



Leveraging Virtual Reality for Collaborative & Experiential Learning



bit.ly/uwwctlvr





The Presenter



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Collaboration & Design



Preservice educators planned, designed & taught lesson in VR classroom

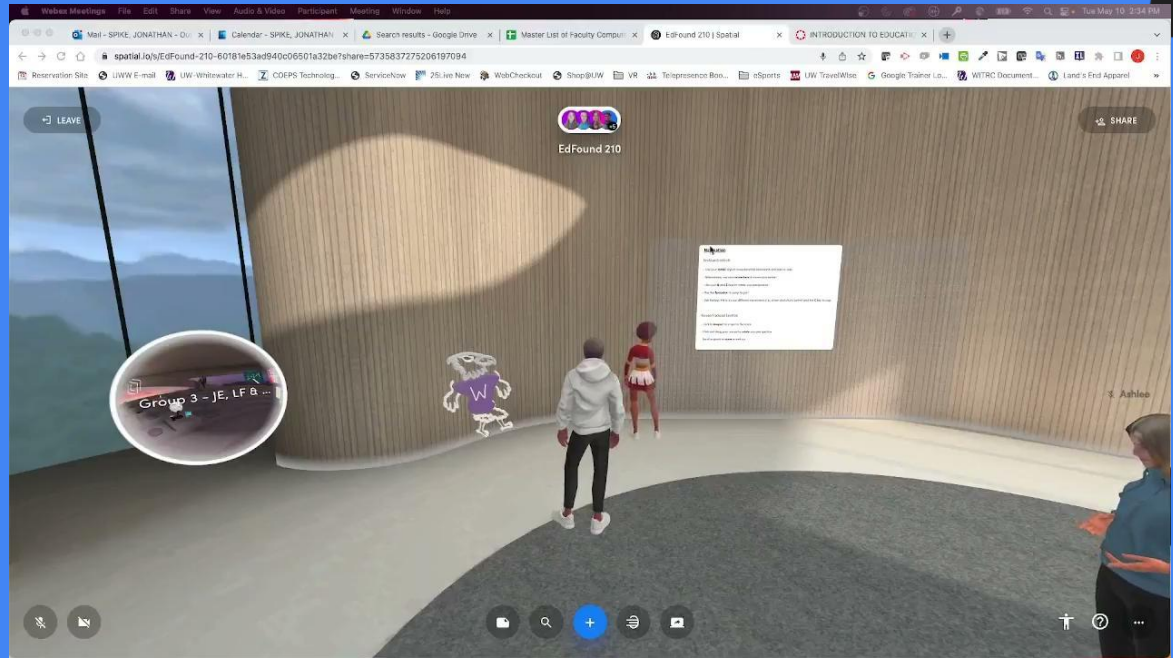




Collaboration & Design



Clip of students working in the VR space via headsets (also available via web browser too)





Teamwork & Communication



ROTC Cadets worked together in military sim to practice formations and communication





Teamwork & Communication

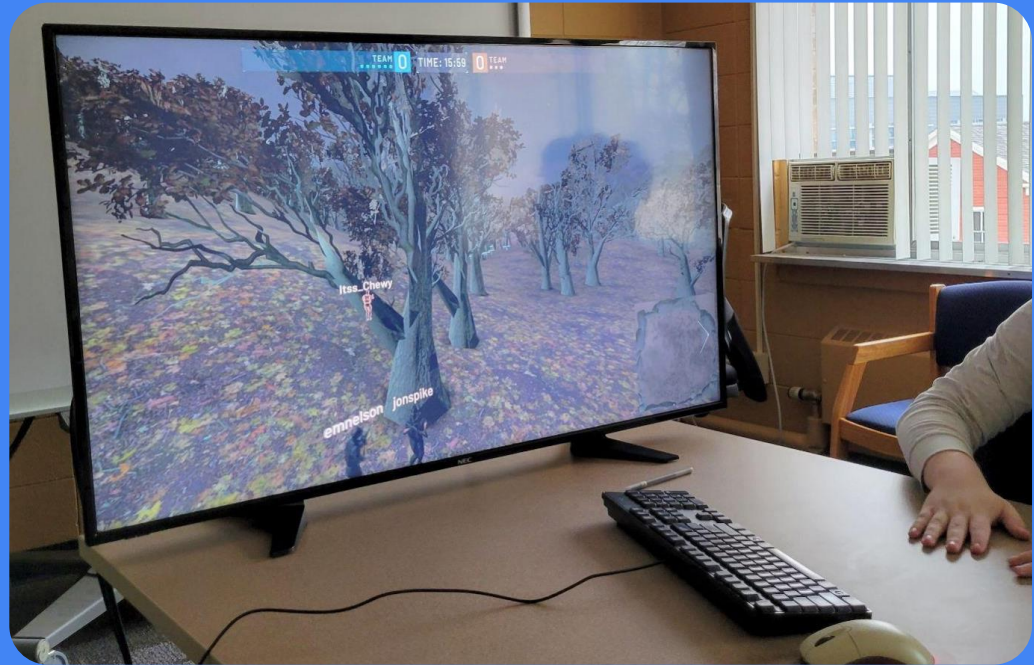


Tactical missions emphasize strategy, precise language, and following leader's orders





Teamwork & Communication



Non-participants able to watch the overall view of the training exercise to learn and discuss





Simulation & Observation



Comm Sci Disorders
Open House Featured
Speech & Language
VR Clinic Simulation





Simulation & Observation



Potential Students could observe the clinical simulation in 360 degrees via VR headset





Social Emotional Skills



Collaborative short-order cooking game helped build group & community skills for Spec Ed





Social Emotional Skills



Must prepare food orders as they come in while sharing ingredients and food prep tools





Social Emotional Skills

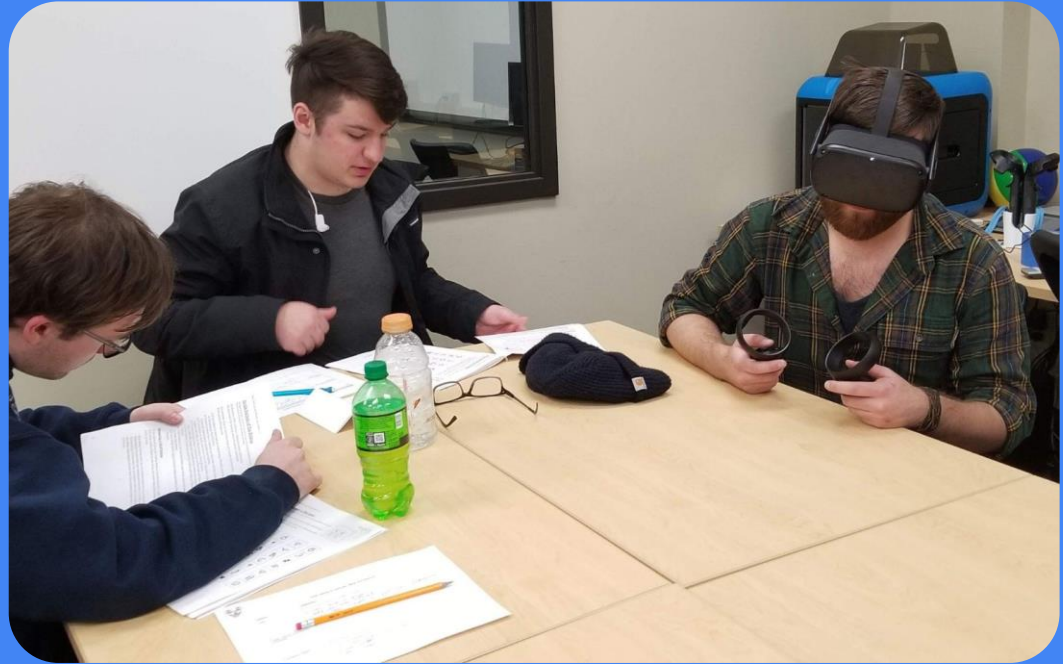


Builds social awareness
& relationship skills via
unique collaborative
activity





Social Emotional Skills



Person in VR must disarm a “bomb” with the help of team outside of VR with instructions





Social Emotional Skills



VR player does their best to calmly describe bomb to teammates to get their assistance





Social Emotional Skills

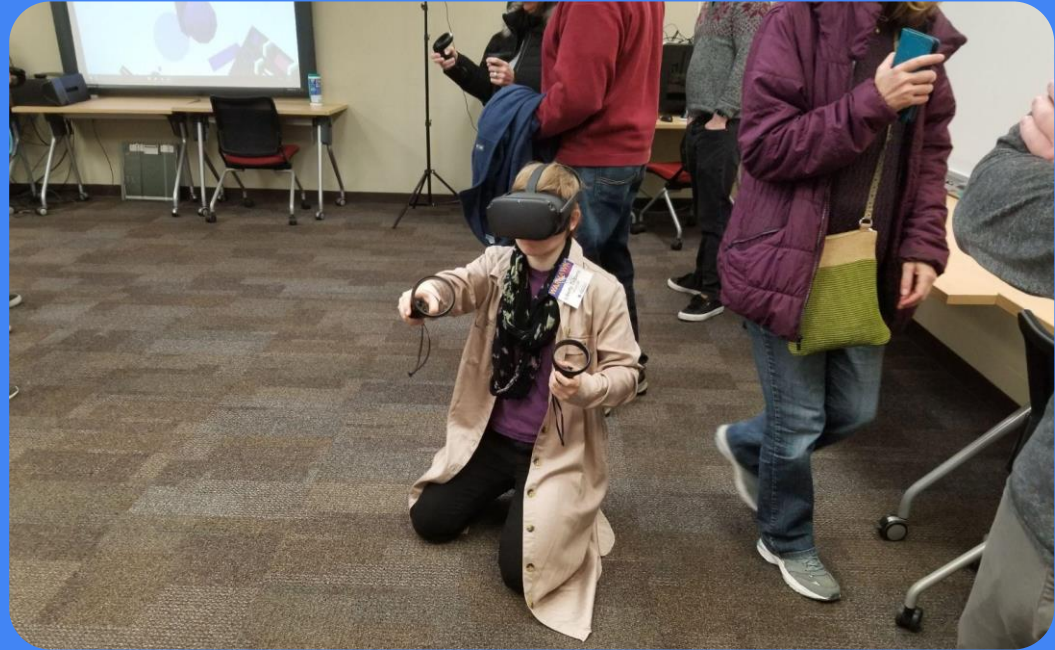


Builds Self-management & Self-awareness skills through the modulating of emotions





3D Design & Creation



3D Design in a virtual space to give user 360-degree control of their creation tools





3D Design & Creation



Users can import reference images, create in 360 degrees & export as 3D printed object





Bonus - Esports Teams



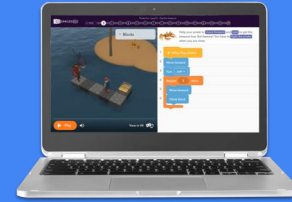
Team-based 3v3 game that combines ultimate frisbee, hockey, and zero gravity





WebVR and/or DIY Headset

- Works on Chromebooks & Mobile
- Cardboard - \$10+ (no controller)
- Mainly “fixed” VR experience



Oculus Quest 2

- \$300-\$400
- Untethered & Standalone device

Vive Pro 2 or Valve Index

- \$800-1K - headset
- \$1,500-2,000 for PC
- Tethered & high end

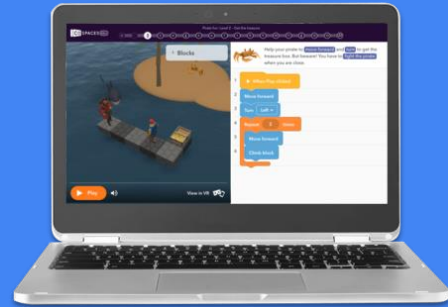




What Should I Get?

WebVR and/or DIY Headset

- Works best when using with large class of 25 & up
- Not very expensive (either free or cost of DIY headsets ~\$50-300ish)

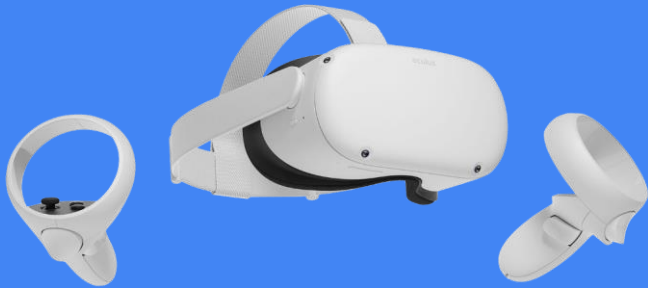




What Should I Get?

Oculus Quest 2

- Best as a station/cart of 4-5 headsets for activities
- Cost around \$1,200 - 1,500 for headsets, with app costs between \$100-500 depending on preferences





What Should I Get?



Vive 2 Pro or Valve Index

- Best as single purchase in maker area or library
- Costs \$1,800 - 3,000 for headset and high-end PC

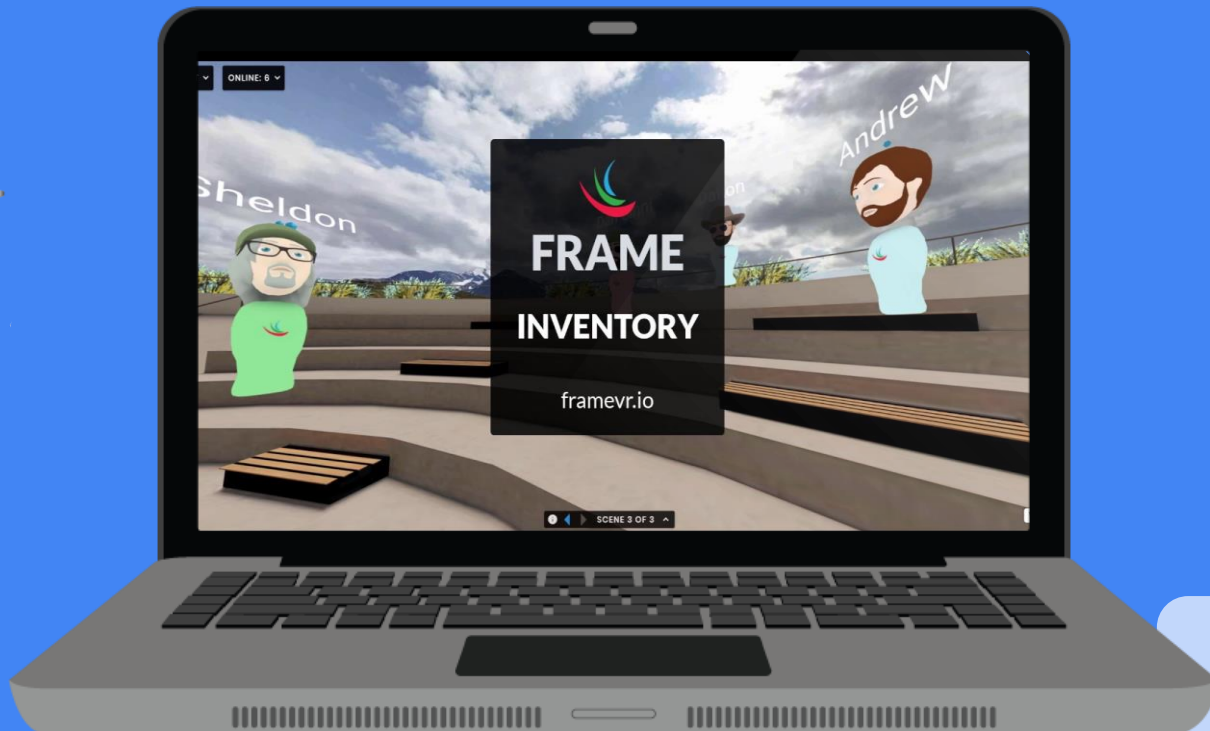
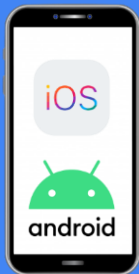




Asynchronous or Synchronous Frame VR



Works on





FrameVR





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Questions?

