODUCTION

### A. Problem Statement

Improvement in education system with the use of virtual reality.

### B. Introduction

Education system generally refers to public schooling from kindergarten to high school programs. Schools and colleges are the part of education system. Education system is governed by the authorized community created by the government of a country. This education system is bind by various laws, ethics, protocols, regulations, etc. In the recent year’s system has made various changes with the introduction of technology in schools and colleges. Teachers are provided special training with latest technology in order to get fit in the new smart system. Industrial development and technical influence have increased the demand of tech specialized students. This increase in demand has created a pressure on education system.

Following content of paper provides the information about the Virtual Reality and the use of this technology in education system.

### C. Virtual Reality

Virtual reality means experiencing things through our computers that don’t really exist.

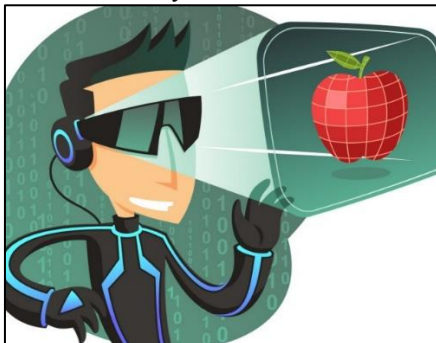


Fig. 1: Virtual reality

The computer generated simulation of a three dimensional image that can be interacted with a seemingly real or physical way by a person using special electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors.

### D. Virtual Reality Applications Statistics

Virtual Reality Application creates artificial world scenario with the use of VR devices. The most important device that helps the user to experience the simulated or 3D environment is HMD (Head Mounted Display). The use of VR devices is forecasted to grow 37 million by 2020.

Number of users for VR have increased 53 million in count according to Statista, and it’s forecasted to increase about 135 million by 2020.

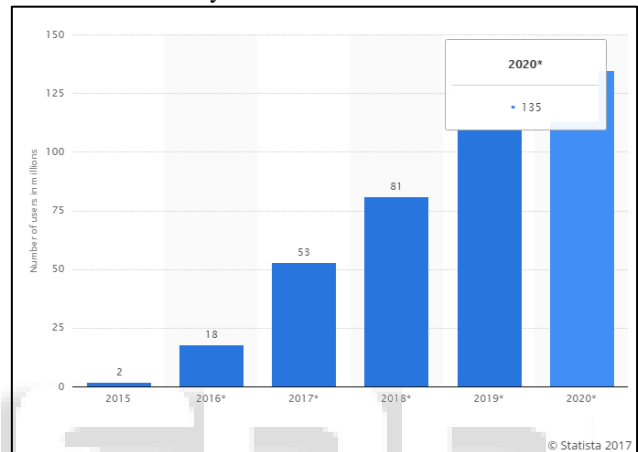


Fig. 2: Virtual Reality Application statistics

### E. Ed Experiment with VR

We have tested multiple VR based application with GIONEE VR GLASS used in education sector with multiple users. By doing this test we have found the person gets live experience of the concepts and was easily able to understand the topics rather than reading it through textbooks or any study material.

We have conducted the test by providing a technical paper to person and then replacing that paper with VR device.

We have termed this experiment as Ed Reality (Education dimension Reality). Ed Reality refers to understanding of concepts with VR technology.

#### 1) Solar System VR

This application is based on the planet geography.

Equip	User Comments
Paper	Planet
VR device	Feels like I was in space and see each planet through my eyes

Table 1: Output with paper

#### 2) Anatomy VR

This application is based on Anatomy. Anatomy is the branch of biology concerned with the study of the structure of organisms and their parts.

Equip	User Comments
Paper	Anatomy (Body Parts)
VR device	you can surf inside the body and understand the function

Table 2: Output with paper

### 3) Periodic Table VR

The Periodic Table is arrangement of chemical elements on the basis of their:

- Electron Configuration
- Atomic Number
- Chemical Properties

Knowing the periodic table is very helpful to learn Chemistry.

Equip	User Comments
Paper	Periodic Table
VR device	It helps to know atomic weight, number & electron configuration.

Table 1: Output with paper

### F. Results

Result for each test has been presented in the test. The major result of this test that user was able to provide more and detailed information about the subject topic by using VR devices and very less information by reading a paper on the same topic.

### G. Benefits

#### H. Information Detailing

VR devices and technology in education system helps the student to get the detailed and deep information about the subject matter.

#### I. Creativity

It provides the 3D experience which makes students to relate the topics with real world scenario which helps students to create enhanced problem solving stuffs.

#### J. Imaginary Study

VR improves the imagination power of students. It helps the students to visualize the problem that helps to solve the root cause.

## II. CONCLUSION

We have tested VR application with VR devices, and found that the education system is getting influenced by VR technology. Stats shows that VR technology is most developing field in education system. We can say that it is the end of beginning in technology, now we are in the middle of technical era where all things are monitored, controlled, judged, assisted by technical things.

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