One HMD in Learning Support

Are you looking to integrate virtual reality into learning support? Here is a procedure for one-on-one direct learning in virtual reality for the purposes of learning support:

Getting Ready

Technology

Determine what form of VR technology you have available for your use. If you are looking to purchase a head-mounted display (HMD), learn more about common <u>HMDs available for purchase</u>. For the purpose of learning support and students with varying behaviors and learning requirements, we would suggest choosing a smartphone in a HMD or a stand alone HDM. A cabled HMD to a gaming computer could become an entanglement hazard for some students, however this set-up will provide more opportunities for programs which are targeted towards diverse learning needs.

Space

Determine the space required for the HMD:

- Smartphone in an HMD: Recommended seated play
- Stand Alone HMD: Seated, standing, or positional tracking (up to 3 m x 3 m)
- HMD connected to a gaming computer: Seated, standing, or positional tracking (up to 3 m x 3 m)

Location

Some schools have a flex room, maker space, or learning support room. Determine if there are any scheduling requirements to book these spaces. If none of these spaces are available, the library, gym or stage, or an empty corner of an office may be suitable for your use. Remove all potential dangers or obstacles from the space. Using a small carpet or bath mat in the center of the space gives a tactile feeling for players to identify the center of the play space.

Renovation Tip: If your school is considering library renovations, consider suggesting the addition of a VR Maker Space room (minimum 3 m x 3 m) for an enclosed, hazard free zone for virtual reality experiences and development.

Finding the Right Experience

Browse our suggested <u>VR Programs</u> or <u>Sourcing Educational Games</u> to find a program which is suitable for the age and curricular objectives. Check the length of gameplay to understand time requirements. Some games have save points, which means you can continue the experience at a later point in time. Download this experience to the device.

Test the Experience

Try out the experience beforehand to explore how to best support your student throughout the experience. This will help you troubleshoot problems if they are unsure how to continue within the simulation. If you are uncomfortable playing through the experience or do not have time to do so yourself, there are full walkthroughs of almost every game on YouTube which you can have open, playing for your view only at the same time. You can follow where your student is at by having them describe what they see. This can help you to identify any challenges they may face within the program.

Procedure for Instructional Time with Students

Prepare Student

Be sure to go over safety requirements before starting any simulation, reviewing whether or not this experience is a seated, standing, or positional play. We have outlined <u>general safety</u> <u>practices</u>. Additionally, you should prepare your student about the type of experience they will have, any controls they need to know, and any heightened emotions they may experience. Be sure to make connections to their curricular learning objectives to reinforce learning. Demonstrate how to hold controllers before helping the student into the headset, and ask them regularly about what they see to ensure you can support them if there are technical difficulties.

Play and Monitor

Monitor the student for any signs of discomfort or heightened emotions. Ensure they stay within their boundaries for seated, standing, or positional play. If your attention is needed elsewhere, ask the student to take off the headset and to wait until you are ready to resume. Sanitize the HMD after gameplay.



Reflect

If possible, engage your student in reflective practices about the experience. Take the time to review your own practice to ensure the technology is meeting your pedagogical needs, alongside the curricular objectives of your student. We have provided <u>examples for student</u> reflection alongside questions to reflect on your own pedagogical practice.