

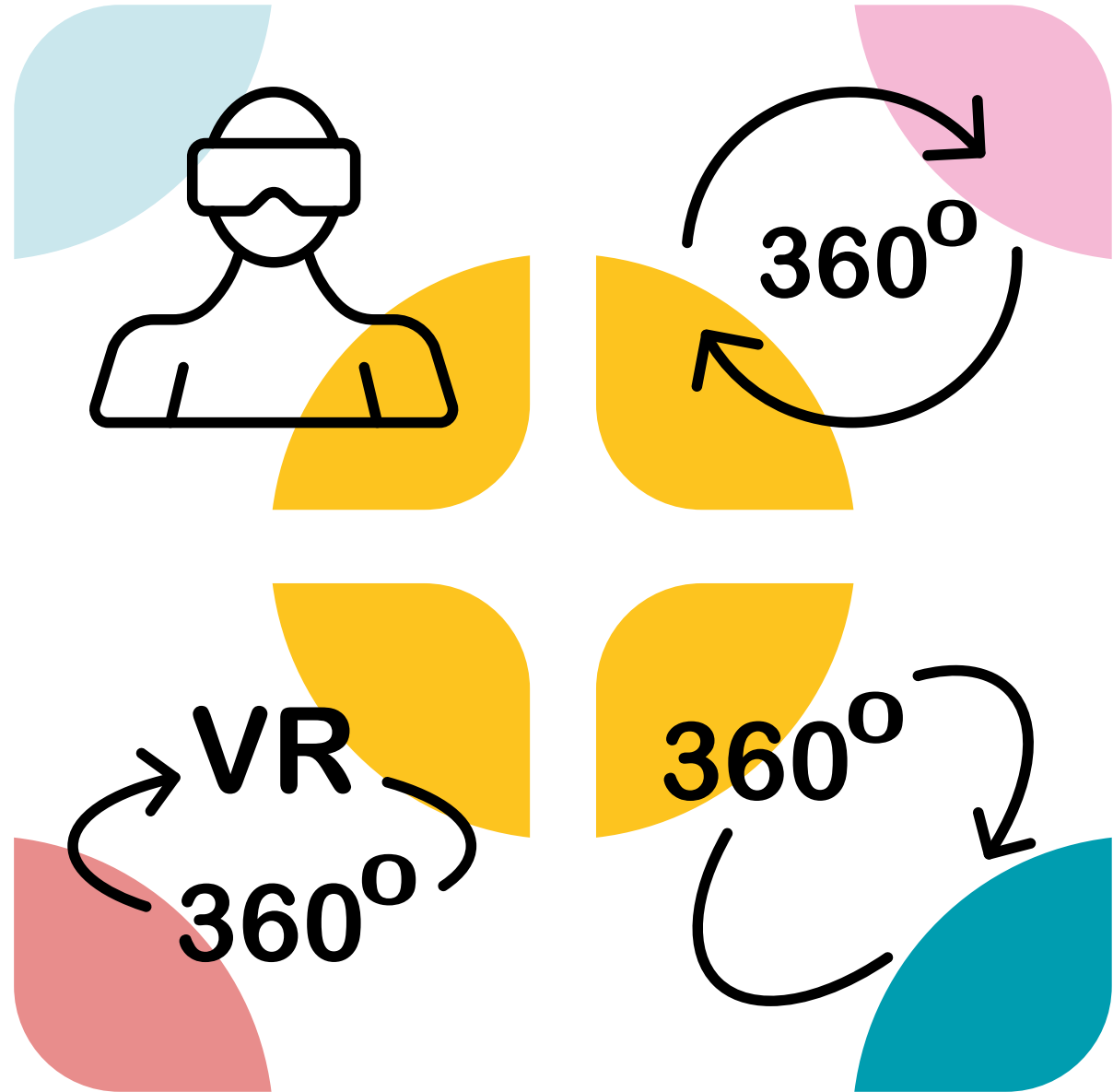
Anders digitaal leren in de zorg

Joachim Gregoor

HOGESCHOOL 

ZOR
innovatie 

Van traditionele opleidingen naar een nieuwe realiteit





Verken de grenzen van het
opleiden van
zorgprofessionals met de
METaverse

Wat is “*The Metaverse*”?

The metaverse is the future state of how humans will **experience** the internet.

Web3 is a set of decentralized concepts and technologies that provide the **infrastructure** for the future paradigm.

3D

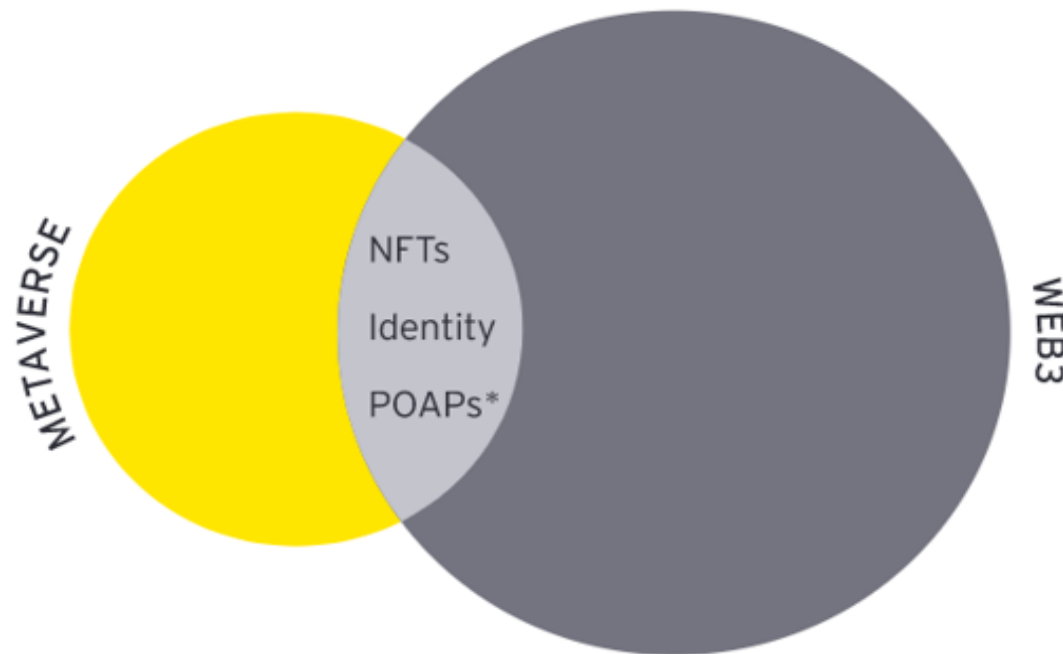
Virtual/physical

Immersive

Persistent

Creative

Social



Blockchain

Decentralized web

dApps

DeFi

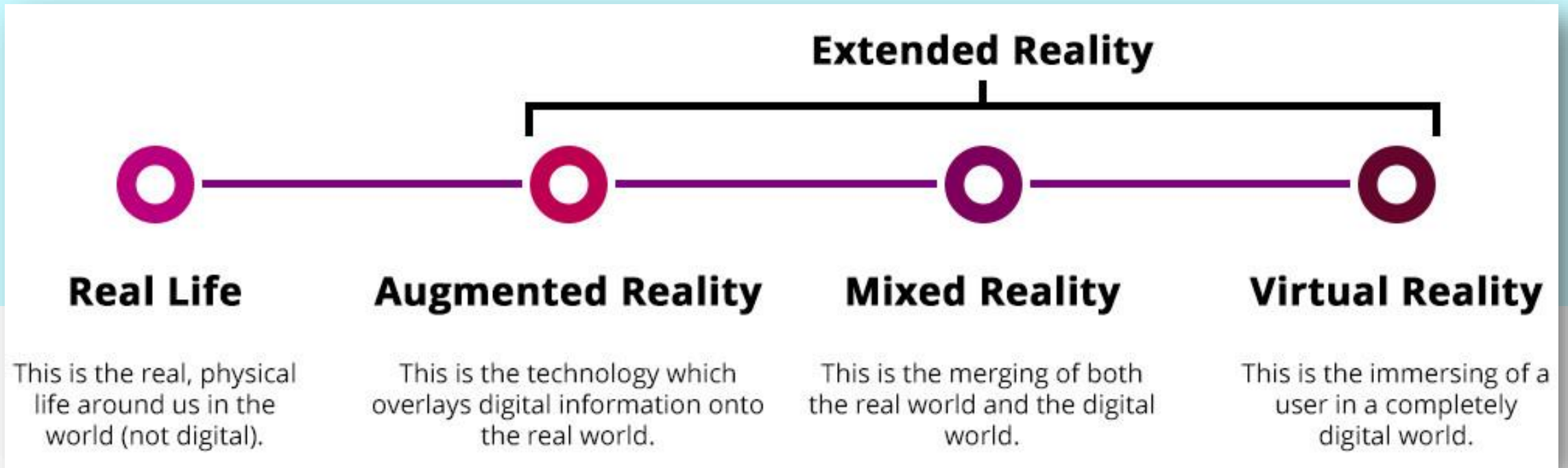
DAOs

Cryptocurrencies

Creator economy

DDNs (networks)

Wat is XR?



Wat is XR?

XR - Extended Reality

XR is an umbrella term that covers VR, AR, and MR



Waarom XR / Metaverse in opleidingen?

Interactive Learning

Studenten kunnen oefenen in een **interactieve** virtuele omgevingen die levensechte medische scenario's nabootst.

Studenten kunnen omgaan met patiënten, ziekten diagnosticeren en behandelingen oefenen, allemaal zonder de risico's en beperkingen van real-life trainingen.

Collaborative Learning

Studenten kunnen in real-time **samenwerken** met andere studenten, mentoren en professionals van over de hele wereld.

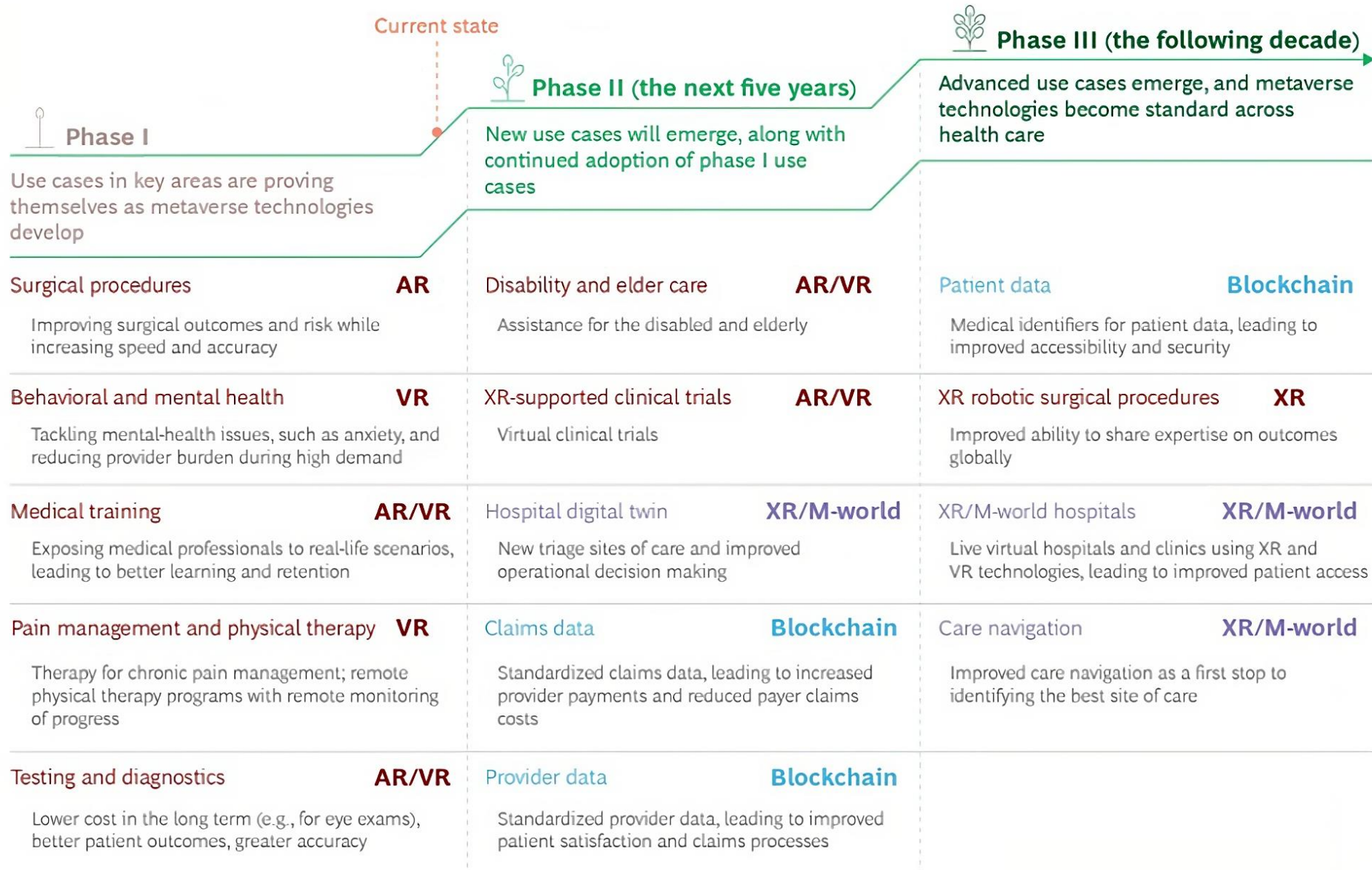
Hierbij kunnen ze naadloos van elkaar leren en elkaar ondersteunen.

Adaptive Learning

De training kan worden **aangepast aan de behoeften** en voorkeuren van elke student.

Het biedt gepersonaliseerde inhoud aan die aansluit bij zijn of haar kennisniveau en leerstijl.

New Use Cases Will Emerge As the Metaverse Develops



Voordelen van opleidingen in XR

XR

Hogere motivatie & engagement

(Botha et al., 2021; Huang et al., 2022; Pellas et al., 2021; Elford et al., 2022; Moro et al., 2020; Reeves et al., 2021; Rodríguez-Abad et al., 2021)

Significant verhoogde leerprestaties Meer leerstof onthouden & hogere examenscores

(Di Natale et al., 2020; Elme et al., 2022; Lee et al., 2022; Pellas et al., 2021; Christopoulos et al., 2021; Garzón and Acevedo, 2019; Rodríguez-Abad et al., 2021; Del Cerro Velázquez and Morales Méndez, 2021)

Technische en praktische kennis Analytisch denken & problem-solving vaardigheden

(Lee et al., 2022; Radianti et al., 2020; Rodríguez-Abad et al., 2021; Yoon & Kang, 2021)

Meerdere trainingen van complexe scenario's op eender welke moment en plaats

(Paszkievicz et al., 2021; Del Cerro Velázquez & Morales Méndez, 2021)

Kostenefficiënt

(Di Natale et al., 2020; Mayne & Green, 2020)

Vooral voordelig voor first-generation students

(Miller et al., 2021)

Meer plezier uit de lessen

(Christopoulos et al., 2021; Yoon & Kang, 2021)

Nadelen van opleidingen in XR

XR

Gezondheidsrisico's en verslaving

(Botha et al., 2021; Udeozor et al., 2021; Moro et al., 2020; Paszkiewicz et al., 2021)

Nood aan opgeleide trainers en studenten

(Radianti et al., 2020; Nørgård et al., 2019)

Novelty effect

(Christopoulos et al., 2021; Coban et al., 2022)

Dure hardware

(Radianti et al., 2020)

Kan geen rekening houden met iedere variabele uit het echte leven

(Udeozor et al., 2021)

Eerder beperkt aanbod aan off-the-shelf opleidingsmateriaal

(Del Cerro Velázquez & Morales Méndez, 2021)

XR implementeren

XR

Begin met XR en gebruik daarna traditioneel lesmateriaal

(Lamb and Etopio, 2019; Lamb et al., 2019; Fernandes et al., 2020)

Studenten focussen op het gebruiksgemak en hoe leuk het is

(Álvarez-Marín et al., 2021; Udeozor et al., 2021; Mystakidis et al., 2021; Nørgård et al., 2019)

Nood aan opgeleid personeel en studenten

(Radianti et al., 2020)

Novelty effect

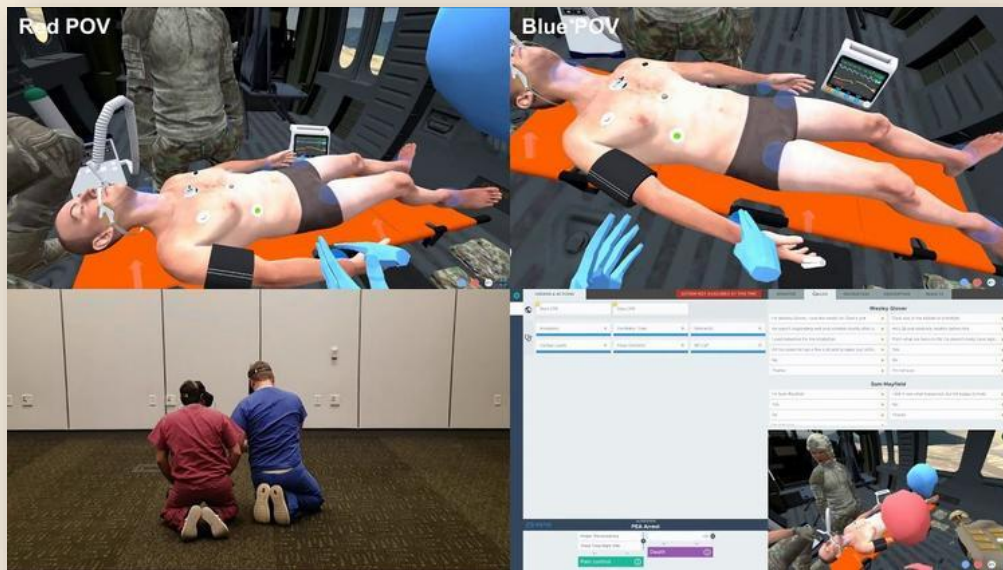
(Álvarez-Marín et al., 2021; Christopoulos et al., 2021; Coban et al., 2022)

Kosten

Praktische of declaratieve kennis

First-generation students

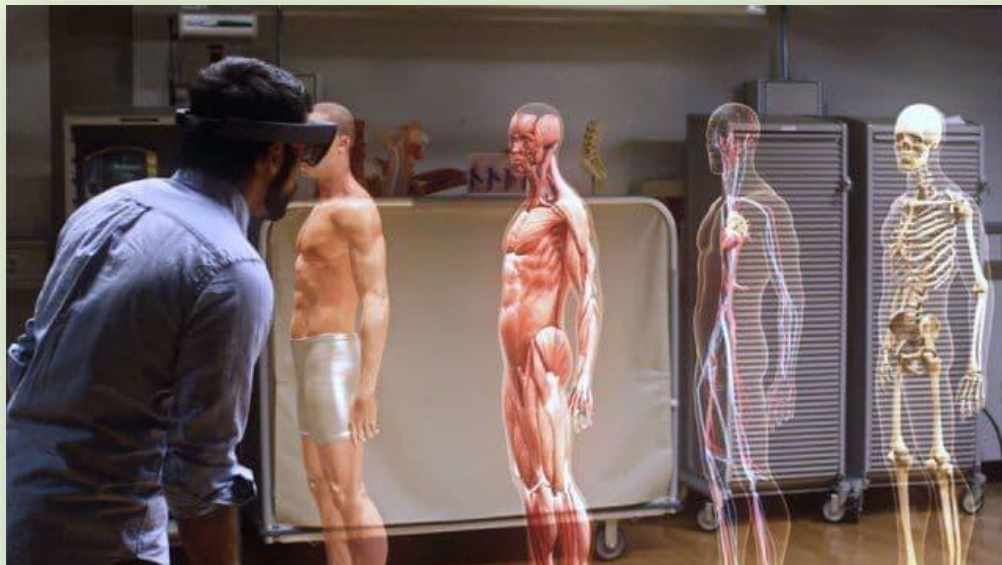
(Miller et al., 2021)



SimX



Osso VR



HoloAnatomy



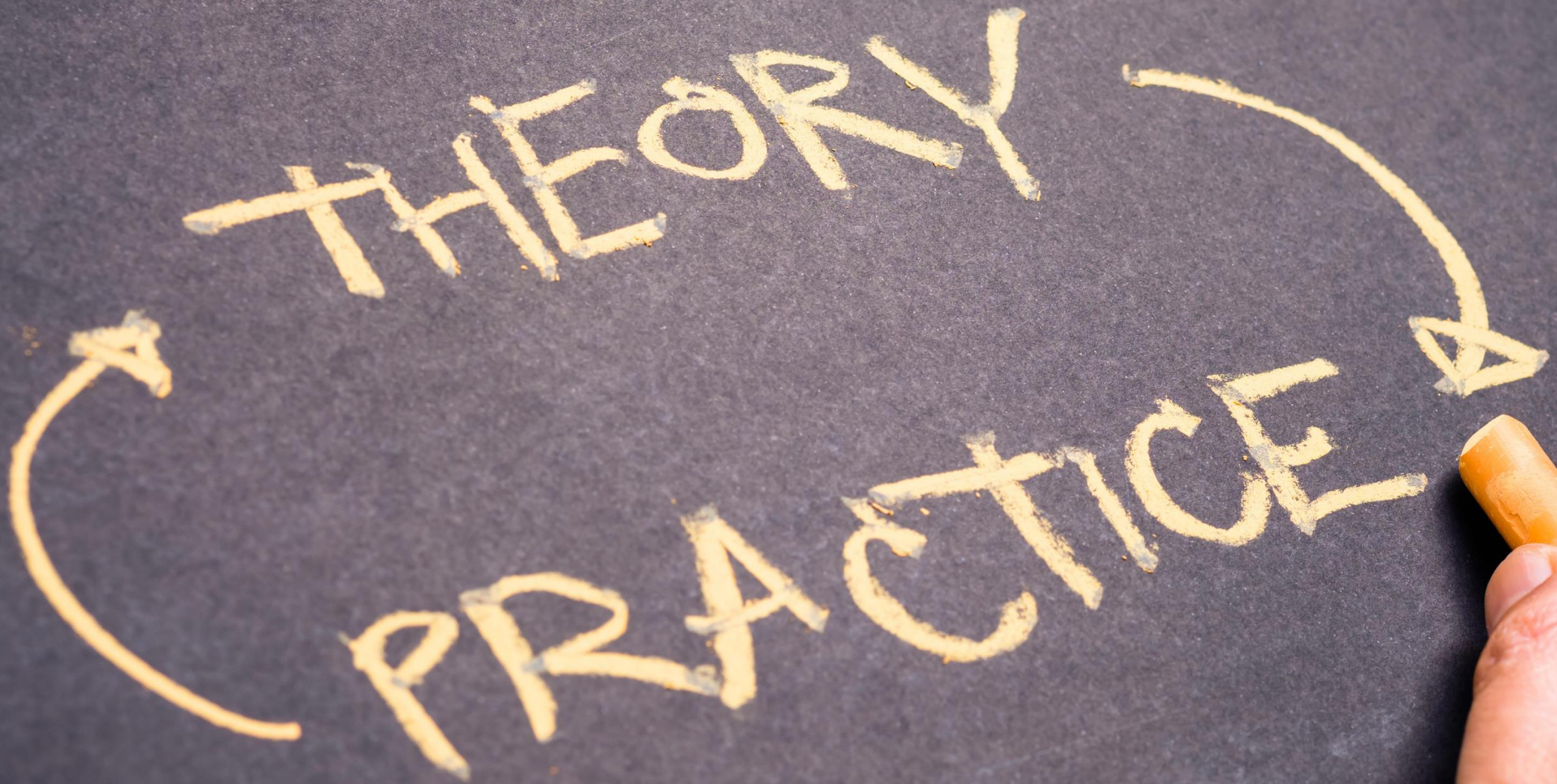
Virtual Medicine





Start a Workout

THEORY
PRACTICE

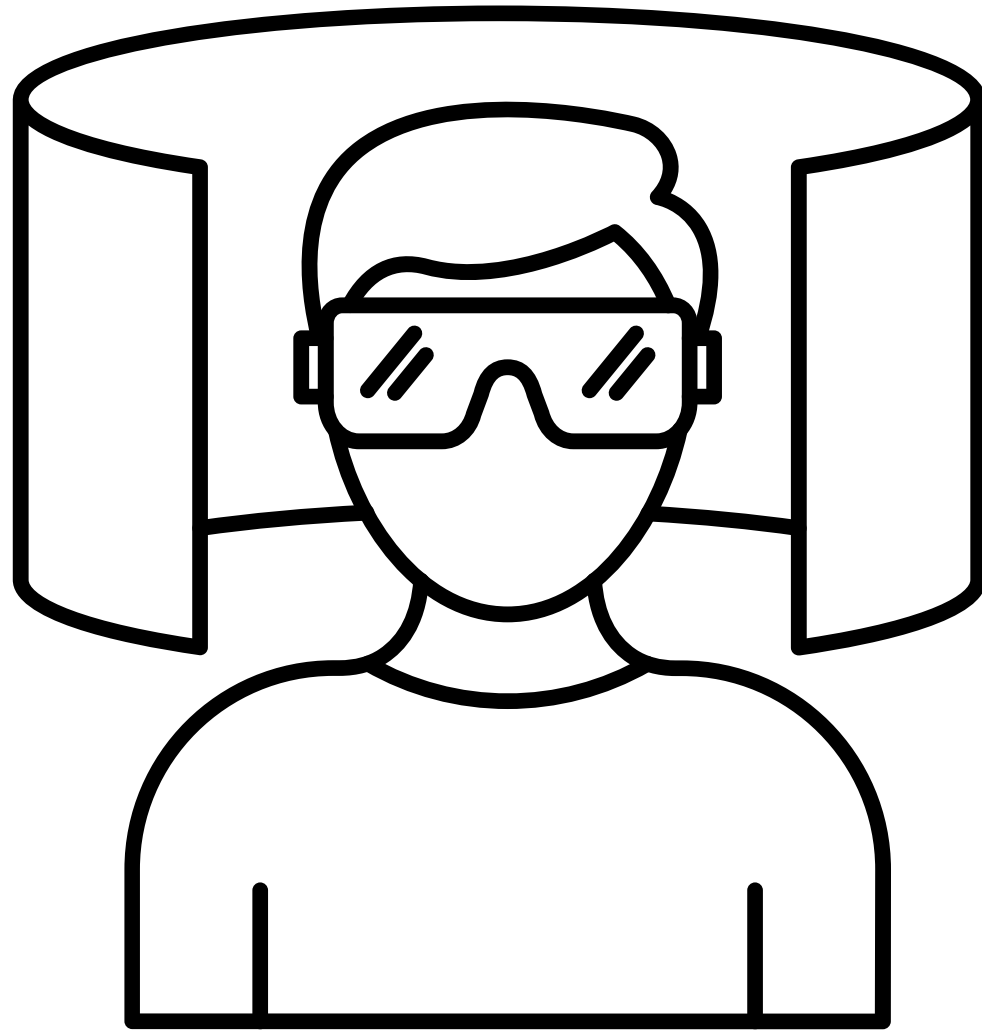


A hand-drawn diagram on a dark surface. The word "THEORY" is written in yellow chalk at the top, and "PRACTICE" is written in yellow chalk at the bottom. A yellow curved arrow starts from the right side of "PRACTICE", goes up and around the right, and points down towards "THEORY". Another yellow curved arrow starts from the left side of "THEORY", goes down and around the left, and points up towards "PRACTICE".

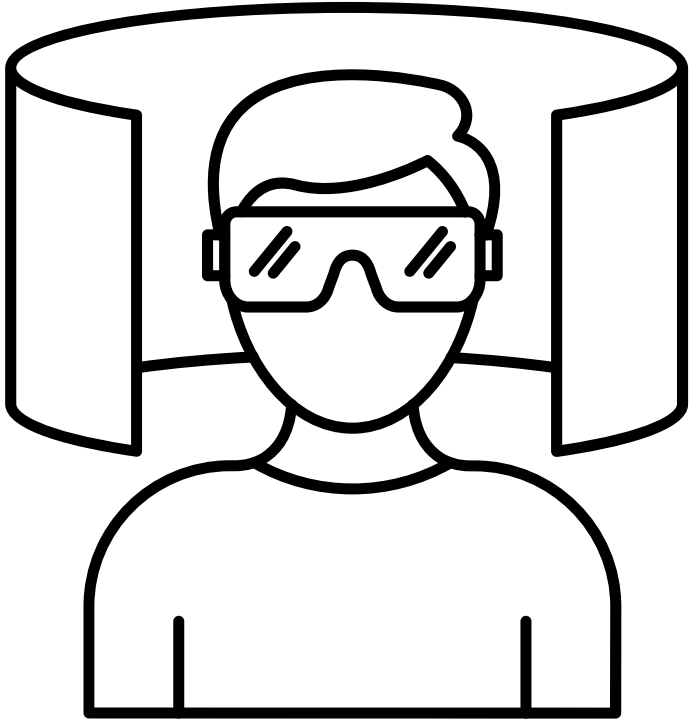




INSTRUCTION



IMMERSIVE

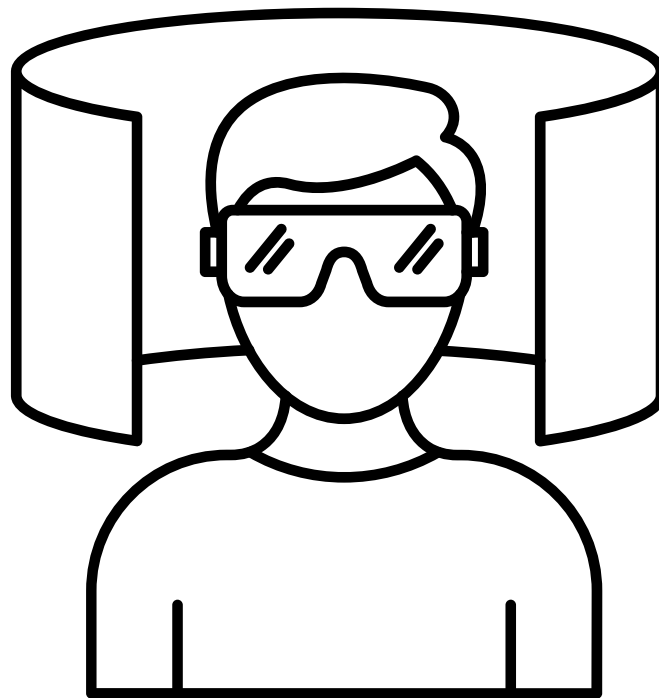


ROOM

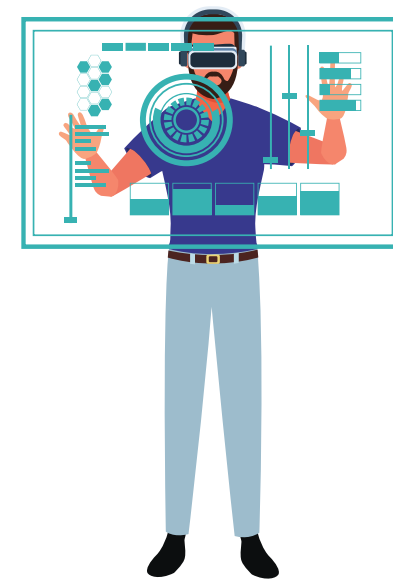


TLSC

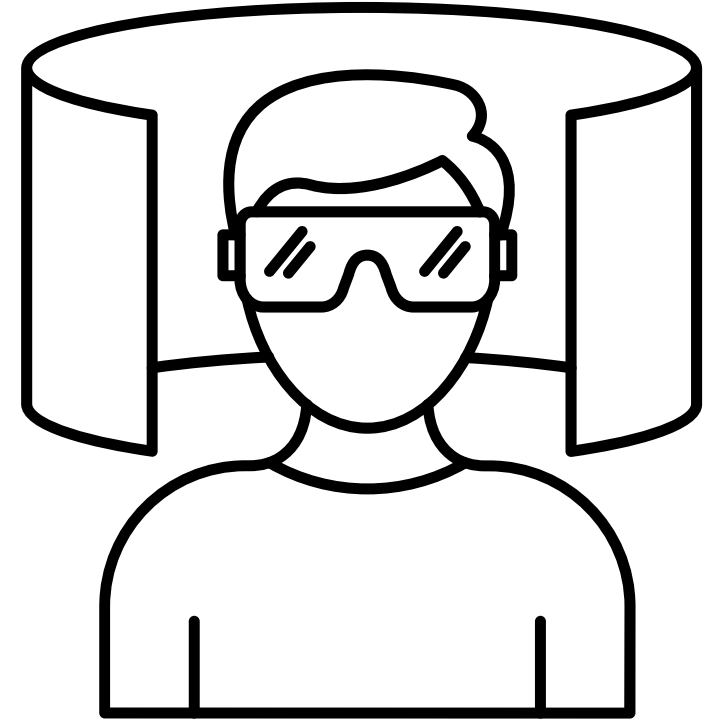
VR



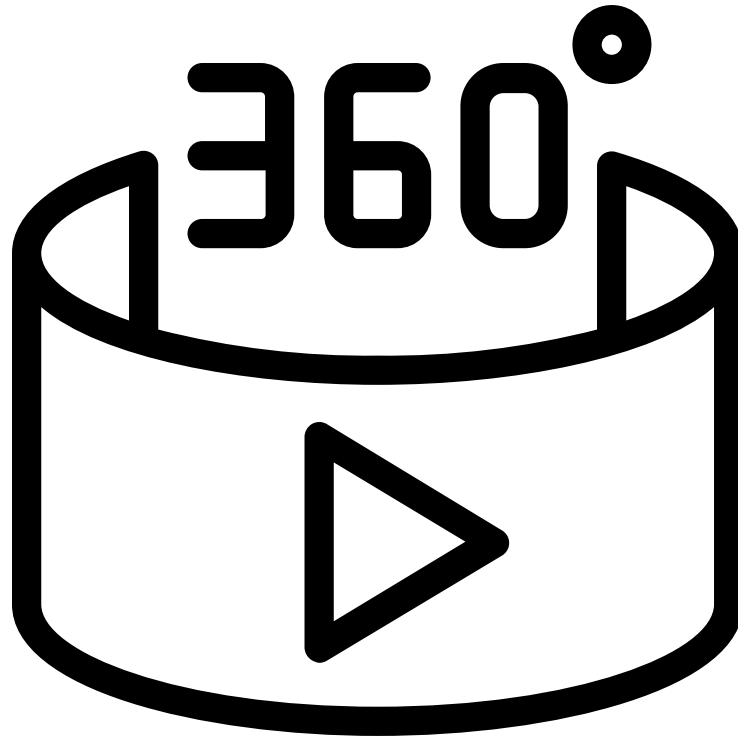
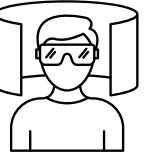
AR



- ENVIRONMENT?
- OBJECTS?
- ENRICH?
- PUBLISH?



● ENVIRONMEN T?









FARO

PRG0

END

Home

FARO



Parameters

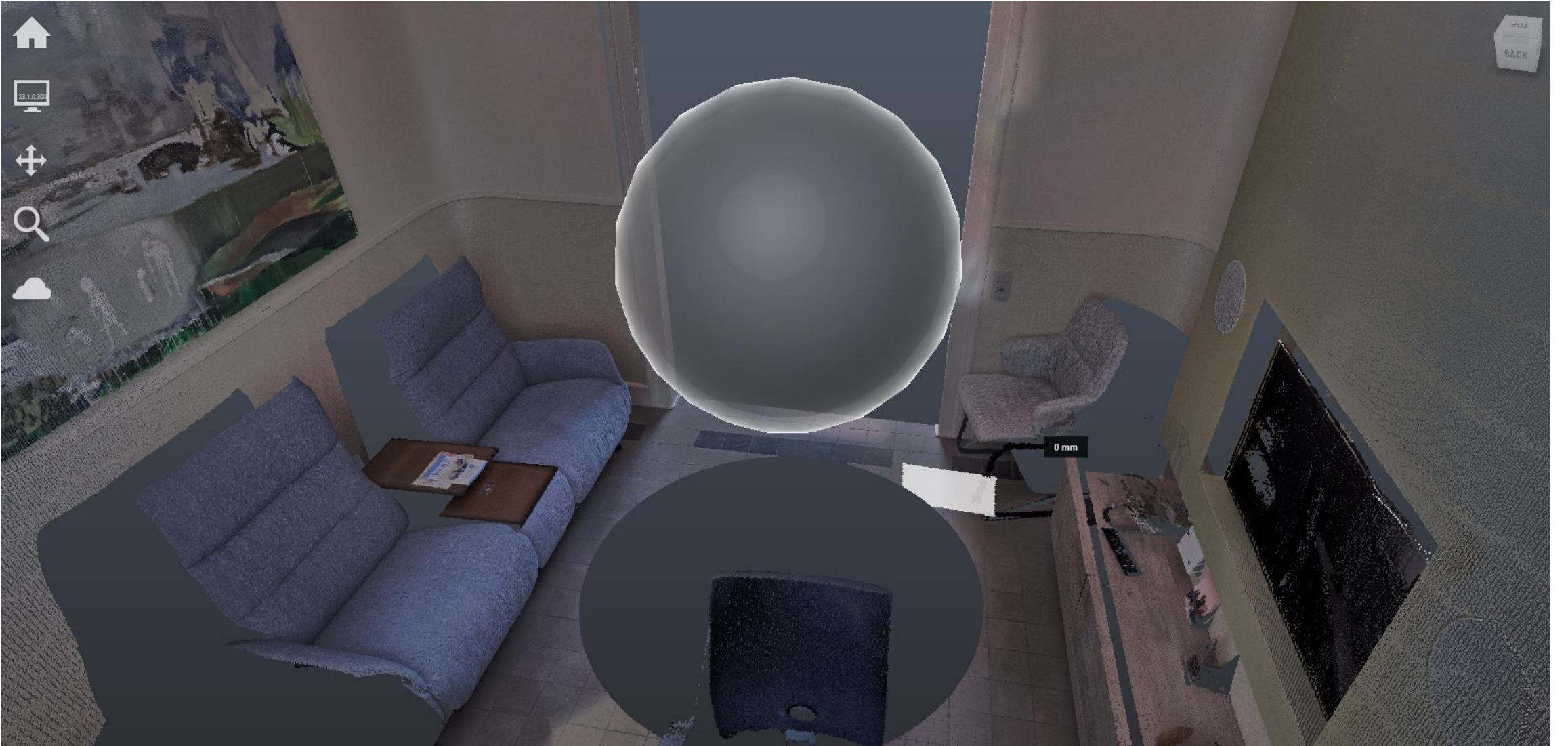


Scene

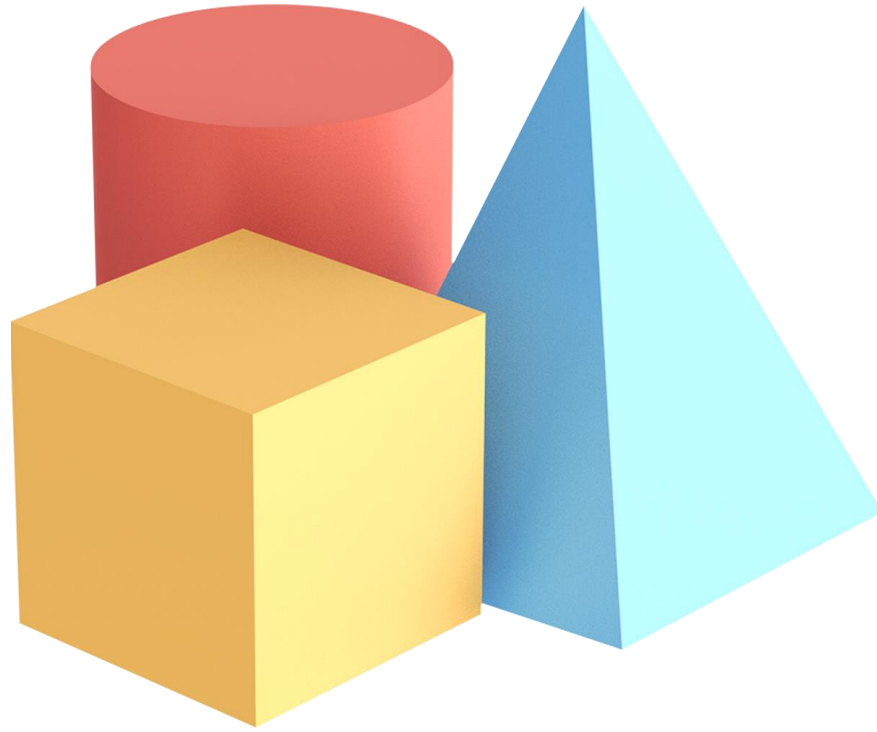
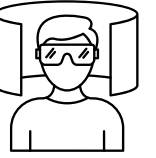


Menu

FOCUS S



● OBJECTS?



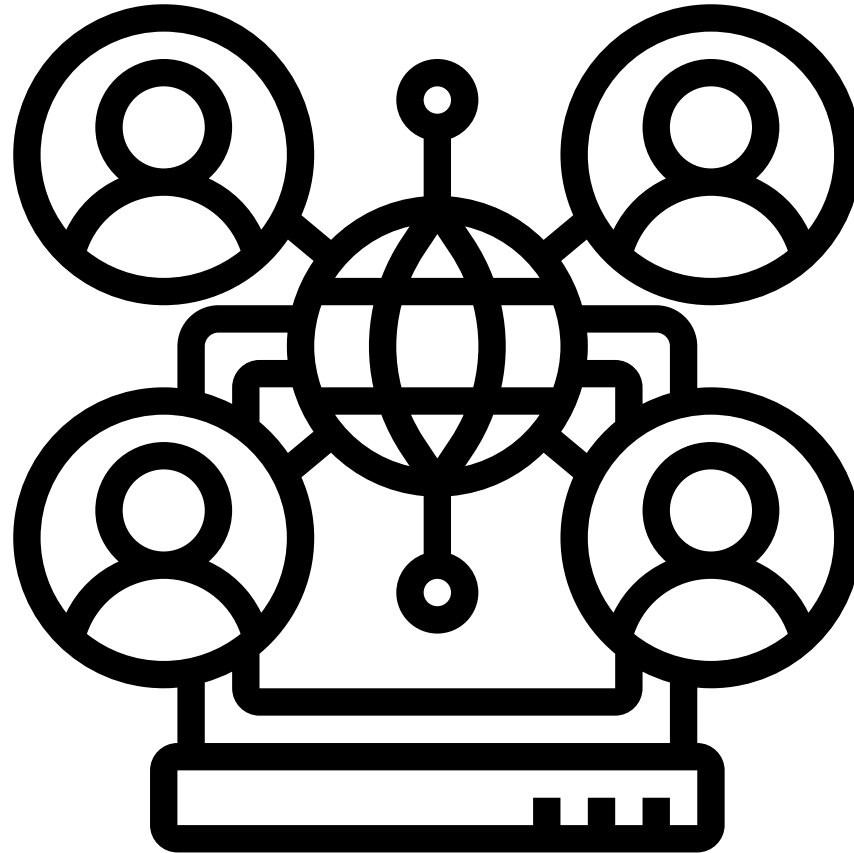
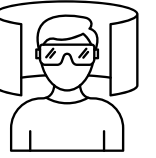








● VERRIJKEN ?



VIVISTA

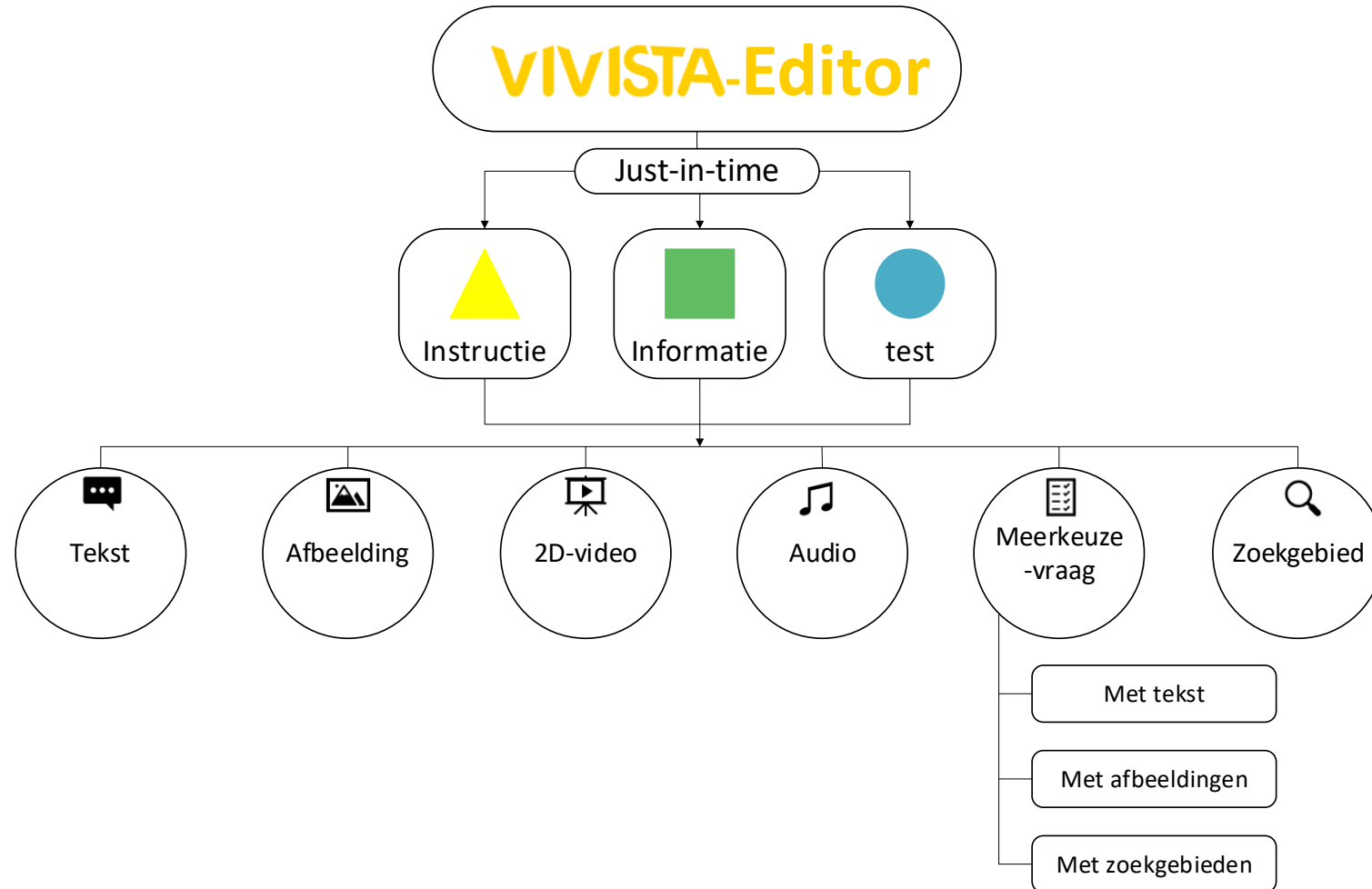
VIVISTA

- Open source
- Stitched 360° videos
- Enrich
- View
- Currently only for Windows

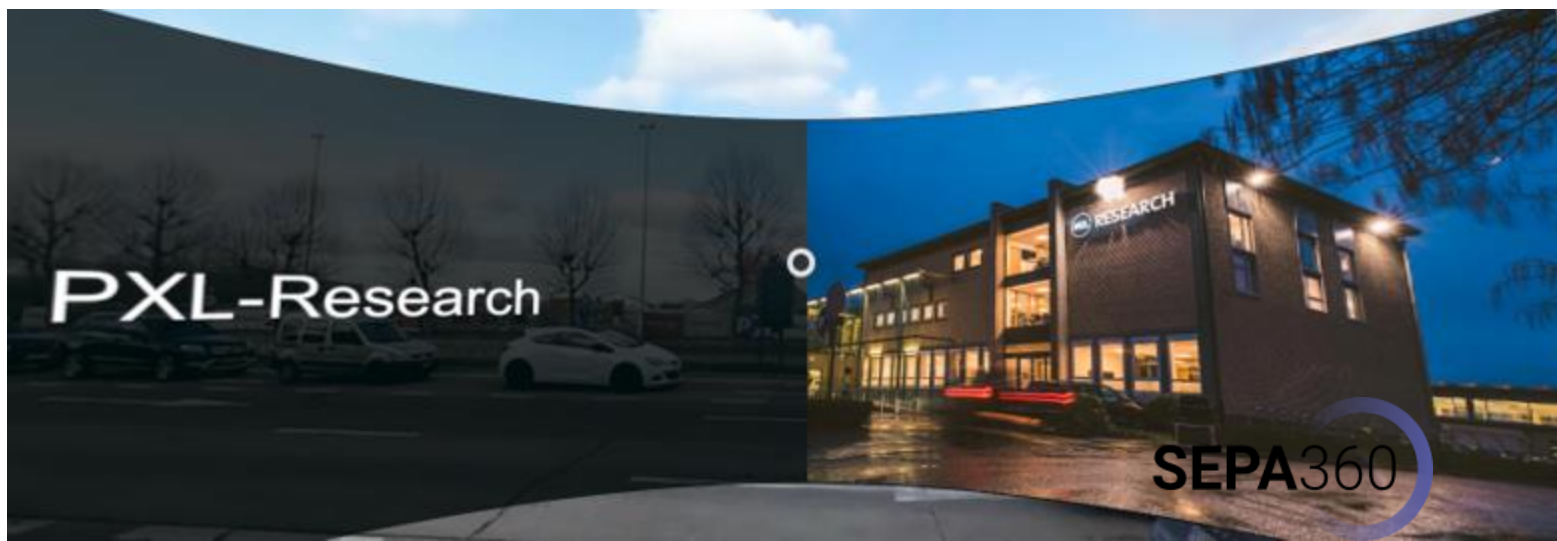
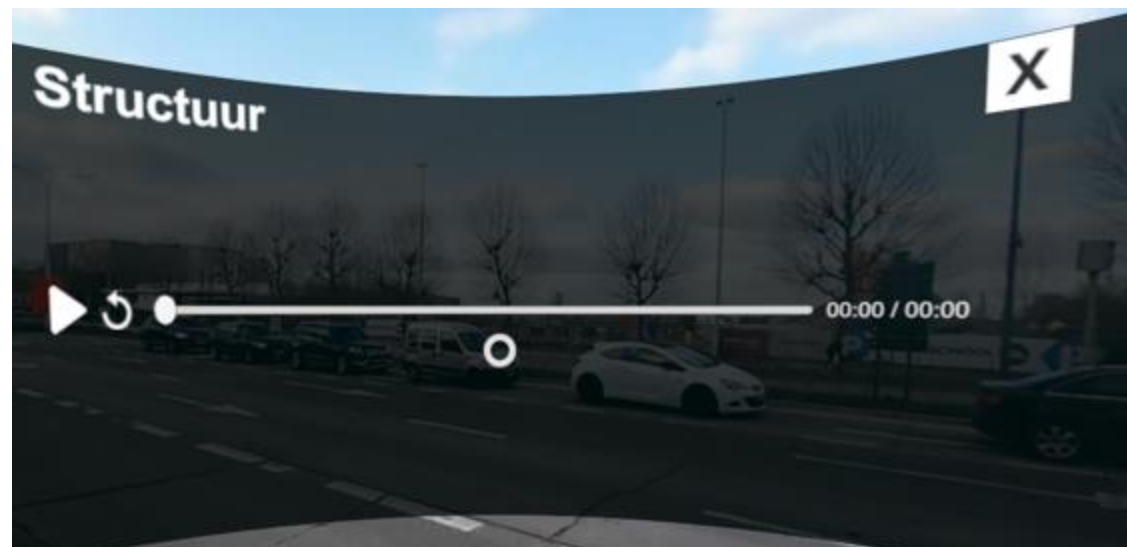
VIVISTA



VIVISTA



VIVISTA



VIVISTA



VIVISTA

Welk verkeersbord geeft aan dat fietsers
verplicht op het fietspad moeten fietsen?

Start



Bij welk verkeerslicht mag je zeker nog doorrijden?



Check Answer

SEPA360



THINGLINK



THINGLINK



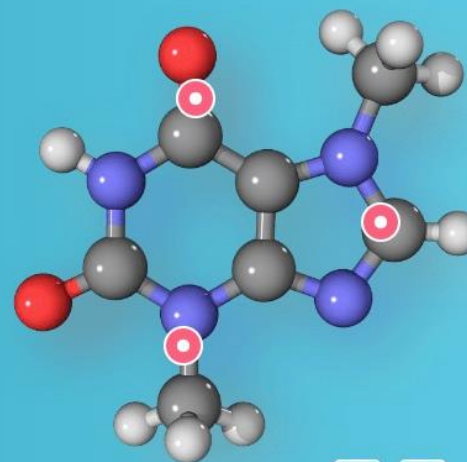
ThingLink wins 2023 BETT Award for the Best Digital Learning Product in Higher Education

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products or services
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and collect data on
engagement

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**190
COUNTRIES**

Rating on





THINGLINK

What type of interactive content do you want to create?



Blank canvas



Image



360° image or virtual tour



Showroom, gallery



Map or aerial view



Infographic



Floor plan



Learning experience



Presentation



Product demo



Shoppable media



Video or 360° video



VR experience



Introduction or CV



Timeline

NEW



3D Model

NEW



Scenario

☐ Don't show this again

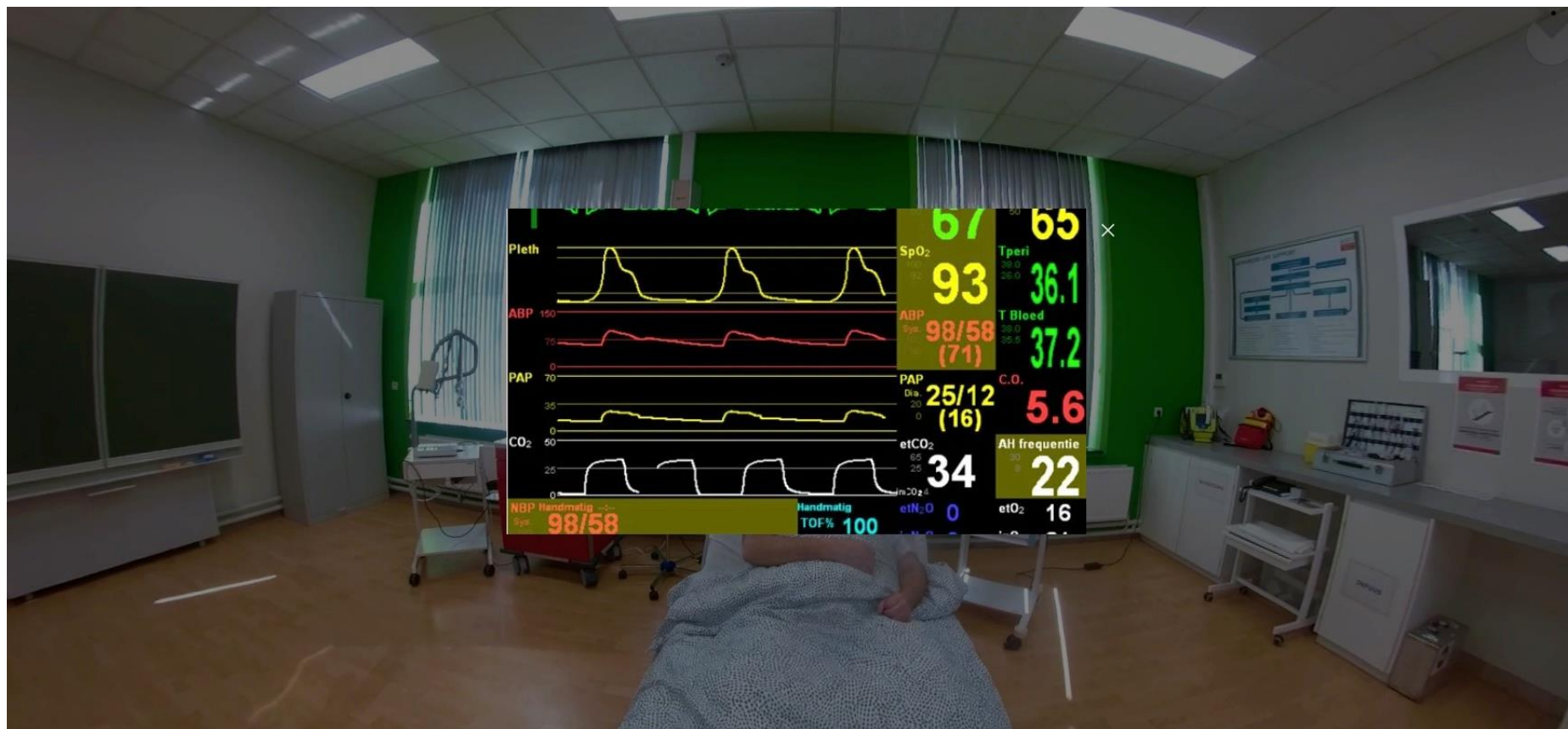


THINGLINK





THINGLINK





+

Write

 Upload image

 YouTube

 Add link

 Upload audio

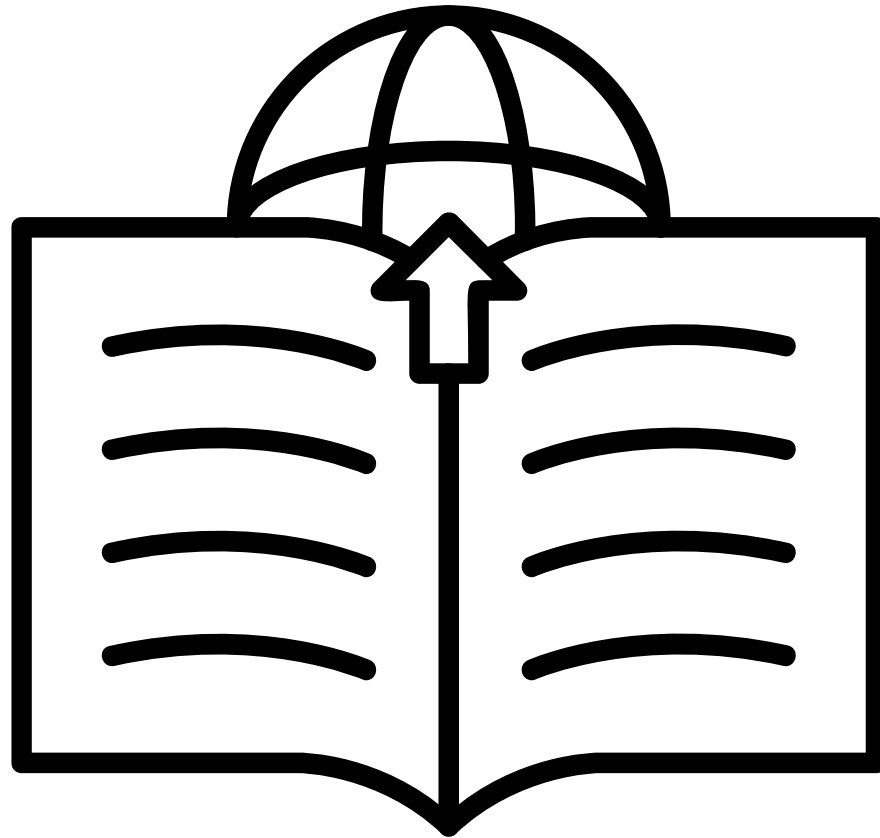
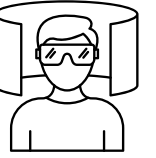
 Upload video

 Embed

 Upload file

 Record audio

● PUBLICEREN ?



thinglink..



THINGLINK

MY ACCOUNT



Enter your shortcode to view content in VR

Open







DYNAMICS 365
Guides

Anker



1. Schedel

...

Bekijk het 3D-Model van de schedel langs alle zijdes.

1

Geslaagd!



Dit deel is ten einde

2



Stap
toevoegen

2. Bekken

...

Dit is het eerste model van het bekken.

1

Dit is een tweede model van het bekken.

2

Dit is het derde model van het bekken.

3

Geslaagd!



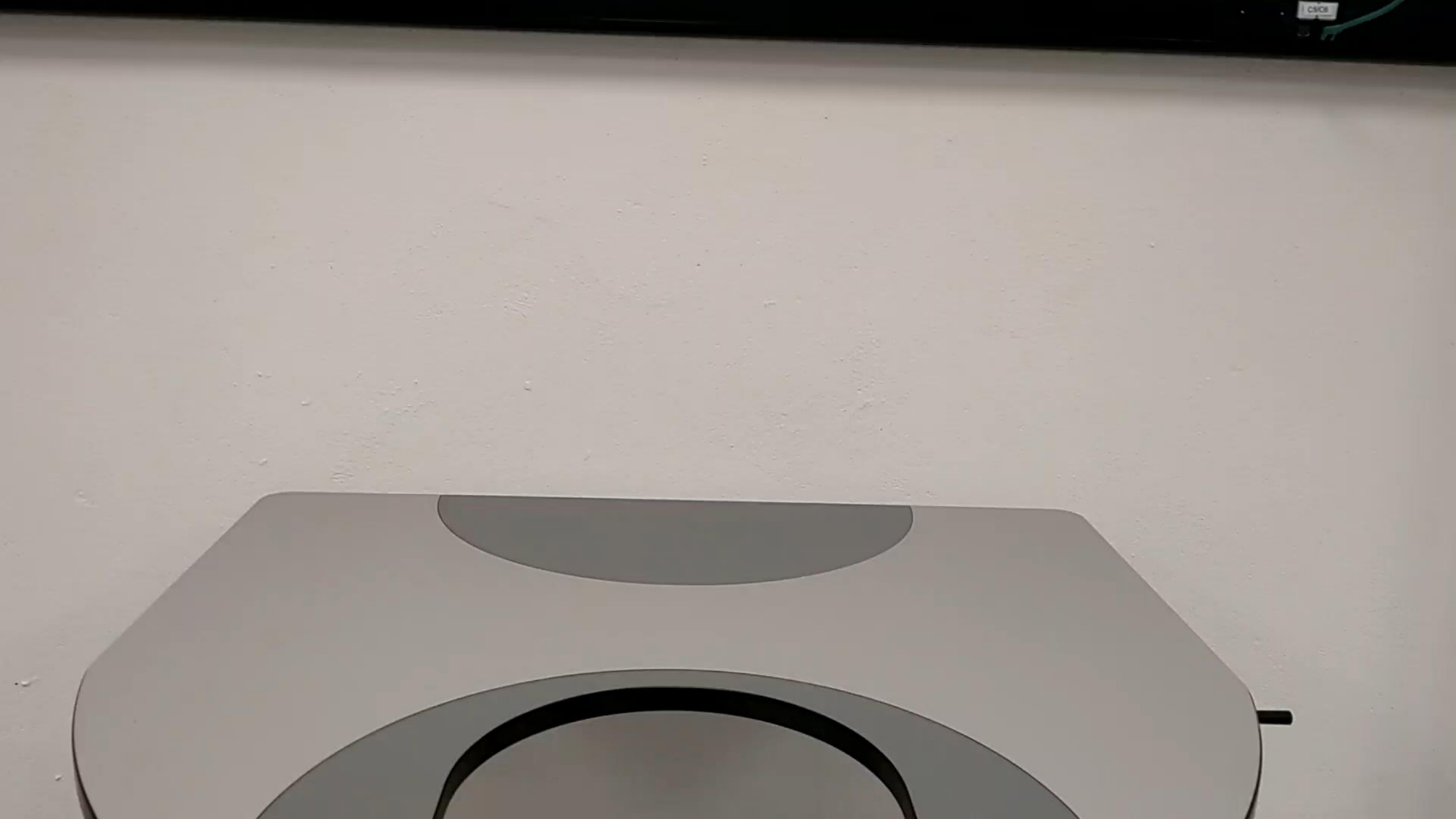
Dit deel is ten einde.

4

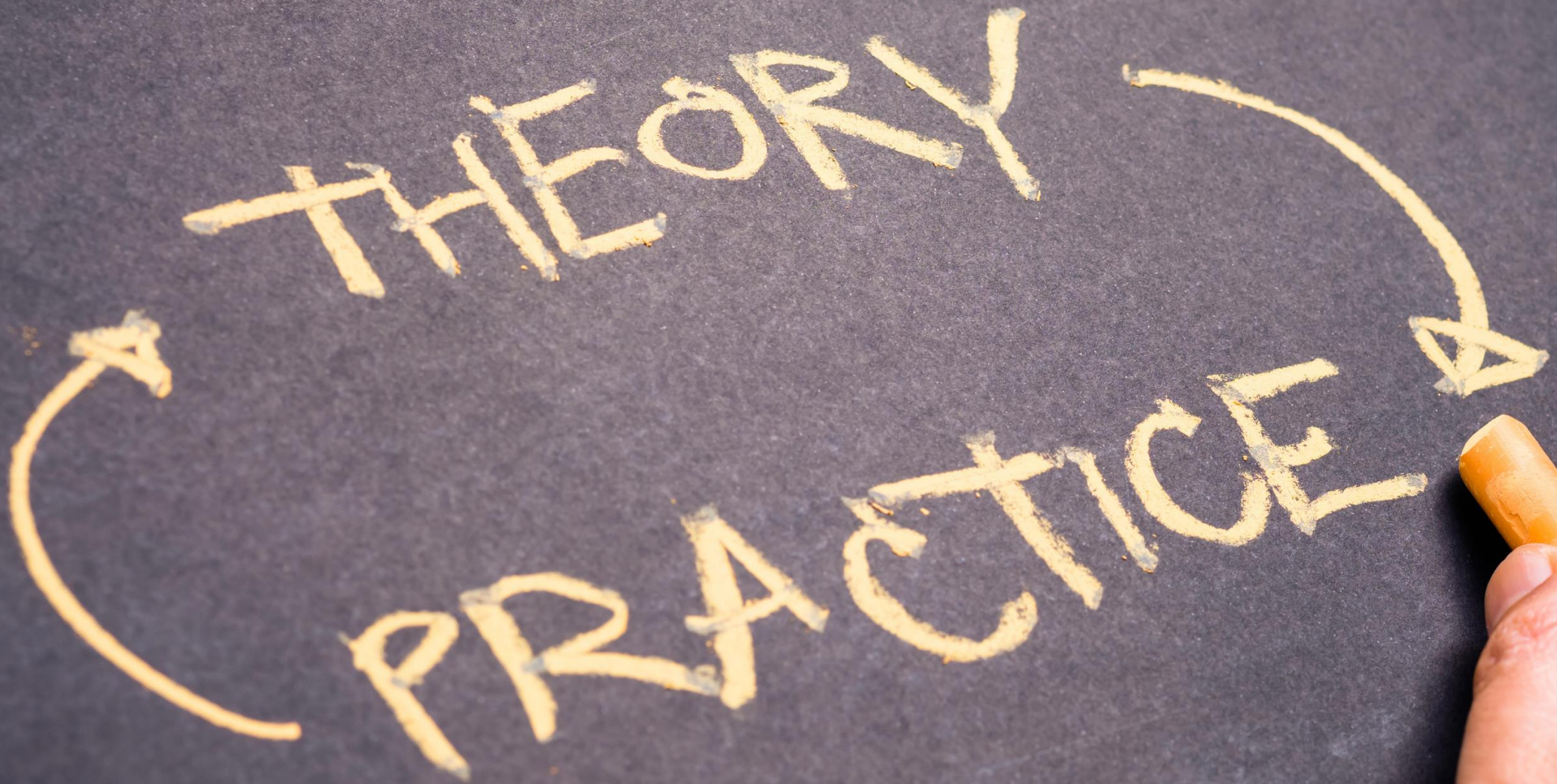


Stap
toevoegen





THEORY
PRACTICE



```
graph TD; THEORY --> PRACTICE; PRACTICE --> THEORY;
```

