

Best Practices - Distance Learning with XR

Prepared by [Rob Theriault](#) MET, BHSc., CCP(f)

Immersive Technology Manager (retired)

Author of The Future of Education is Experiential ([U.S.](#), [CDN](#)). Follow @ [Bluesky](#), [LinkedIn](#)

VR Experience (software)

The software chosen for VR for distance learning should be an application or applications that students will use several times (e.g. weekly) over a semester. Some examples of suitable applications for VR for distance learning include, VR anatomy, chemistry, physics, medical simulation, public speaking, VR for language learning or history.

Hardware

Recommendation: Stand-alone VR headset

PCVR, which requires the connection between a VR headset and a gaming computer, is a form of VR that utilizes higher end graphics and is not recommended as it may be cost-prohibitive for distance learning.

Courses and learning outcomes

To justify the use of VR for distance learning, VR applications should address as many learning objectives as possible in a given course/subject.

VR superpowers

Does VR enable learning that would otherwise in an analogue world be:

QUALITY	y/n	EXPLAIN
Dangerous		
Difficult		
Impossible		
Impractical		
Inappropriate		
Counterproductive		
Expensive		
Other:		

Additional explanation:

Evaluation strategy

Do the VR applications possess any of the following attributes:

Evaluation tool(s)	y/n
Built in analytics	
Teacher present with students in the VR environment	
Ability to video record student activities in VR for debriefing and evaluation	
Other:	

Explain:

Learning objectives

- XR addresses a sufficient number of learning objectives to justify using it for an entire semester
- It addresses 1 or a few learning objectives that would otherwise be difficult or impossible to address by other analogue or digital means

Accessibility - PC or VR (see AODA). For students or teachers who are unable to tolerate the VR headset or VR experience, PC access should be available. On Social VR platforms, there has been a good deal of discussion around closed captioning for the hearing impaired. Various platforms have been talking about this feature, but as of June, 2022, we have not yet seen this feature. Are there alternatives to VR available?

Equity - PC or software fully loaded onto VR headset or no wifi required, Closed captioning?

Diversity - avatars of multiple ages, genders, ethnicity, non-human

Inclusion - policies and mechanisms in place in VR to mitigate discrimination, harassment

Cost and ROI