Introduction

At the end of the 20th century, it is difficult to imagine an architect, engineer and an interior designer working without a graphics workstation or application. Then machines are equipped or design with better and faster growing technology and better prices fall down and easily available in market, but not enough. New era demands more they have, so to move one step more forward to this interactive world new technology immerse is 3D technology [30]. This technology which becomes more popular & fashionable in current decade is called ‘Virtual Reality’. The very first idea of it was presented by Ivan Sutherland in 1965.

In the early stage of use of virtual reality a training to flight simulator with head mounted display developed at Wright-Palleison Air-force Base in Ohio in the 1960 and 1970[30]. Youghblut 1998 conducted a survey of research and educational uses of virtual reality during the 1990, the role of the teachers change to facilitator. Students enjoy using pre developed application and developing their own virtual worlds.

Virtual Reality is a real–time and interactive technology. It is a term used for computer generated 3D environments that allow the user to enter and interact with alternate realities [13]. The users are able to interact to ‘immerse’ them to varying degrees in the computers to artificial world. The term referred to “Immersive Virtual Reality”. In immersive virtual reality, the user becomes fully immersed in an artificial, three-dimensional world that is completely generated by computers. The key concept of immersion in a simulated world and to complete sensory input and output, which are the basics of current virtual reality research.

The term “Virtual Reality” (VR) was initially coined by Jaron Lanier, founder of VPL research (1989). Also this is related to other term “Artificial Reality”, “Cyberspace”, and more recently “Virtual Worlds” and “Virtual Environments”.

Virtual Reality [19] is a term that applies to computer-simulated environments that can simulate physical presence in places in the real world, as well as in imaginary worlds. Interactivity and its captivating power, contribute to the feeling of being the part of the action on the virtual safe environment, without any real danger. In other term Virtual Reality is a simulation in which computer graphics is used to create a realistic looking world. So, virtual reality has been a new
immerse technology applies in various area of applications such as training simulators, medical and health care, education, scientific visualization and entrainment industry.

Virtual Reality systems depend upon three groups [18] on the degree of immersion and interactivity. These three groups are immersive system, non-immersive system, and hybrid system.

Immersive system replaces our view of the real world with the computer-generated images that interact to the position and orientation of the user’s head. A non-immersive system leaves the user visually aware of the real world but able to observe the real world with virtual world through some display device such as graphics workstation. A hybrid Virtual Reality system permits the user to view the real world and virtual images superimposed over this view. Such types of system are also called as “Augmented Reality” system [18].

An immersive system consists of three system elements interacting with each other to make the whole functioning system. These three elements are Virtual Environment, the Computer Environment and Virtual Reality Interfaces. Virtual Environment includes ideas such as model building, introducing dynamic features and physical constraints. The computer environment includes the processor configuration, the I/O channels and the real time operating system and Virtual Reality Interfaces to interact with the hardware used for tracking head, recognizing hand gestures, detecting sound or haptic, 3D interfaces and multi-participant systems [18]. One of the final aspects of virtual reality in education is practical training.

These platforms are entirely developed for instructional purposes and they give educators brand new opportunities to utilize the technology. Virtual reality developments for educational use will also increase in number as professionals become more acquainted with the technology and capable of producing educational materials.
Various Methodology used in Virtual reality are

1) The simulation is the first method of Virtual Reality: The simulators normally consist of several systems such as real-time vehicle simulation system performing real-time simulation of vehicle dynamics motion, visual and audio system reproducing vehicle motion, driving environment scenes & noise and act as interface between the driver and the simulator.

2) In Avatar image based virtual reality one can join the virtual environment in the form of real video as well as an avatar. In this image one can work of two types of user one can use 3D
distributed virtual environment a conventional avatar or a real video. Avatar image based virtual reality provides pretty good interaction environment between human and computer for computer system.

3) Projector based virtual reality modelling of the real environment plays a vital role in various virtual reality applications such as robot navigation, construction modelling and airplane simulation. It provides more realism by using photo for 3D date camera is used for modelling.

4) Desktop based virtual reality involves displaying 3-dimensional virtual world as a regular desktop display without use of specialized movement tracking equipment. Computer games can be used as example of desktop-base virtual reality using various triggers, responsive characters and other such interactive devices to make the user feel as the virtual world. Desktop based virtual reality is used which fully immerses the user in a virtual world. The head mounted display includes two small high resolution LED or LCD monitors which provide separate images for each eye for stereoscopic graphics rendering 3-D virtual world, stereoscopic biannual audio, positional and rotational real time head tracking for 6 degrees of movement and optionally motion controls with haptic feedback for physically interacting with the virtual world.

5) True immersive virtual reality: Hypothetical virtual reality as immersive as consensus reality. It produces by using brain computer interface. An intermediate stage may be produced by “Virtual Space” using a head mounted display with head tracking and computer control of the image presented to the helmet.

The majority of the teachers in the review studies said that they would use virtual reality technology if it were affordable, available and easy to use for students and teachers.