



*I Reject this Reality and
Substitute a Virtual One:
How to Build A VR Service in
Your Library (or Other
Space)*





Who am I?

Dr. Jonathan Bradley

Innovative Technologies Coordinator for Learning
Environments

University Libraries at Virginia Tech

bradley1@vt.edu



The Virtual Environment Studio



A free, bookable space in Newman Library

Can be used for development or play

Regular hours are staffed by student workers

Has a content expert (me) available for consultations

Offers tours for both the Virginia Tech community and public

Offers workshops in VR development

The Technology in VES

Headsets: HTC Vive Pro, Oculus Rift, Samsung Odyssey, Oculus Go, Lenovo Mirage, Microsoft HoloLens

Accessories: Vive trackers, Vive wireless adapter, ZED stereoscopic camera, 3DSuit motion capture suit, projector, chroma-key fabric

Computer: Dell workstation with Xeon 6-core processor, 32GB ram, and a nVidia GTX 1080ti graphics card

Software: Unity, Unreal Engine, Blender, Maya, MotionBuilder, Fusion 360, OBS, Steam, Oculus






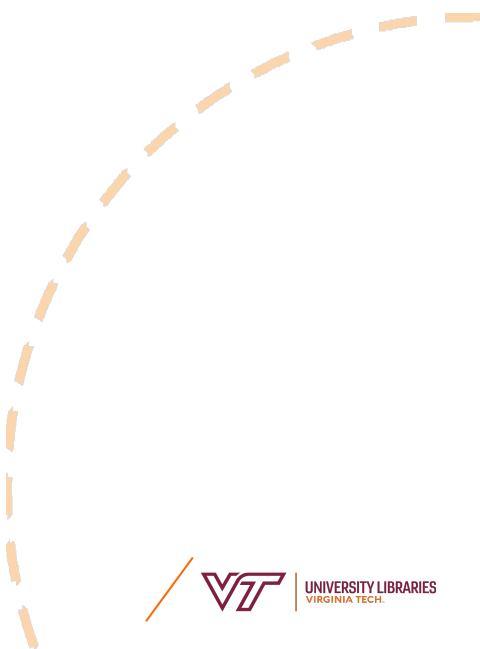








Costs

- Can be anywhere from cheap to very expensive
 - Depends on what all you need to accommodate
 - The PC and headset are the major costs
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Safety



- Padded walls!
- Defined spaces
- Well-trained students
- Wire management
- Scripted safety blurb









Personnel



- A boss who's on-board
- Someone who loves learning new technologies
- Student workers who are personable and excited about VR (not necessarily knowledgeable about VR)



Service Models



- Booking slots, our is handled via Connect2
- Open Theatre Night
- Technology checkout
- Consultations
- Tours

Timelines

- Give yourself time to learn the hardware and software before opening
- Consider if renovations will be needed
- Advertise internally before opening
- Do outreach to interested parties to get them using the space prior to opening
- Study the best open hours for your population
- Expect a lull at first



Benefits



- Sells itself
- Can increase your community engagement
- Can help establish you as an incubator for creativity and technology
- Brings people in the door



Pitfalls



- Hiring the wrong student workers
- Getting the wrong technology
- Not preventing overlap with existing services
- Not finding your base users
- Technology will fail; have a contingency plan
- Poor IT support
- Not tracking your usage

Some Numbers (until July 1, 2018)

- From Oct. 11 to July 1, we had 198 bookings
- From Feb. 25 to July 1, we had 410 walk-ins
- From Feb. 25 to July 1, we had 69 questions from patrons about VR answered by student workers
- I've consulted on 13 faculty projects
- We've been interviewed 6 times by student journalists
- We've been interviewed once by local news
- Took part in 7 major campus events
- I've presented on VR in 4 courses for faculty
- Awarded one grant, with a second pending



Projects



- Internal to the library: our research object collection and exhibit digitization
- Student led: Shakespeare's garden and the ethical shopping experience
- Faculty led: Historic battlefield recreation, logistics simulation, and architecture visualization

Outreach and Community

- We've had hundreds of area students come through and use the space, from all grade levels
- I was shadowed by 4 local middle school students who are interested in VR development
- I have done VR demonstrations in public libraries in lower-income area near the university
- Worked with local school system on a grant to build a similar space in a local middle school









Questions?