Social VR in Higher Education: Lessons learned from our pilot
Why VR?

- **Long-term**: Developing media tech
- **Short-term**: Negative impact of social distancing (stress, loneliness, motivation...)
- **Social VR** technology available, feelings of **social presence**

Mojet, T. & Pander, B. (2020). *Student Reactions to Corona-Adapted Education*. Faculty Student Council Social Sciences, VU Amsterdam.
Objectives of Pilot

• Can we use social VR to **reduce** the impact of social distancing?
• How to **integrate** social VR in a lecture / the classroom?
• Acceptance and effects on **wellbeing**?

Project Title
“Acceptability and Effects of Social-VR as a Tool for Overcoming Social Distance in Higher Education”

Funded by **ZonMw** – Covid-19 *Science for Practice call*
July to December 2020

Partners:
Social VR in the classroom

• M.A. course on media psychology, “effects of new media” (30 students)

• Workshops in VR
  • AltspaceVR
  • “VR Campus”

• Learning goals
  • Psychology of VR
  • Doing and presenting qualitative research + experiment in VR

• Equipment
  • We shipped Oculus Quests to each student at home
Let’s meet at the PBMU VR class

If not invited yet, send me your username

You can find it in:
Menu > Me
Ethnography of social VR?

Let's go for a field trip!

- With your group, select a world / hub space
  - Menu > Discover > Featured Hub Spaces (e.g. Campfire)
  - Menu > Worlds > Featured / Popular
- Adopt a "participant observation" approach to explore
- Let's meet back in Zoom in 30 minutes
Pilot study

- Participants: **25 students**
- Three ‘waves’: $T_0$ (Oct.), $T_1$ (Nov.), $T_2$ (Dec.)
- Measures
  - Diary of VR use
  - Qualitative interviews ($T_2$)
  - Surveys ($T_0$; $T_1$; $T_2$)
    - Acceptability of the technology
    - Wellbeing (to be compared against a **control group**)
    - Feelings of presence

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Reported Acceptability

Usefulness: 3,288
Ease of use: 3,6
Enjoyment: 4,43
Attitudes: 3,84
First Impressions

• “Wow” effect
• Only few technical issues
  • Easy to use, but some practice needed before mastering it
• Cybersickness
  • Decreases with regular use for most students
• Headset too heavy to use for a long period
  • Ensure that it is positioned correctly
  • Sessions need to be short (max. ~30min)

“I had a lot of fun”.

“More advanced than I expected”.

“Really excited to explore more because I love using it. It's a whole new world”.

“It keeps surprising me”.
Teaching

• **VR preferred for more interactive activities**
  • Group meetings, presentations
  • More “natural”, spontaneous, interactions, less “hierarchical”, “closer” to others
  • Feeling of “leaving home”, while saving physical travel

• **Zoom preferred for lectures**
  • Lower resolution of VR “screens”
  • Unable to take notes in VR
  • Others can make a VR session “noisy” and “distracting”

“IN VR, you can just approach people and talk”.

“It's like actually speaking face-to-face”.
Social interactions

• VR boosted connectedness and feelings of community
  • “Doing things together” in the class
  • Better if students also know the classmates (e.g., via ZOOM or campus)

• Seeing an avatar instead of the actual person
  • Might limit “emotional” connection, e.g., due to missing facial expressions
  • But powerful non-verbal behavior
  • Protected while almost “real-life”: less shy while making presentations

“It’s like the first day of school”.

“I wanted to say 'high five' to the classmates”.

Conclusions

• **VR scores in connectedness + interactive tasks**
  (brainstorming, group sessions)
  1. Better than break-out rooms in ZOOM?
  2. Alternative for coming to campus for only short meetings
  3. Safe “test ground” (e.g., first presentations)

• **Just a pilot test**

• **Technical issues**
  • Availability of headsets
  • Need for technical improvements: taking notes, better visuals, facial expressions...
Outlook (VU)

- **VR@VU** interest group at VU (Network Institute)
- **KnowVU**: VR-knowledge hub for teaching?
- **Represent VU in VR** (AltSpace)
- **Buy VR headsets for classes**
Thank you very much for your attention!

Questions + comments?
AltSpace Demo

• Event name: “PBMU VR Classroom – demo”

• Link: https://account.altvr.com/events/1673825220391076636