Pitch in 30 seconds

1. *Name & Institution / Organization*
2. *When it comes to VR/AR I'm a:*

   Bloody Amateur; Advanced User; Nerd; Geek; … ?
3. *VR or AR – what is your preference?*

For questions and inputs during the workshop:
https://web.speakup.info/
Room nr. 62919
(Login over ICEM 2017 network)

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Workshop VR/AR for education - ICEM conference Napels

Jeanine Reutemann
Leontine van Melle

Centre 4 Innovation, Leiden University

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Workshop Outline

- *Kick-off: Welcome & Onboarding*
- *The VR/AR landscape*
- *Break out [1]*
- *Reflection / Questions*
- *Break out [2]*
- *How to make the virtual real?*

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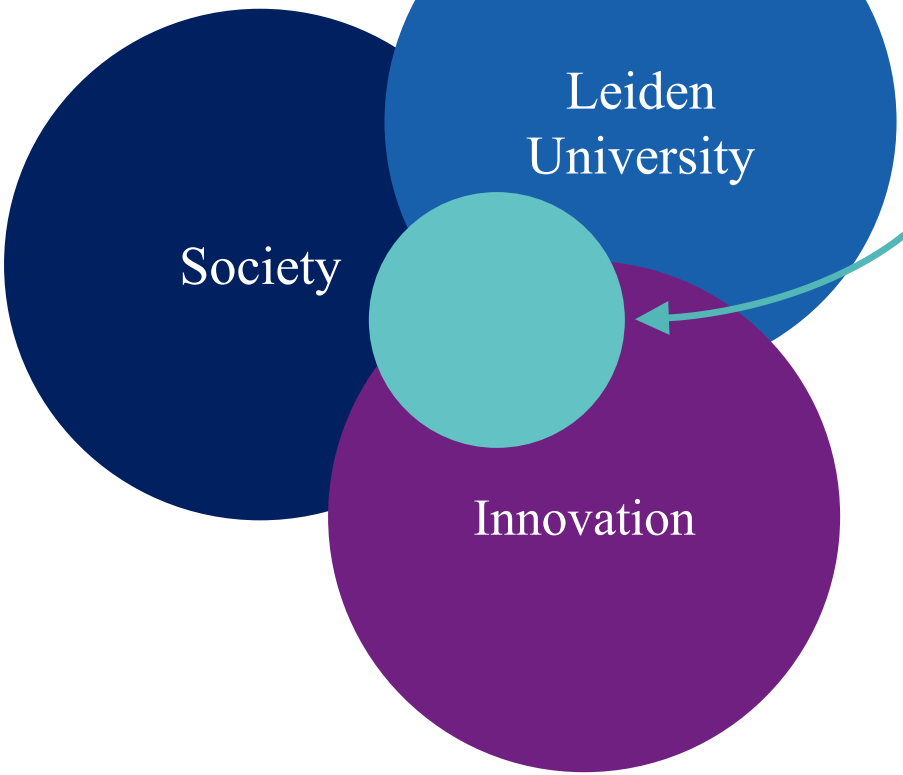
INTRODUCTION



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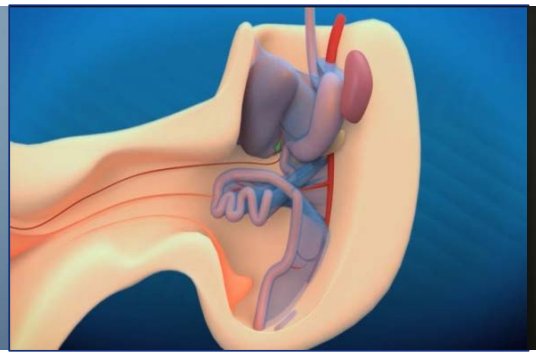
New Media Lab – Leiden University



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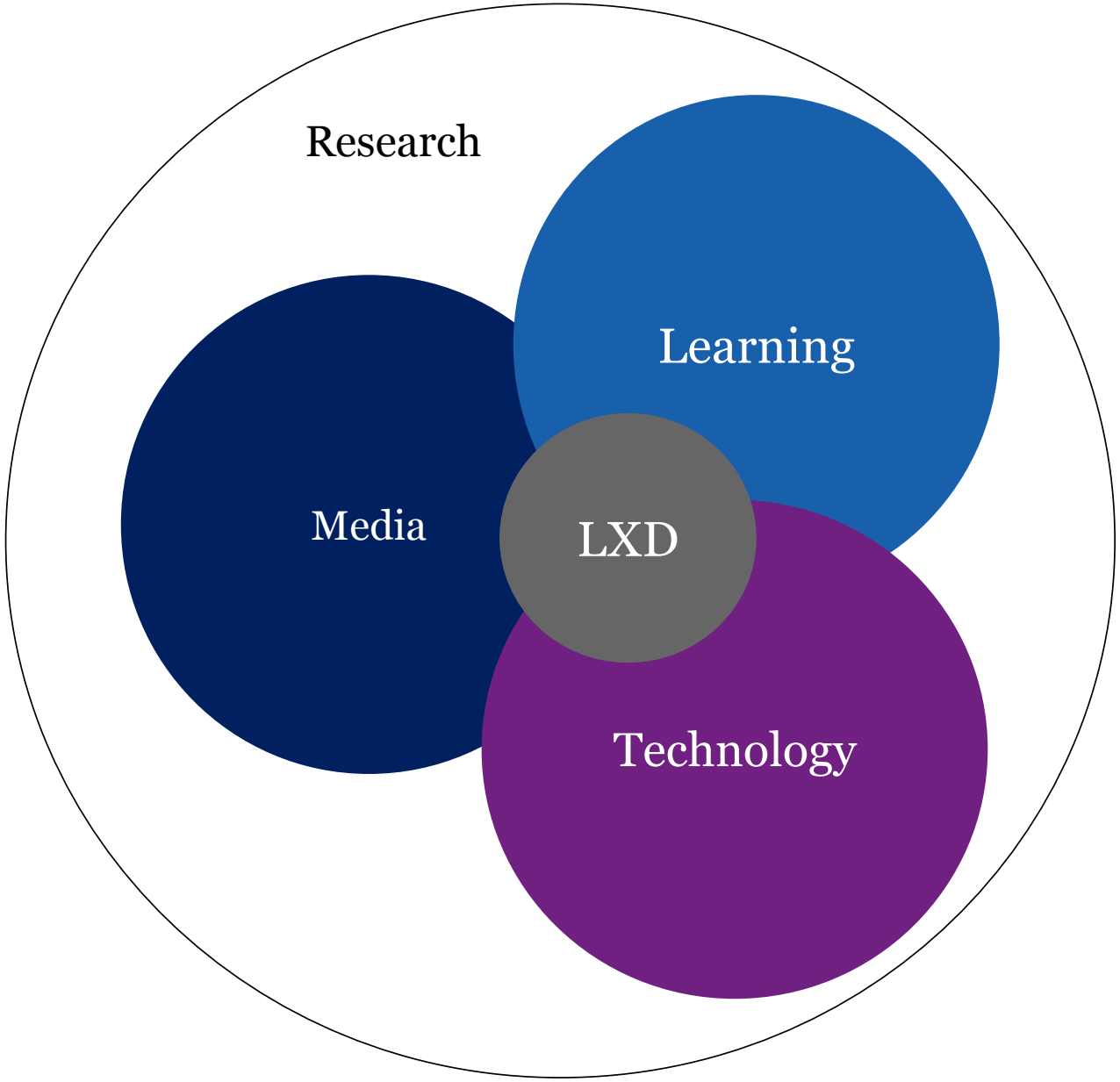
Co-designing Future Education

Immersive Learning Experiences



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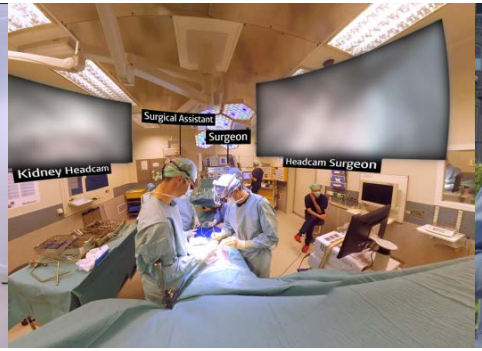
VR/AR landscape



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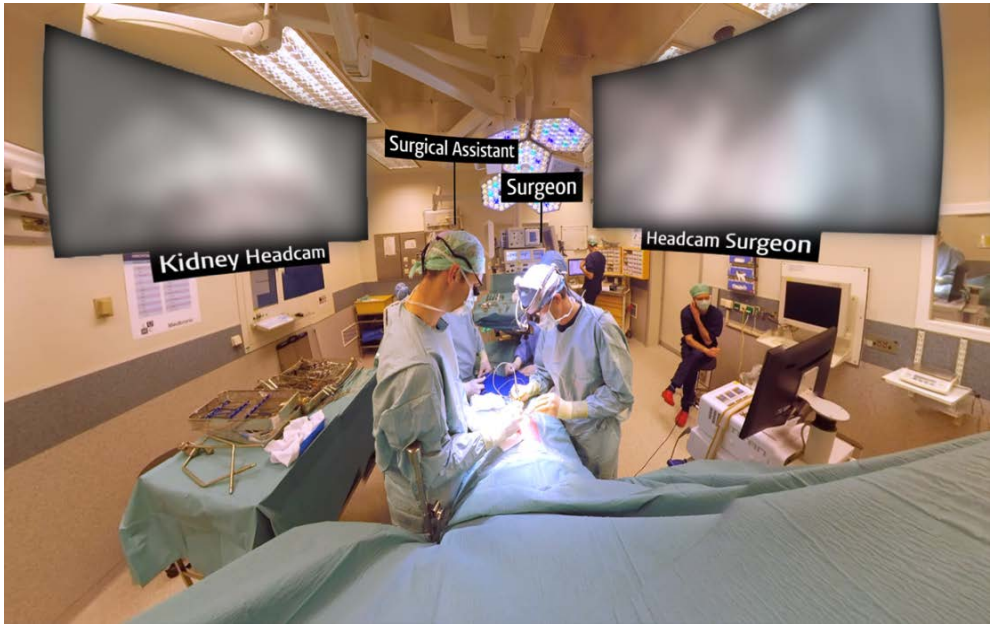
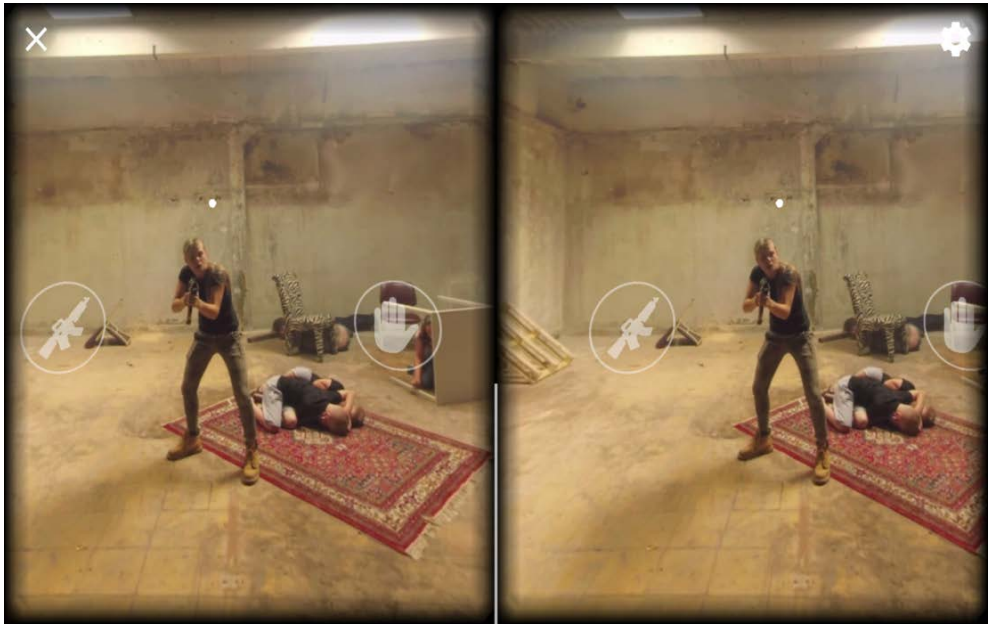
360° VR: Immersive Learning



Immersive learning



Pressure/emotions

Augmented Reality

Reviving Anatomy education

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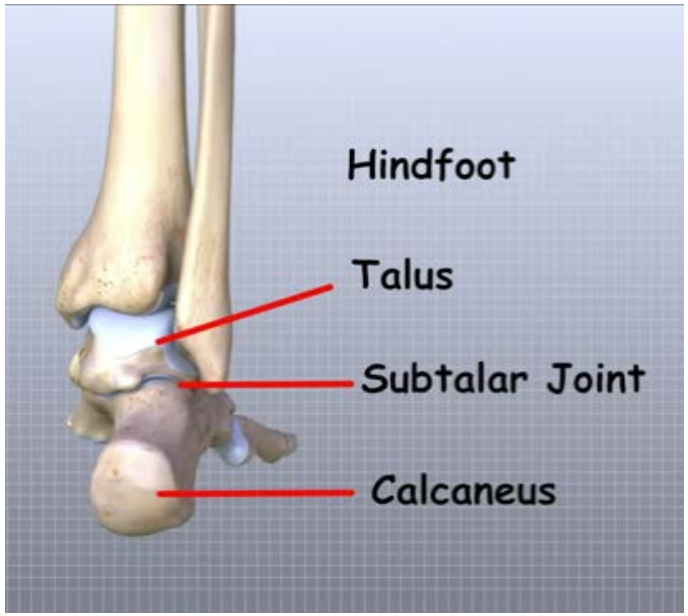
Pedagogical challenge

Supination

Pronation

Flexion/Extension



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Randale Sechrest – eOrthopod.com
Foot Anatomy Animated Tutorial - https://www.youtube.com/watch?v=ROd1Acma64o

Learning from clinical cases

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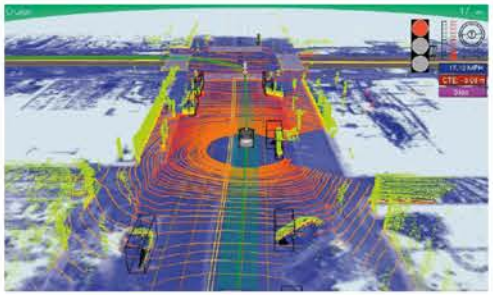

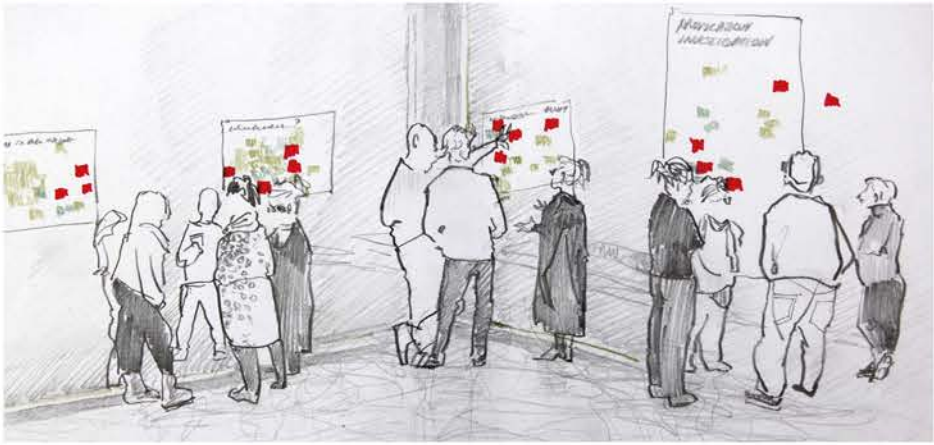

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PROMISING

Potential for paradigm shift

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Virtual Reality

Immersive experiences

Realistic simulations

Virtual characters

Augmented Reality

Interaction with real world

Collaboration with peers and teachers

Virtual character and real people

Embodiment Perspective

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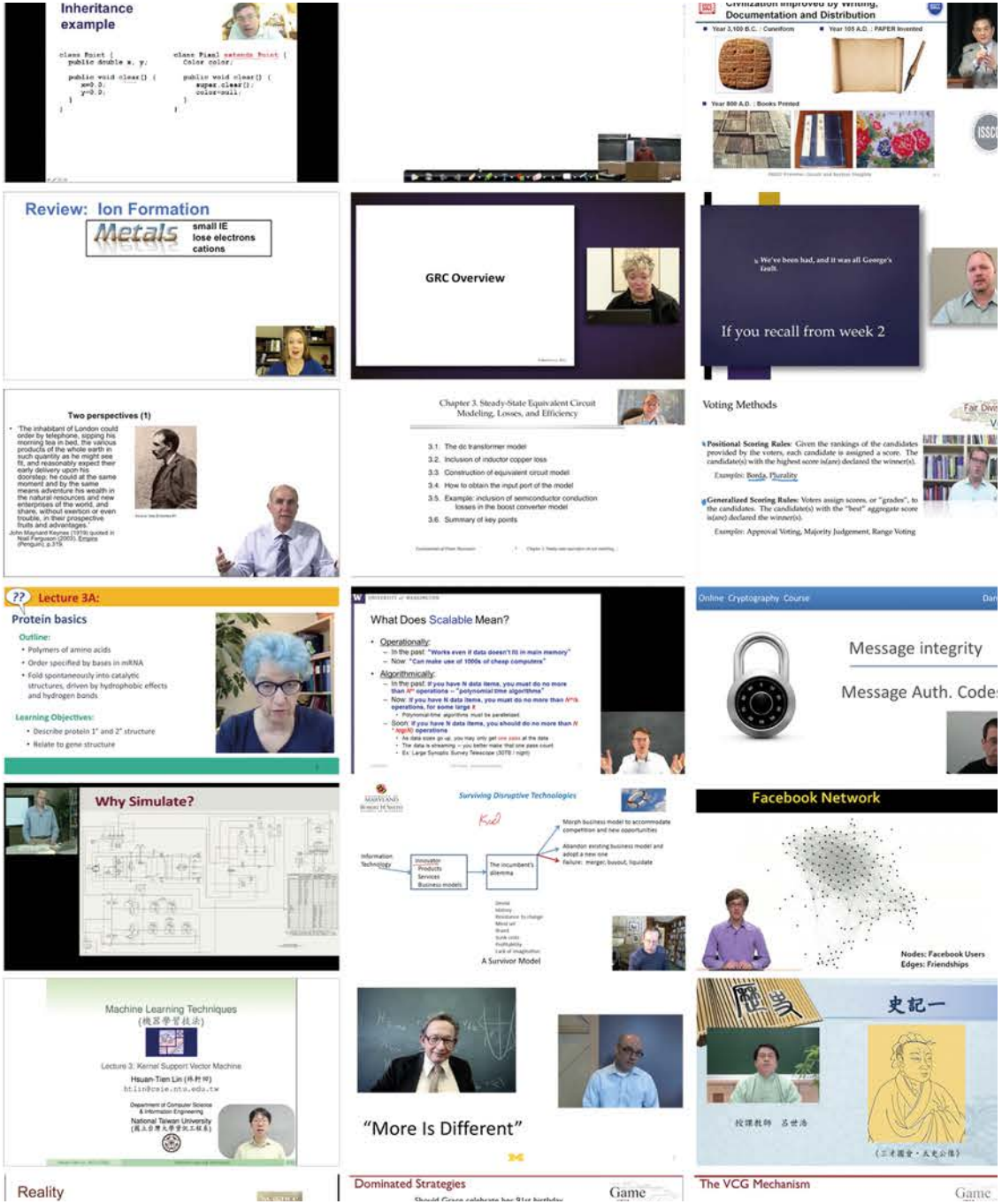
PP IN MOOC VIDEOS

«Video Styles in MOOCs – A Journey into the World of Digital Eduaction», youtube: https://youtu.be/5VEHBuuRKXI



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PP IN VR

EDORABLE ACADEMY (MAY 2017)

AVOID FALLACIES

PP IN MIXED REALITY?

Language of the Media

Identification of Affordances

Not only visualization!

Language of the Media

Identification of Affordances

Not only visualization!

UX beyond images on a screen

Language of the Media

Identification of Affordances

Not only visualization!

UX beyond images on a screen

Interactive media design

Language of the Media

Identification of Affordances

Not only visualization!

UX beyond images on a screen

Interactive media design

Rhetorics of the media

Language of the Media

Identification of Affordances

Not only visualization!

UX beyond images on a screen

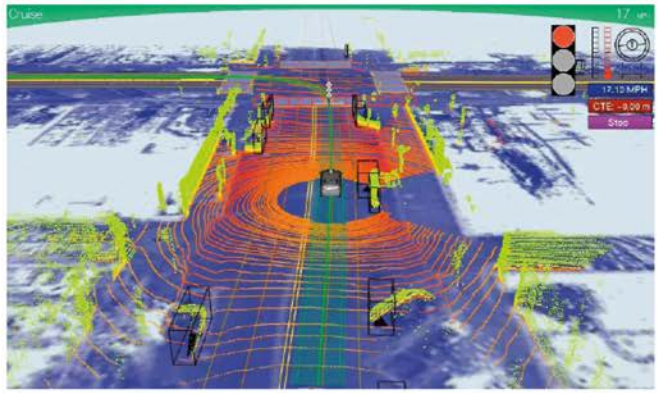
Interactive media design

Rhetorics of the media

Audiovisual argumentation

PROMISING

Potential for paradigm shift



Combination of VR/AR with AI

Sensors / IoT

Visual recognition

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OUR VISION

Potential for paradigm shift

Affective learning experiences with educational content

Embodied interaction with learning content

Personalized/adaptive learning experiences

Collaborative learning in virtual case studies

Simulation, learning by failing

… and hacking

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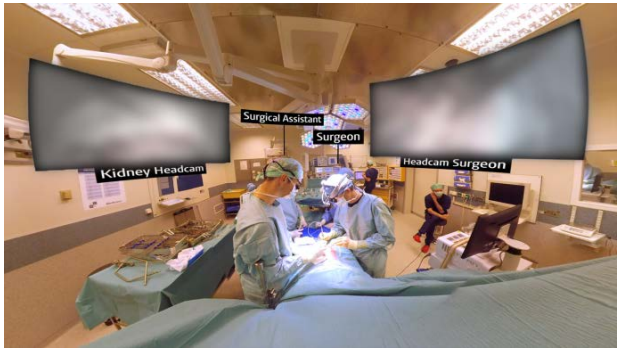
Break out [1]

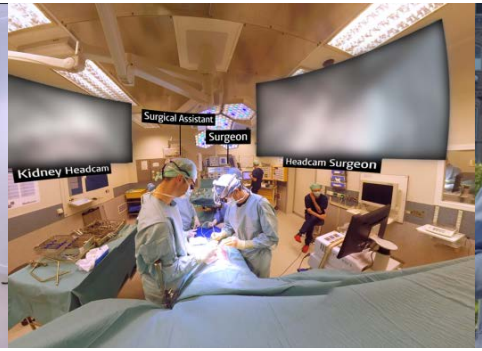


1. Analyze in groups the potential of VR/AR for higher ed
2. Analyze the challenges of VR/AR for higher ed
3. Identify examples in different disciplines

[20 minutes]

In parallel : individual demonstration of HoloLens/ 360 VR

Reflection / Questions



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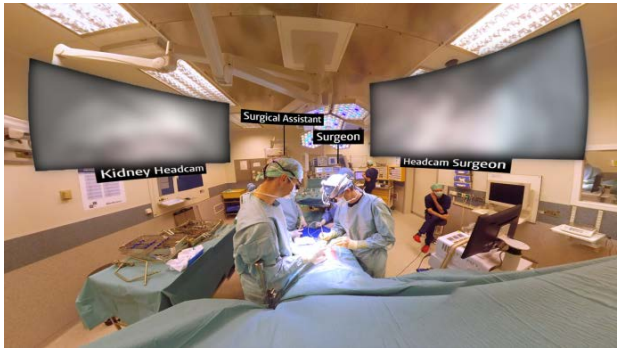
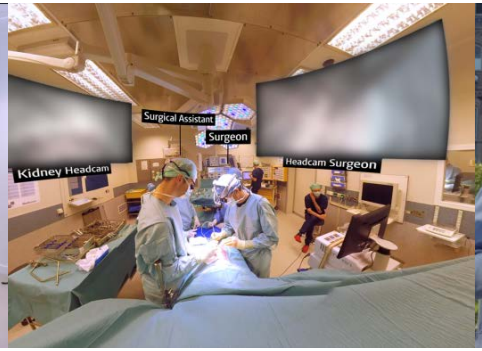
Break out [2]



Define one case (VR/AR) that is valuable for your education

[10 minutes]

How to make the virtual real?



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MATURITY MODEL
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ORIENTING

- ADAPTIVE LEARNING
- CHATBOT

DEMOS, PRESENTATIONS, BLOG POSTINGS

EXPERIMENTING

- HOLOLENS
- MIXED REALITY
- ONLINE MICRO MASTERS
- ONLINE PROCTORING
- VR 360 VIDEO
- LEARNING ANALYTICS

1 - 5 EXPERIMENTS, PROOF OF CONCEPTS

SCALING THE EXPERIMENT

- 10 SPOCS
- 5 FLIPPED CLASSROOMS
- CREDITS FOR MOOCS & VIRTUAL EXCHANGE
- TRAINTOOL
- ACTIVE LEARNING SPACES

5-10 EXPERIMENTS, EVALUATING PROOF OF CONCEPTS

DECISIONMAKING

- WORKFLOW: FACULTY STUDIOS FOR VIDEOCLIPS
- STRUCTURAL SUPPORT FOR FLIPPING
- ONLINE LEARNING STRATEGY, (INCL PRODUCTION ONLINE EDUCATION)

FORMAL DECISION

ESTABLISHING

SERVICES OR SERVICE MODEL

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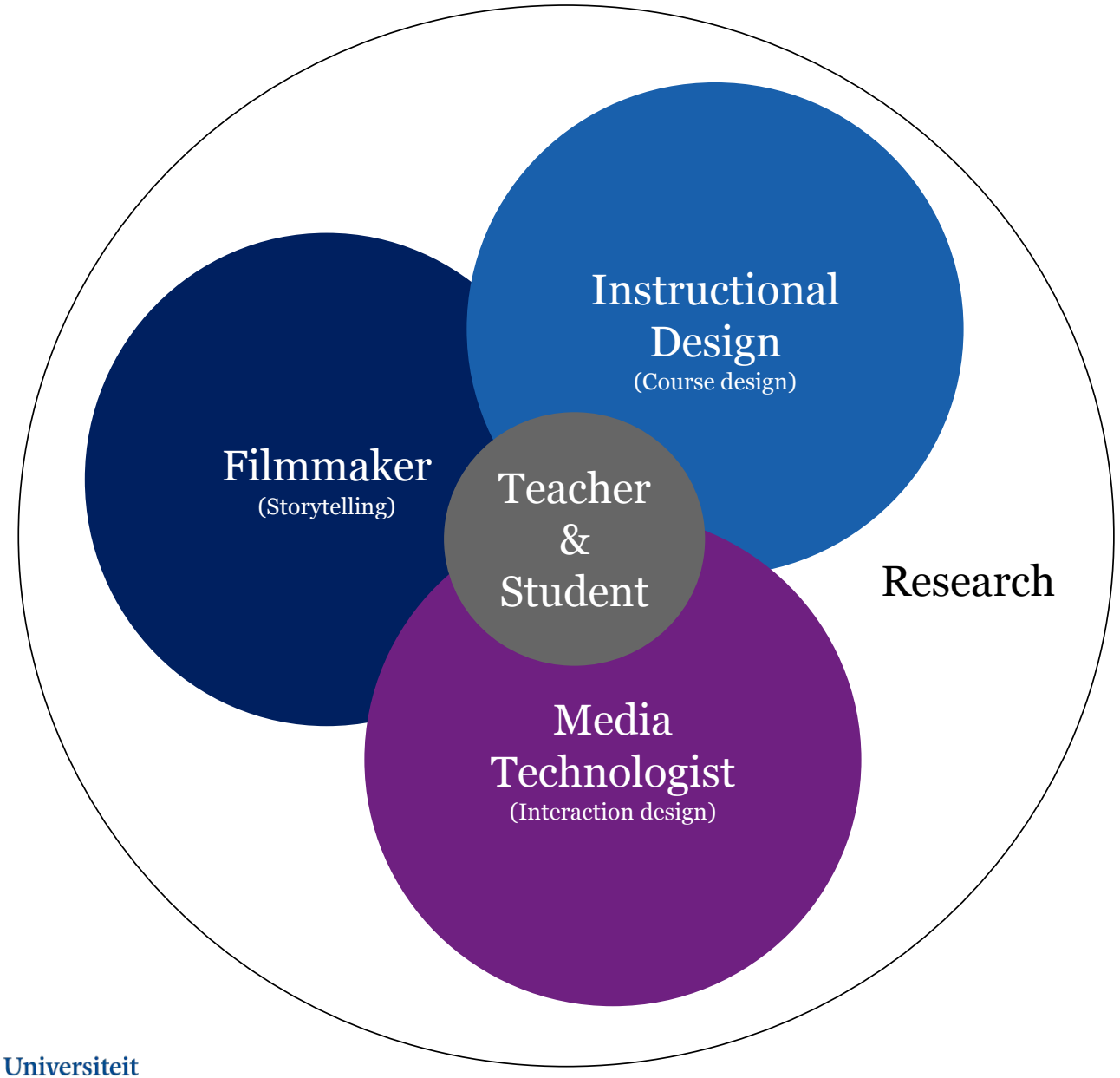

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https://www.centre4innovation.org/
https://www.mr4education.com/

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Leontine van Melle

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