

Summary 2:

Virtual reality vs. reality in engineering education

There have been many breakthroughs in VR technologies in the recent years and there is increasing interest in using VR for education. VR education empowers student by engaging them through immersive interactive experiences and switch from memorization to application, analysis, and evaluation. In the engineering field, VR could be used for field trips to hard to access location for closer examination as opposed to a simple video. A hands on major like this can also benefit by using VR in training to allow student to learn using an experience at a lower cost (no waste of material) and removing the potential risk causing any detrimental mistake may have on the real world. VR can also allow for learning and collaboration over long distances because experiment material and settings can be easily recreated and shared in VR. The use of virtual labs can also ensure students have a better understanding before they step in to the real lab, which can be very beneficial to preserving expensive equipment and limited materials which could go to waste from simple mistakes. Although VR still faces many problems such as VR sickness, bulkiness of the displays, etc... , VR hold great potentials to improving the quality of education in the future.

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widely used and more frequently implemented in education, training, and research.  
This article discusses the potential and the current state of virtual reality, and its  
tools in engineering education. The focus is put on some opportunities, challenges  
and dead ends of implementation faced by the authors. In this point of view, virtual  
reality is the future of creative learning, however it has its limits in terms of  
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