

Virtual Reality is Coming...

is here!

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Link to Presentation

<https://goo.gl/amgbEK>



What is Virtual Reality?

Virtual= Near

Reality= What we experience as human beings

You are presented with what isn't there but your senses perceive it as real.



What is Virtual Reality?

A three-dimensional, computer generated environment to explore and interact with by a person

Computer Technology stimulates more than one sense together to create an illusion of reality



Why have Virtual Reality?

Potential entertainment value

Architecture, medicine, sport, the arts, etc. If it is too dangerous, expensive, or impractical VR is the answer.



Features of Virtual Reality?

3D images and they appear life-sized to the viewer

3D images/video change with perspective

Provide appropriate responses in real time.

The free-flowing interaction = memorable experience

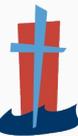


VR and Education

VR is on the doorstep of education and will change the world as we know it.

VR increases student engagement and learning

Makes knowledge available, accessible and affordable



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de porsche

Oculus



VR in Education ([Link](#); [Link](#))

Medical Training

Storytelling

AR and VR for Autistic Children

Constructivist Learning

Field Trips

Create Own VR Trips

Creativity



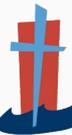
VR @ Lakeside Lutheran



Cardboard

Samsung J5 Phones

Storage Cart



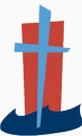
Buying Cardboard



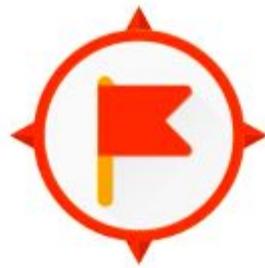
[Cardboard Topmaxions](#)--\$7

[Cardboard Official](#)--\$15

[Google Daydream](#)--\$41



Google Apps



Google Expeditions

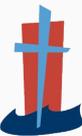


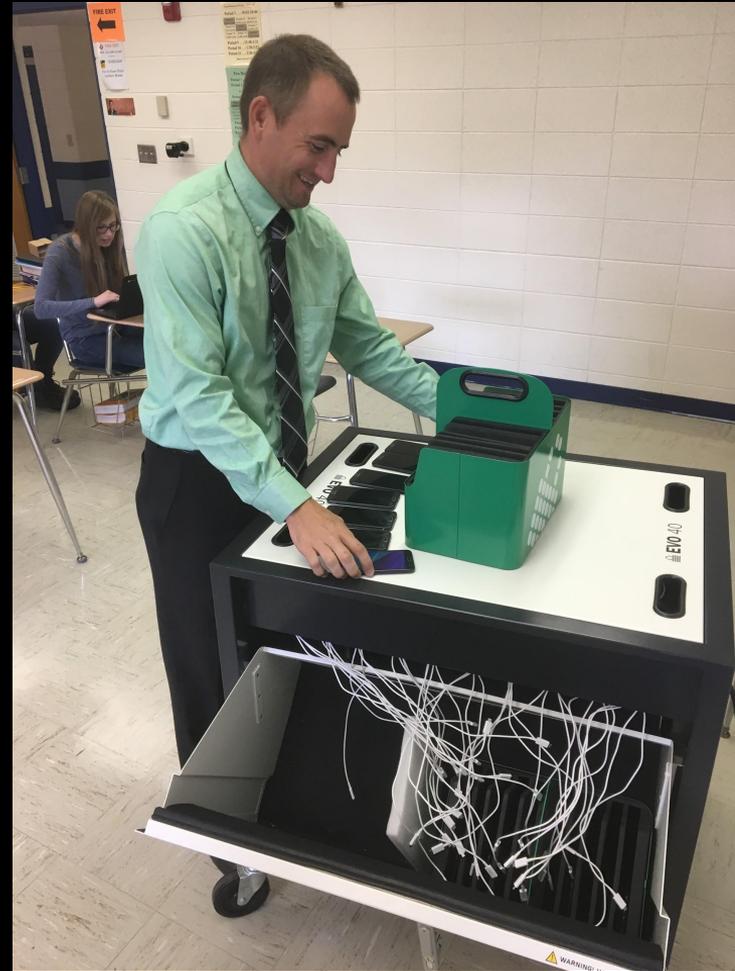
[Google Expeditions](#)

[Google Tour Builder](#)

[Google Arts and Culture](#)

[Own VR Tours in Expeditions](#)





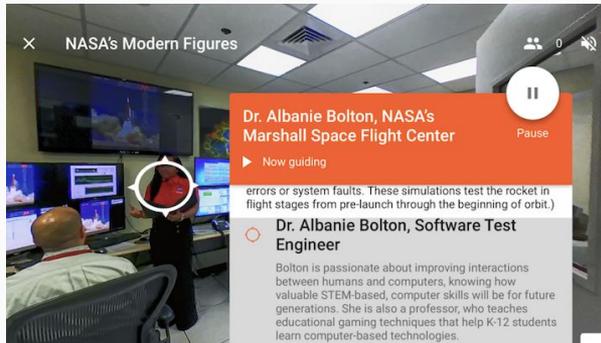


Apps

25 Best for iOS Android in 2018

Apps for Google Cardboard

Best Google Cardboard Apps



Apps

[YouTube 360](#)

[YouTube Virtual Reality](#)

[LIFE VR](#) (any app store)

[National Geographic VR](#) (Google)

[7 Best VR Education Apps](#)

[20 Top VR Apps Changing Education](#) (create/use)



Cautions

Not a quiet orderly time

Load VR Apps/Download Expeditions before class

Chairs with wheels that spin are awesome

Motion Sickness

Addicting! Kids will ask, “When can we do it again?”



zSpace ([link](#))



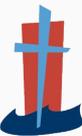
Educational Resources

World's first AR/VR laptop

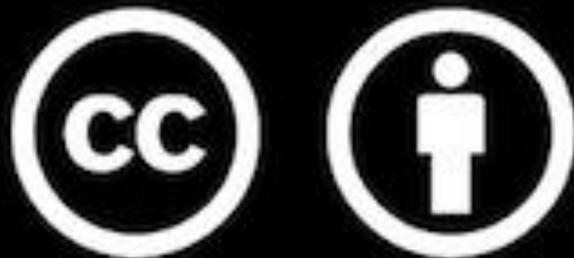
All-in-one computer

Eyewear and stylus

zSpace



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VR in Research

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Opportunities to employ VR

&

Maintaining/Managing a VR facility

Research Arenas for VR

Basic theoretical research

Applied research

Realization research



Relevant Topics in VR Research

Synchrony

Bias Reduction

Special Needs

Rehearsal

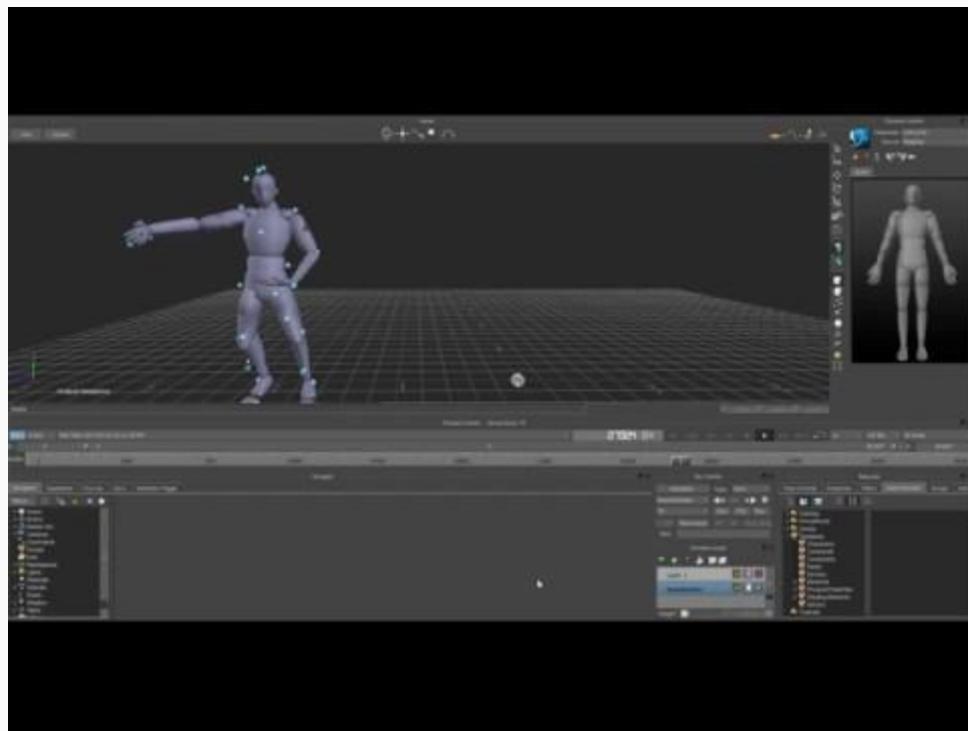


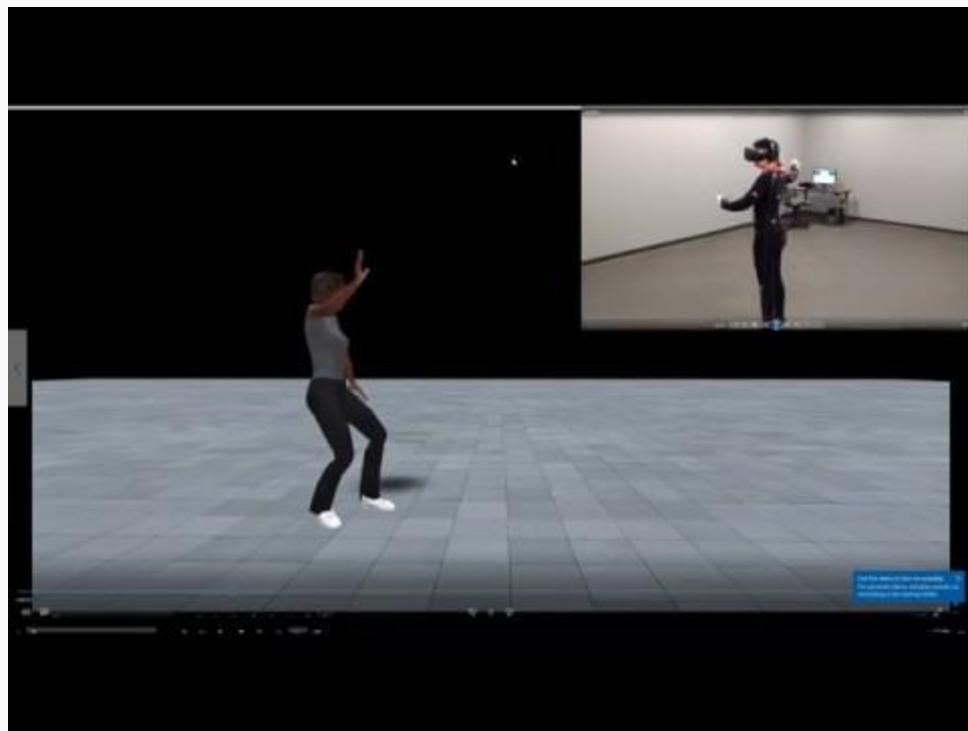
Synchrony

The experience of moving in tandem

Increase affect, trust, learning, etc.

Mediated synchrony produces similar outcomes (Tamborini et al., 2016)





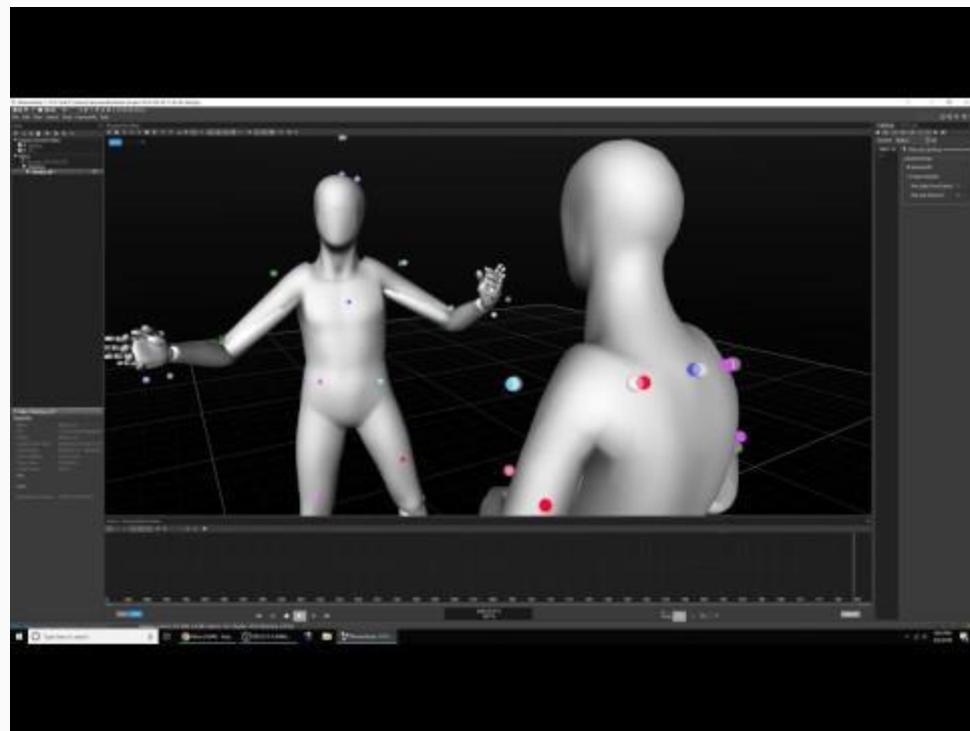
Bias Reduction

Synchrony 2

Interaction between two people with virtual avatars

UNESCO Global Citizens Initiative

Rafaela Schmaelzle (Michigan State)





Google Earth VR

Special Needs

Autism

Socially closed doors

Rehearsal benefits







Classroom Outcomes

Public Speaking Programs

Ovation, VirtualSpeech, Virtual Orator

Virtual tours

Inaccessible objects/places

Everything from Astrophysics to Zoology... Even had Puppetry visit.





Common VR Issues

Hygiene

Tracking

Speed

Headset





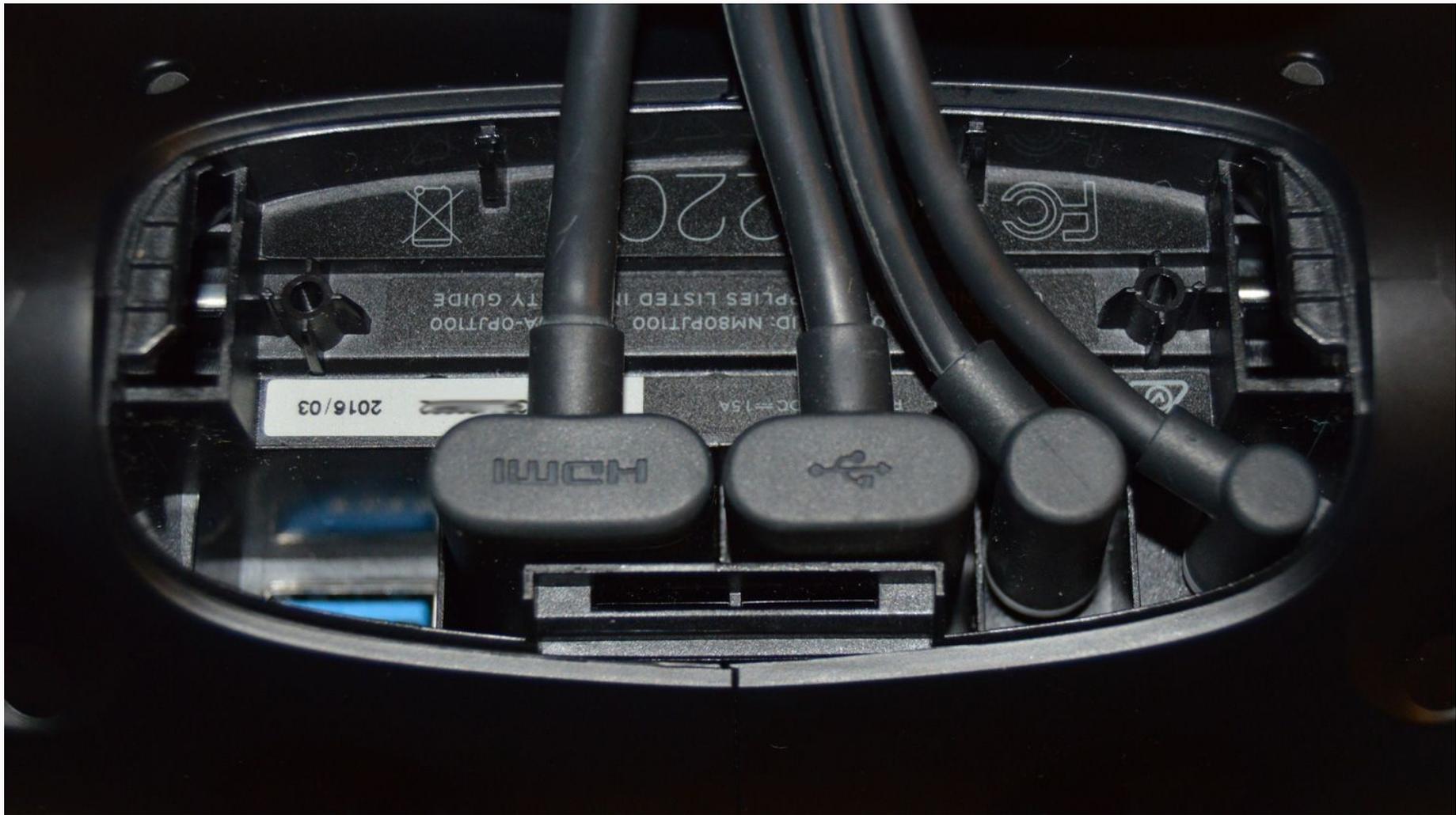














VR is here.

Literally, as in... in this room right now.



Virtual Reality is coming (is here!)

Your questions and comments?