VIRTUAL REALITY

How to use in Education for University Students

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Preface

This workbook is intended to be a guide for the using of VR in education for Design and Use of Instructional Material class. It contains both what is VR and how to use it in education.

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What is VR?

VR, or virtual reality, has gone from a science fiction concept to a broad market of consumer devices in just a short span of years: It's no surprise some of us have whiplash.

Now that VR technology is everywhere, you may have some questions. We're going to answer them! Here's everything you need to know about VR.

Virtual reality technology seeks to create a realistic three-dimensional image or environment that a human can perceive as real, and even interact with in realistic ways. Obviously we aren't at holodeck levels of realism yet, but consumers do have easy access to VR headsets and controllers.

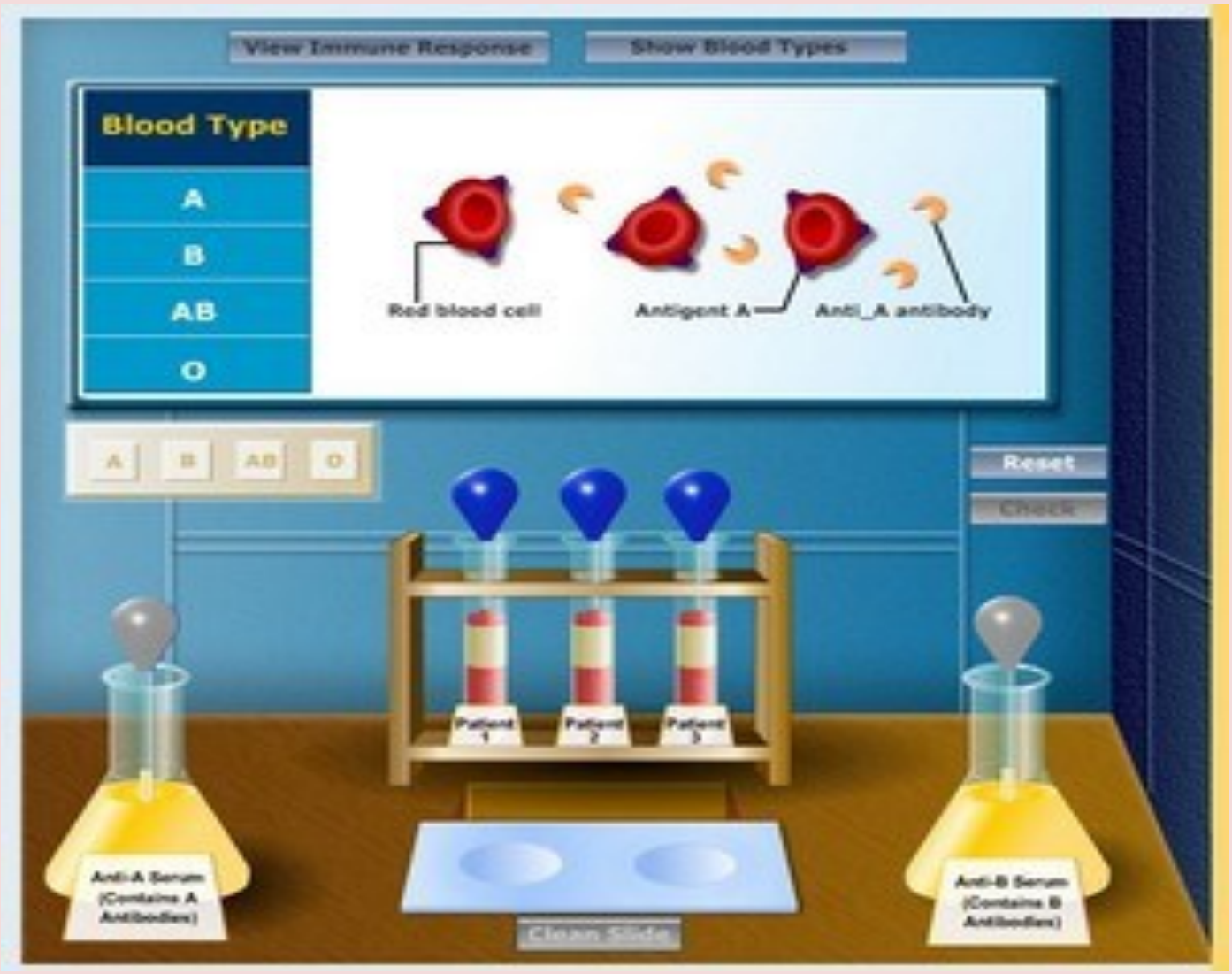
VR in devices like headsets is created entirely by a mixture of hardware and software. That makes it different from AR (augmented reality), which uses an overlay of the real world and adds objects to it, like the Microsoft HoloLens. VR tends to be a more difficult prospect: In AR, there are solid fixed points of reference that your eyes can use to track and navigate. In VR, the full environment is simulated and realism is harder to attain.

VR in Education

VR has unlimited power for learning. The field is improving because people more likely to learn with visual nowadays. VR allows students to interact with their lessons and colleagues. Both experiments and applications will be much more effective with VR. Students no longer have to imagine 3D world. VR has a lot of opportunies as you will see in this workbook.

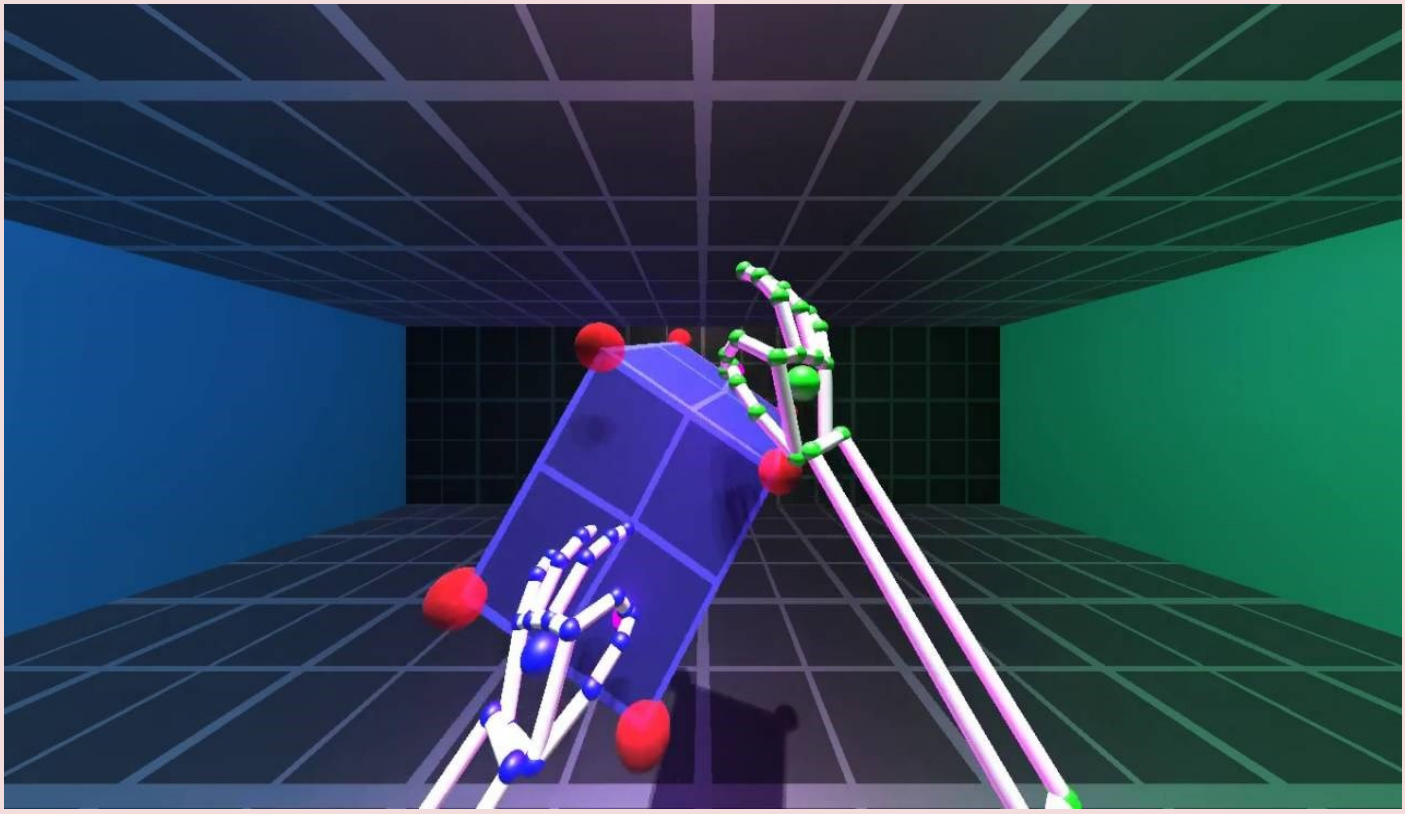
Lectures

Main help of VR is about lectures. It lets students to learn more effective and give them change to make experiments more easily. VR can do everything a fully equipped labrotory.



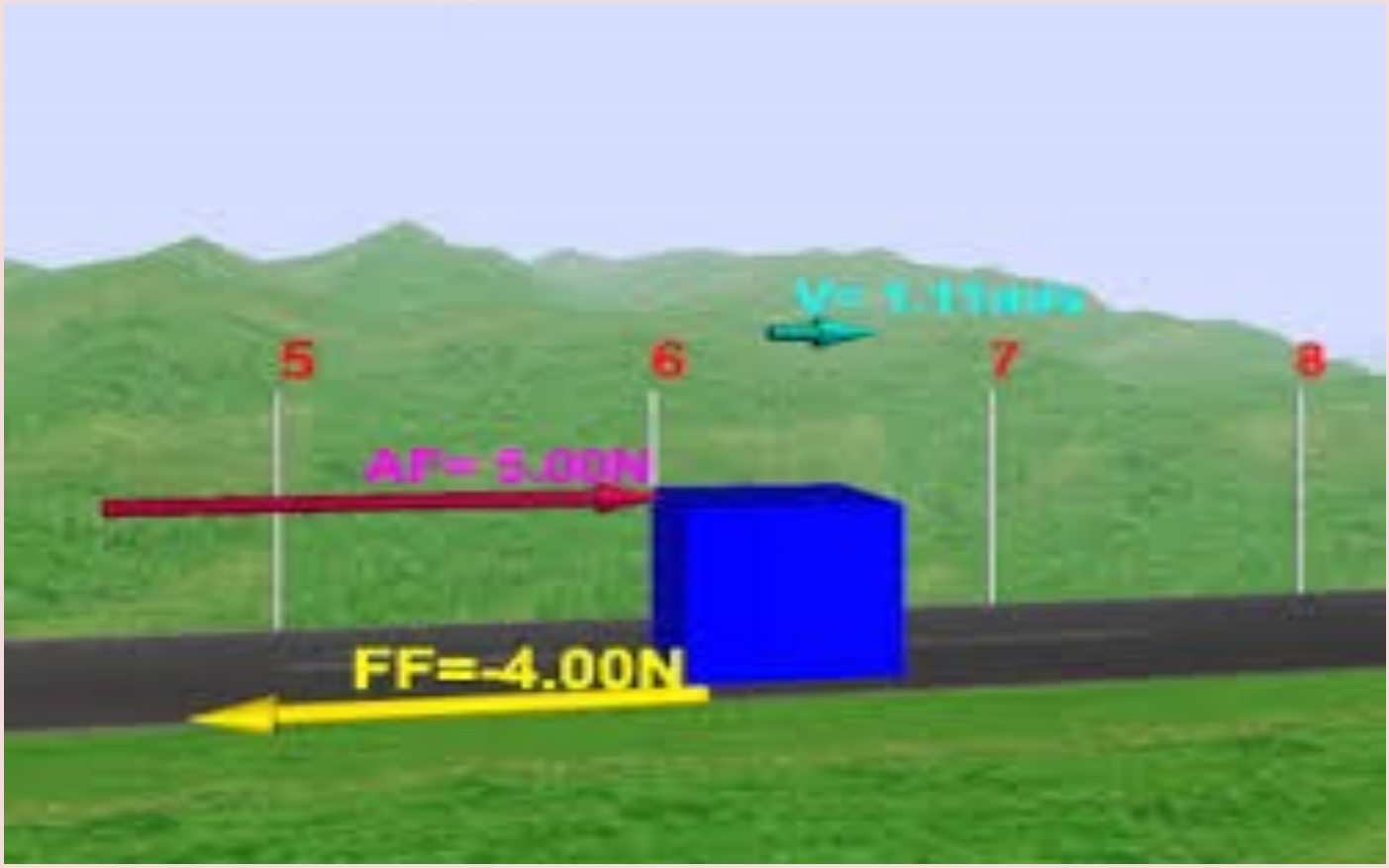
Engineering:

The programs engineers use are easily run with VR. 3D modelling is easy to use with VR because students actually see what they working on. They can interact with the object. More control makes less mistakes.



Physics:

VR can be transformed into a labro-tary with an appropriate program where student can experiment our mystic world. Physics will be easy to unders-tand with this technology and costs less. Students feed their brain with all these 3D physics simulations.



Chemistry:

VR also allows students to experiment in Chemistry. It reduces danger. Most of the chemistry is about experiments and VR makes it easier to do. With an rigth program students improve their learning. Same with the physics no need to lab anymore.

Astronomy:

Planets, suns, stars and more. Most of the context of Astronomy is full of visuals. From elementray school all students learned these field with just images and limited 3D source. VR opens unlimited(only limited with human's knowledge) world to the space. Students can see our solar system and understand more effective. There are billions of galaxies and they can imagine easily with VR.

VR also allows students to make difficult calculations with otomatic programs. Distances and experiments can be calculated with program and students see clearly.

Use VR to see this picture 3D.

Entertainment

Students also have fun with VR. Activities can be easily integrated to VR and make their time more valuable. Students learn new ways to entertain with their friends. Like games or movies.

Tourism and Culture

When students learn about new places they also need to see there. This makes learning efficient and also effective. Most of the time it is not possible to see everywhere but its possible with VR. VR lets students to go on a world tour.

Healthcare

There are two ways of using VR in Healthcare. One is about phobias. User can be faced with the one he/she had a phobia virtually. It can help and make them live more comfortable lifes. This one should be applied with Professio-nal.

Second is about surgeries. Medical students can make practice with virtual bodies. They can exercise in virtual world and it helps them to expert befo-re real surgeries.

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