

#STRUKA



DRinVET

How to ...

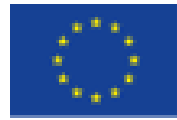
Best Practice in Presential Teaching/Learning



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VR FIRST ENCOUNTER

HOW TO FACILITATE YOUR FIRST CLASS?

VR SAFETY

Introducing new technology to people is always tricky. The first impression matters as well. The problem arises when a person does not have a proper onboarding to the technology which results in hesitancy and apathy towards the technology

The first use of VR can also result in dizziness and headache as the brain tries to adapt and overcome the real-world/simulated-world contradiction.

Therefore it is important to have a proper onboarding follow the safety procedures and try a simple and enjoyable experience first before diving into the VR world.

It is also important to understand what will happen in VR to avoid triggers of phobias or PTSD.



TEACHER PREPARATION

A Tool, Not a Curriculum. Virtual reality is not a technology that should replace other teaching resources; instead, it should serve as a complementary tool that can enhance learning across disciplines. As with any new technology being introduced into the classroom, success depends on expectations, an effective strategy and the practical details of how it is being used.

Safety! Safety! Safety! We always recommend sitting when participating in V.R. experiences. Partners create an additional safety measure because the partner who is observing can ensure that his or her partner is safely experiencing the VR content.

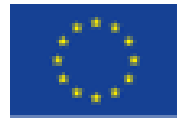
Before starting, go over a list of dos and don'ts. Some of our personal favourites include:

No standing up.

If you are starting to feel dizzy or getting a headache, take the headset off.

Do not flail hands or legs around to avoid causing potential accidents.

Virtual reality can sometimes be an intensely emotional experience. Remind students that if they are feeling overwhelmed, it's OK to stop.



TEACHER PREPARATION

Technology. To get started, you'll also need some basic technology. Here are some general requirements:

Internet: V.R. experiences can be downloaded or streamed. We recommend downloading the experience to the device so that streaming issues are avoided.

Mobile Device: Smartphones are essential to powering these experiences.

Headset: Choose a headset that makes the most sense for the mobile devices that you are using. There are mobile device-agnostic headsets that could work with a variety of phones. Prices start under 2,50 EUR for a simple cardboard viewer and go up from there. Most headsets also come with compatibility specs, so that you can be better informed on how to pair accurately.

Without Headset: 360 videos can also be viewed without a headset, but the experience isn't as immersive. When viewing 360 videos in this format, you can drag the screen while the video is playing to view the surrounding environment in 360 degrees.

Headphones: Headphones allow the user to be more immersed and reduce the disruption to the experience that could arise from using speakers.

STUDENT PREPARATION SAFETY



To start teaching using VR you need to be prepared as a teacher, but you also need to prepare your students. Always start your class with safety instructions. Explain to the students how to use VR safely. Main talking points should include:

How to put on the VR gear (there are always some small differences between the equipment, therefore make sure to explain how to put and secure the headset on).

How?

Start by showing that you are inspecting the VR headset. Make comments on what you are observing.

The headset does not have any loose cables (if applicable), the headset is intact with no cracks or any other damages, the lenses are intact (if applicable) and there are no scratches. The lenses should light up if the headset is on.

State that the headset is ready to use and start by disinfecting it with the appropriate cleaning solutions. This is in order to avoid any transmittable skin conditions. If possible (and available) use the protective masks for the VR headset such as the one in the picture below. Put it on.

Demonstrate the correct way how to safely put the headset on and how to fasten it. Vision should not be blurred and the student should feel comfortable. In the case of students with eye-sight health issues, instruct (if applicable) to adjust the focus on lenses.



STUDENT PREPARATION

ASSIGN A “BUDDY SYSTEM”



The first encounter with a lot of students might be difficult to navigate. Therefore always pair your students to have couples.

This way the “VR buddy” will become your extended arm to help and observe any discomfort of the person using the VR.

They should report to you if they hear the person in VR complaining about any discomfort at all and help them remove the headset. After that, they should contact and report to you directly.



STUDENT PREPARATION

PLAY A SAFETY VIDEO



- Especially, the first encounter should be facilitated in the safest way. If you have students who have never tried VR it is important to show them what not to do.
- An example of video - https://www.youtube.com/watch?v=QEpcIx_lodk&ab_channel=Holonautic
(You can click on the play button and it will take you to the Youtube video)





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STUDENT PREPARATION

ASK FOR ANY OF THESE CONDITIONS:



History of SEIZURES



Light Sensitivity



Post Traumatic Shock Syndrome



Phobias



Children under 13



STUDENT PREPARATION DONTs



Explain to your students that it is in no way allowed in any way or form to touch the person using the VR unless the person using it requests help!



THIS IS VERY IMPORTANT!

The person using the VR is in a very vulnerable position and some students might find it intriguing to have “some fun”. This can result in injuries, damage to equipment and emotional trauma. To avoid this, clearly state that no touching (with hands or objects) is allowed. Furthermore, if a person who is not using the VR is getting any close to the person using the equipment, they should talk to make the person blinded by VR aware of where they are.

FIRST LESSON

For the first class, you want to have a simple showcase of VR. Anything that is “fun” and pleasurable to experience in VR. To build the confidence of your students, you should make this experience as best as possible. The fact is, that the older students in VET will be reluctant with the technology. To make their first experience a positive one, we recommend having some sort of VR experience such as “The Blue” where the person is underwater on a ship and sees a beautiful whale approaching (ask for any phobias of deep water, animals and similar). “The daw of art”, “Museum excursions” etc.



You can watch this video for inspiration, simply click on the button



FIRST LESSON

You have selected some calm experiences for your students, you have taught them about safety and assigned a buddy. You explained the “ethics” and you are ready to observe your students. You are ready now. Except you are not :)

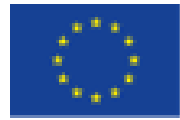
READY ?



EXPLANATIONS NEEDED

Why are you not ready, you might wonder. Simply, because your students need to know the following: (applicable for the very first VR encounter and to any VR class you might hold in the future)





EXPLANATIONS NEEDED

1. What will happen?

Your students might be very excited to dive in and try things out.

But it is your responsibility to explain what will happen inside the VR experience. This is, once again, to have your students determine if there might be something they do not want to see/hear/ experience (for example the student might be afraid of deep water, the scale of the whale, or panic because of the fact their brain got too tricked and they are worried they can not breathe.)

Explain shortly what will happen in the experience (without going into too much detail where there is nothing more to explore). Ask for any questions the students might have before letting them try the VR.



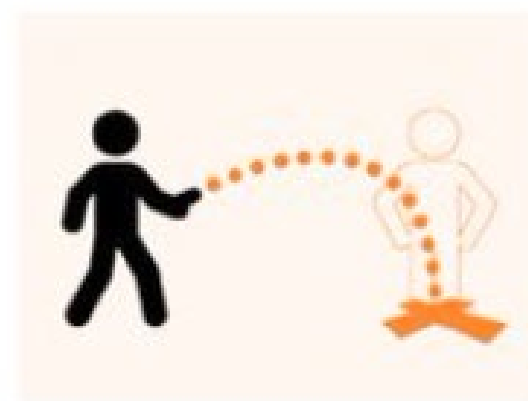
EXPLANATIONS NEEDED

How can I move?

Now you have to go a little more into detail on the functionality of the VR. Depending on the type (tethered - VR headset connected via cable to the computer with controllers, standalone - VR headset with controllers without a cable, mobile - the headset frame uses the phone as a display). This is crucial for people who have no knowledge about VR and gaming as such.



ROOMSCALE



TELEPORT

Fade out at point A, fade in at point B



SHIFT

Smoothly zoom from point A to point B



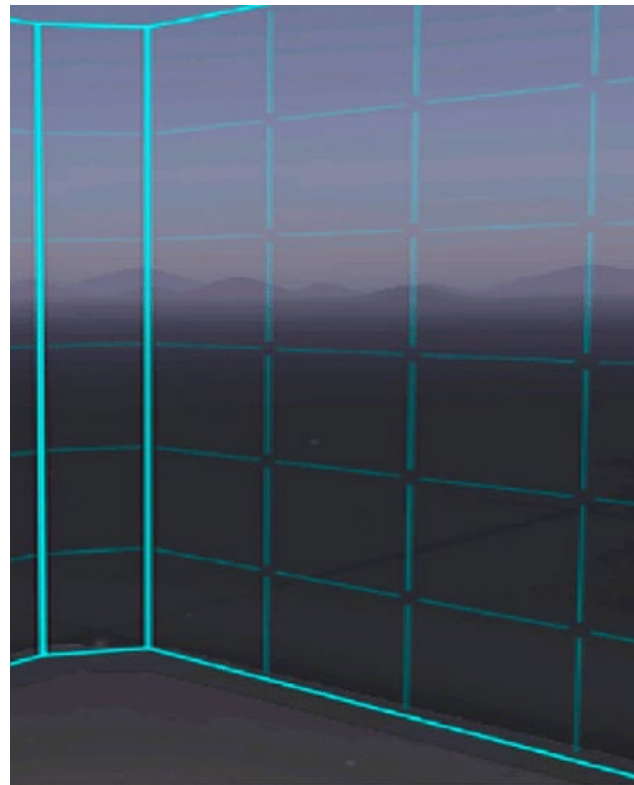
CONTINUOUS

Use analog stick to walk or run



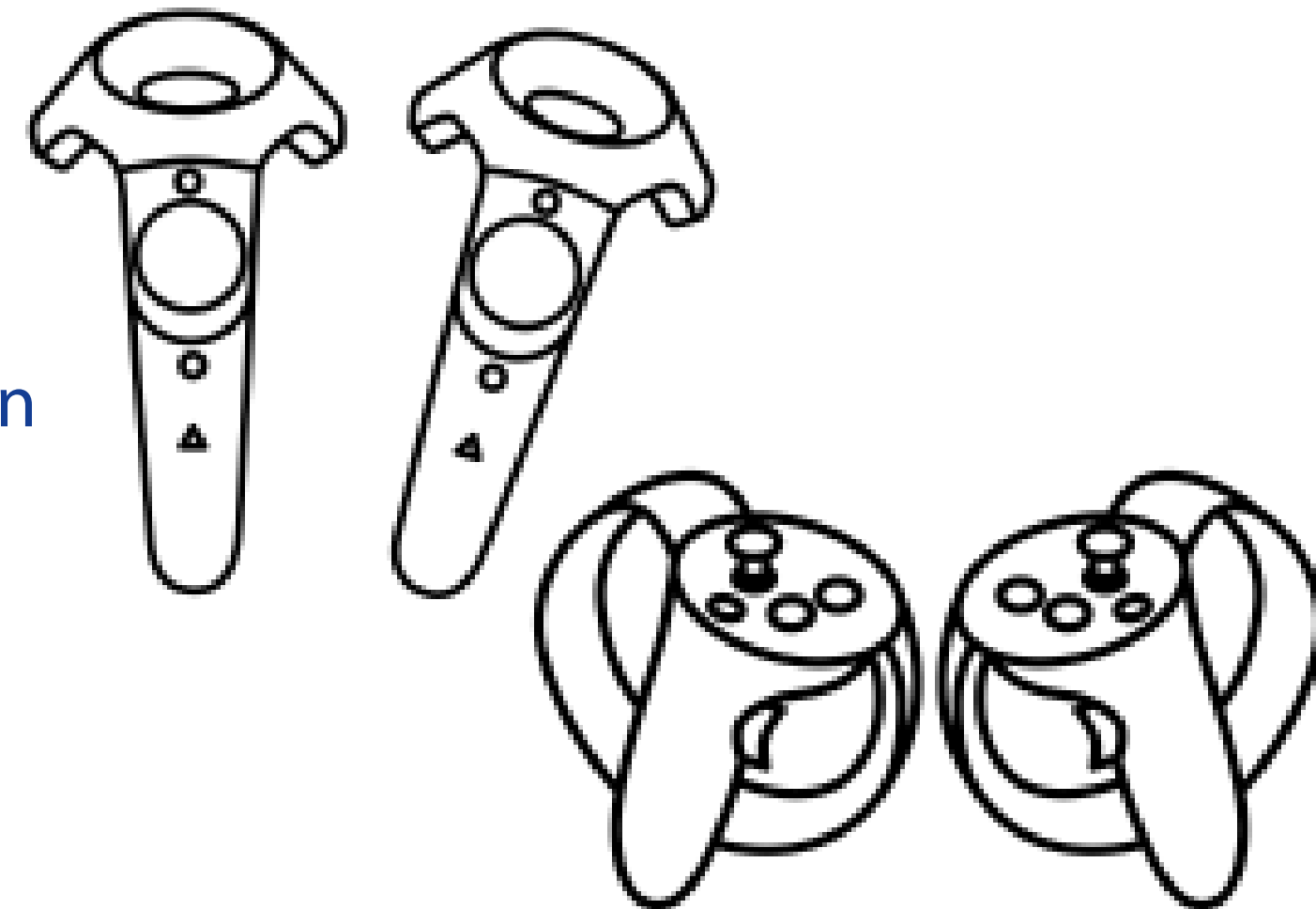
SITTING & STANDING

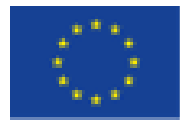
EXPLANATIONS NEEDED



The GRID: The grid (tethered and standalone) is a “safety net” that the person in the VR can see. It shows up when you get too close to your physical space borders (walls, objects etc.). If they see grid they have to avoid it.

The controllers: (tethered and standalone) are your hands in the VR. You use them to interact with the VR world and its objects. Every experience is different so you need to know what experience you have selected and how to use the controllers.





EXPLANATIONS NEEDED



2. What is expected of the student

Be clear of what is the main objective.

Example: In the “blue” experience, you should observe and note what sort of animals were around, what happened and how did it make you feel.

By stating clear objectives from the beginning you help the student to learn that you use VR as a tool for education and not for entertainment. This will help you keep them focused and object-oriented.

EXPLANATIONS NEEDED

3. Observe the students

Everything is going all right and none of your students has any troubles. However, what can occur is that the students might lose the track of time. Especially in experiences which do not have a clear defined timer for the experience to end (for example a museum visit).

It is up to you to notify them when they are nearing the end of their time allocated. It is recommended to give them a 5 minutes notice and then a 2 minute notice so that they can complete their tasks and observations.



EXPLANATIONS NEEDED

4. Evaluation

Part of your VR inclusion class should also be an evaluation of the experience. Each student should provide feedback either orally or in written form. By doing so, you will be able to determine if the VR inclusion is meeting your learning objectives and its purpose.

For example, ask for details which are cohesive with your learning objectives and what you wanted to achieve.



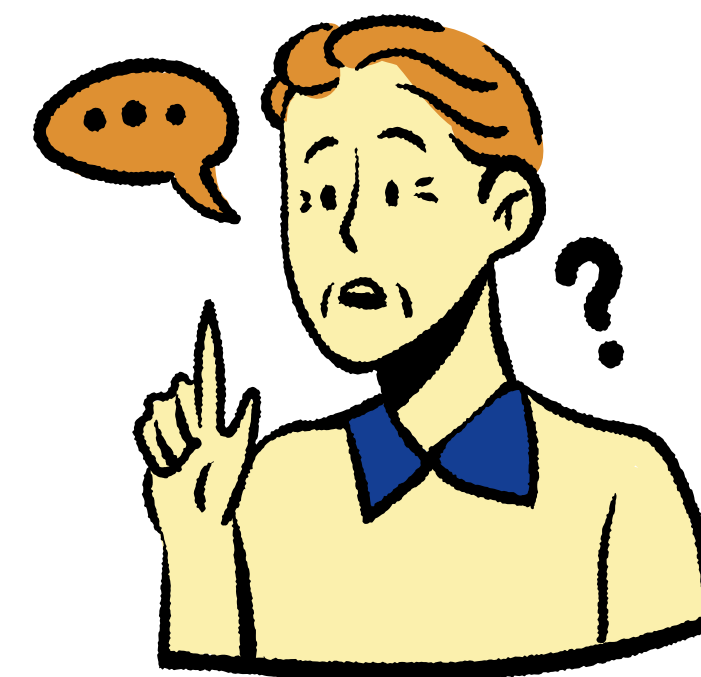
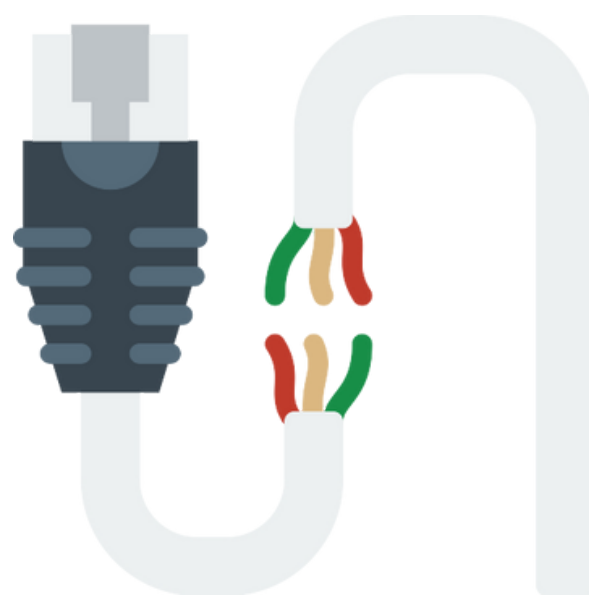


EXPLANATIONS NEEDED

5. Finale

After your evaluation asks the students to clean and put away the equipment.

While doing so they should also inspect the equipment and if they find anything they should report it to you.





SUMMARY

1

Inspect the Equipment you are demonstrating with

5

Provide information on what will happen in the VR scenario and ask if there is anyone with a specific problem with the content (people with PTSD, people with seizures, any sort of phobias etc.)

2

Clean the equipment and put on the protective mask (if available)

6

Assign the task and explain what is expected of the student after the completion of VR

3

Assigning students their "buddy"

7

After finalization of the class request feedback from the students

4

Play the safety video on how to behave with headset on

8

Ask the students to clean and put away the equipment and inspect equipment for any damage or problems