

- EDUTECH -

Acquisition of Innovative Teaching Methods

2nd C2 – Augmented Reality in the classroom

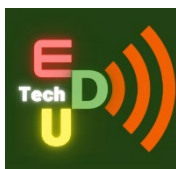


11th April – 15th April 2022
Place: Palermo, Italy
[PRISM Impresa Sociale s.r.l.]
www.prismonline.eu

Report from Hosting Organization C2

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Summary of the Training course C2

The “EDUTECH: Acquisition of Innovative Teaching Methods” C2 training event has been hosted by PRISM Impresa Sociale s.r.l. in Palermo, Italy from 11th to 15th April 2022.

The main aim of the EDUTECH C2 was to offer educators necessary skills to create and use Augmented Reality (AR) and Virtual Reality (VR) samples in their learning process. This 5-day course (11th to 15th April 2022) provided our adult trainers with both theoretical and practical knowledge in order to be able to create and use AR and VR examples to motivate and encourage their students. Our participants returned from this training, with a strong awareness of existing tools in the field of VR/AR and how these can be deployed in an adult work/education context at an affordable cost, so that the participants can replicate or inspire themselves from the solutions.

Objectives of the C2 Training course

- ») To empower adult learners throughout innovative didactical methods.
- ») To merge the divide between adult and younger generations on digital competences and skills.
- ») To promote innovative didactic methodologies in adult education.

Profile of participants

The training event was attended by 9 learners from the partner organisations. Professional profiles involved

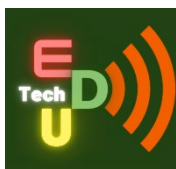
- ») Trainers in adult education, Educators, Teachers.
- ») Adult Education Stakeholders
- ») Adults learners

Represented Institution's	Title	Name	Surname	Country
Aydin Education Culture and Art Association	Mr	Davut	Uysal	Republic of Turkey
Bulgarian Development Agency	Mr	Simeon	Toptchiyski	Bulgaria
Bulgarian Development Agency	Mr	Vanev	George	Bulgaria
Tabalà	Mr	Òscar Tomàs	Martí López	Spain
Tabalá	Mr	Guillem María	Grimaltos Soler	Spain
ALVIT - innovation and education	Mr	Martin	Pokorný	Czech Republic
ALVIT - innovation and education	Mr	Vojtěch	Holub	Czech Republic
PRISM Impresa Sociale s.r.l. (Trainee)	Mr	Elia	Salomone	Italy
PRISM Impresa Sociale s.r.l. (Trainee)	Mr	Ignazio	Colombo	Italy
PRISM Impresa Sociale s.r.l. (Trainer)	Mr	Giuseppe	Reres	Italy
PRISM Impresa Sociale s.r.l. (Coordinator)	Ms	Luisa	Ardizzone	Italy

Methodology

Methods used during the C2 teaching and training activities: team building (ice breakers, energisers), instructor-led training, web-based learning methods, games, coaching / mentoring, (training) videos, case studies, reflection exercises, (small) group discussions, demonstrations, (collective) presentations, hands-on training, working with work sheets, (informal) talks.





Activities (daily agenda)

Day 1: 11th April 2022 [09h00 – 17h00]

- Course Introduction
- Introduction to Virtual Reality (VR) and Augmented Reality (AR)
- Health and safety and tools for the use of VR and AR in classroom
- Lesson example 1: Geography: Using cardboard and Oculus to discover places abroad
- Discussing the design methodology of individual final projects

Day 2: 12th April 2022 [09h00 – 17h00]

- Use of AR and VR in classroom and their pedagogical opportunities
- The potential application of AR and VR in several fields
- Importing reality in the virtual world: lidar scanner and other scanning methods
- Placing a scan in Unity and adding interactivity

Day 3: 13th April 2022 [09h00 – 17h00]

- Resources that offer VR and AR content useful for classroom teaching
- Lesson 2: History, Science and sustainability: ~~The world of plastics~~
- Introduction to 360 cameras
- Lesson 3: Art History: The Massimo opera theatre in Palermo

Day 4: 14th April 2022 [09h00 – 17h00]

- How to use the Google Arts and Culture app for VR and AR experiences
- Meta: what it is, and how to use it for activities in the classroom
- Lesson 4: Arts, History and Geometry: Trip to Stonehenge
- Design of personal project works

Day 5: 15th April 2022 [09h00 – 17h00]

- "Metaverse" phase: testing the Metaverse environment and reflect on activity that can be spent in the classroom with students.
- Project development
- Final projects display
- Closing session





Training content and Learning Objectives

Day 1: 11th April 2022 [09h00 – 17h00]

In the first session, participants presented themselves and their organization and the lecture started. The trainer started with an introduction showing the main differences between the different virtual technologies like Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR). Then the pros and cons of the use of these tools were presented putting the lenses on Health and Safety during the use of VR and AR in classrooms with students.

Moreover, trainees understood the different responsibilities in the communication process with students (Looker, Runner, Builder, Observer).

Finally, the trainer provided the participants with the use of the Oculus in order to do an activity that consisted in trying to discover places abroad and some of them showed their city of origin.

Learning Objectives:

- » Trainee understands the difference between Virtual Reality (VR) and Augmented Reality (AR)
- » Trainee knows about Health and safety and tools for the use of VR and AR in classroom;
- » Trainee knows how to use cardboard and Oculus to discover places abroad
- » Trainee understands the different responsibilities in the communication process with students (Looker, Runner, Builder, Observer)

Day 2: 12th April 2022 [09h00 – 17h00]

In the second session the focus was on the use of VR and AR in classroom and their pedagogical opportunities. During this session trainees had the opportunity of understand the potential application of AR and VR in several fields like education, simulation of activities, videogames, science, sustainability etc.

Moreover, it was presented the state of the Art showing how this type of technologies are developing.

Then the trainer showed how to digitalize real places and objects using lidar scanners and other scanning methods. The main demonstration was a presentation of a 360° scan of his room in the Unity app where it was possible to play with a virtual character adding interactivity.

Learning Objectives:

- » Trainee is able to identify pedagogical opportunities of the use of AR and VR in classroom
- » Trainee understands the potential application of AR and VR in several fields
- » Trainee is aware about how to digitalize real places and objects using lidar scanners and other scanning methods
- » Trainee knows how to place a scan in Unity and adding interactivity

Day 3: 13th April 2022 [09h00 – 17h00]

The third session started with a short video on the main bad effects that Virtual Reality can have on your health and in particular on your brain. Then the focus moved on the positive aspects and trainees were provided with different resources that offer VR and AR content useful for classroom teaching. This resource concerned in particular the application of VR when teaching subjected like History, Science and Sustainability.





Also, different cardboards were provided to each participant in order to show them how a Youtube 360 video can be useful in a potential teaching lesson.

Finally, the last part of the session consisted in a 360° video-scan of the Massimo Theatre square by which trainees understood the application possibilities by using 360 cameras and thanks to the use of the Oculus it was possible to have an interaction with what was filmed.

Learning Objectives:

- ») **Trainee knows about different resources that offer VR and AR content useful for classroom teaching**
- ») **Trainee is aware about the application of VR when teaching History, Science and sustainability**
- ») **Trainee understands the application possibilities by using 360 cameras**

Day 4: 14th April 2022 [09h00 – 17h00]

This session focused on different apps for VR and AR experiences that trainees can use with their students.

Then the trainer put the attention on Meta platform showing what it is and how to use it for activities in the classroom, making references on his previous experience in Virtual Reality platforms.

Finally, trainees had the opportunity to put into practice what they have learned and what they have improved concerning technological reality with a focus on potential arts, history and geometry lessons.

Learning Objectives:

- ») **Trainee knows how to use different apps for VR and AR experiences**
- ») **Trainee understands Meta: what it is, and how to use it for activities in the classroom**
- ») **Trainee is able to create Arts, History and Geometry lessons**

Day 5: 15th April 2022 [09h00 – 17h00]

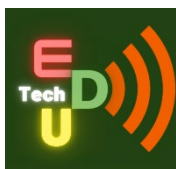
During the last day of the EDUTECH C2 trainees had a further implementation of the "Metaverse" phase and tested the Metaverse environment and reflected on activities that can be spent in the classroom with students. Here each participant created a sort of Lesson Template focused on a particular field where the use of virtual technology tools was at the centre of the lesson piloting.

As a result of the project, trainees were able to know how to create an individual project using AR and VR but also to build a positive educational AR and VR culture.

Learning Objectives:

- ») **Trainee is aware of "Metaverse" phase: testing the Metaverse environment and reflect on activity that can be spent in the classroom with students.**
- ») **Trainee knows how to create an individual project using AR and VR**
- ») **Trainee is able to build a positive educational AR and VR culture**





Impact and dissemination

Participants have been issued with the EDUTECH attendance certificate (Annex 1).

> The short-term impact on participants and partner organisations:

- » Promoted high quality, inclusive digital education and awareness on new digital tools and methods.
- » Raised target group's professional and digital competences in using digital resources.
- » Developed target group's several different skillsets and mastering digital tools for improving their understanding and use of IT instruments.

> Online dissemination channels:

<https://www.prismonline.eu/edu-tech/>

<https://www.facebook.com/prismonline.eu/posts/2010713972450074>

https://www.facebook.com/permalink.php?story_fbid=346898244077118&id=100518098715135

https://www.facebook.com/permalink.php?story_fbid=346900517410224&id=100518098715135

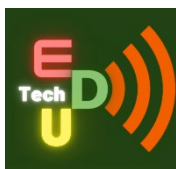
https://www.facebook.com/permalink.php?story_fbid=347476177352658&id=100518098715135

https://www.facebook.com/permalink.php?story_fbid=348283330605276&id=100518098715135

> Training Pictures and videos:

<https://drive.google.com/drive/folders/1InDAQNF47pvJuvUc3oVuaUsxXkdXIHrL>





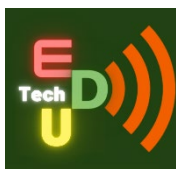
Training Evaluation

This section aims to summarize the training evaluation results. An online Evaluation Form was distributed among the participants with the aim to collect their opinion about the quality of the activities in which they were involved. PRISM as Activity leader received feedback forms from 9 out of 9 participants belonging to 5 partner organizations

[EDUTECH : evaluation form, training activities](#)

What did you like MOST about this training?
The training has been very interactive and enabled all the participants to have a direct and concrete experience of how VR, AR and mixed reality can be used for educational purposes
Lovely environment with nice people.
Interactivity.
Trainer
All
3d scanning possibilities
discovering the utilities of the VR/AR
Trying to understand what the composition looked like, without seeing it
Creation of lesson templates
What did you like LEAST about this training?
Nothing in particular
No such thing.
Connection to adult education
How do you hope to change your teaching or training practice as a result of this capacity building event?
By implementing a technologically intended interactive experience the people I might have to deal with will be more involved in the topics of discussion and develop a genuine curiosity in this regard.
I think it will have positive impact on my work as I got acquainted with the content of the subject, which I did not know before.
Use new methods, tips and tricks from the training
More technical use of Virtual opportunities.
Include VR and AR in the teaching
implementing more ICTs in my lessons
I now know that in order to get precise results there needs to be precise communication
increasing the use of technological tools
What can be improved with regard to the structure, format, and/or materials?
Nothing in particular
I think everything is alright.





More self testing

I do not know.

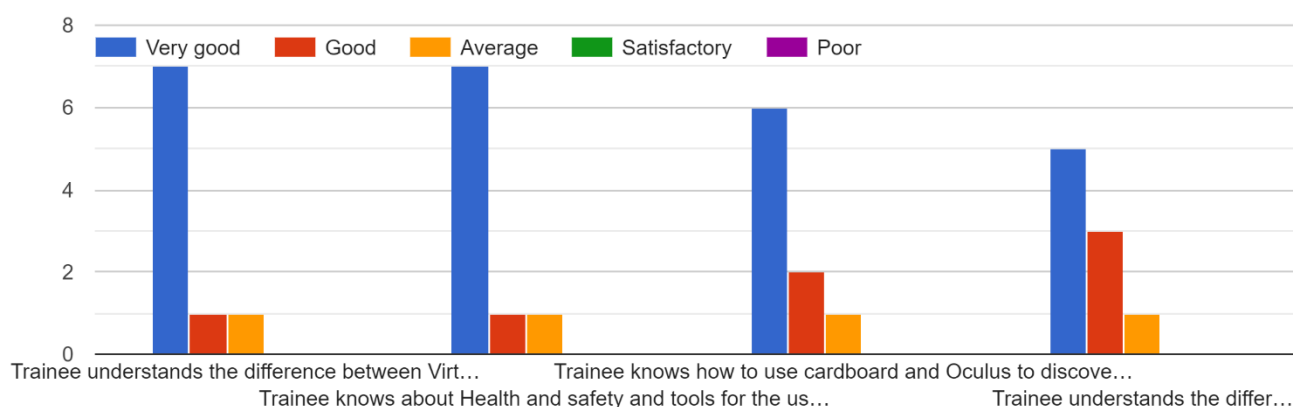
No comment

probably a greater immersion in the software to use

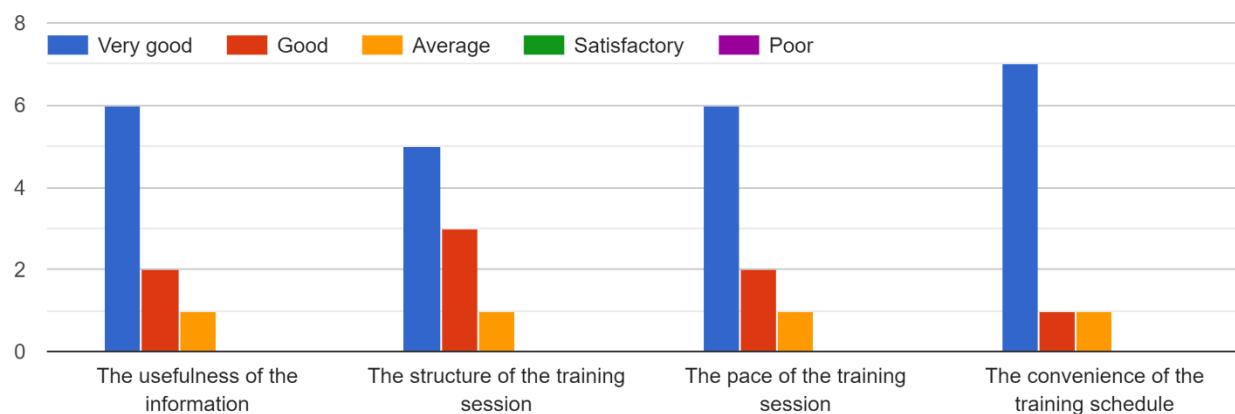
maybe with more practical methods and using them regarding to a specific topic

Day 1: 11th April 2022 [09h00 – 17h00]

To what extent do you think you the training has contributed to the achievement of the foreseen learning objectives:

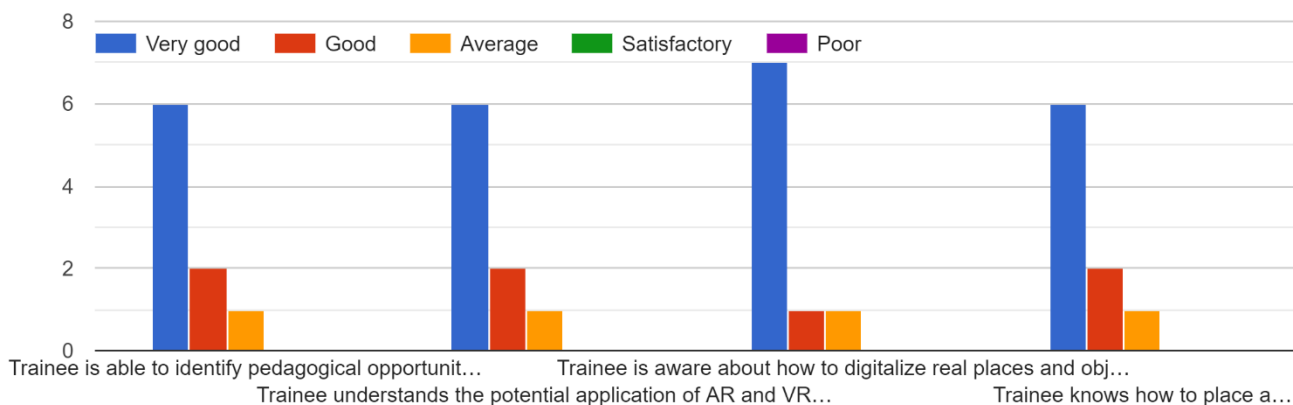


Please rate the content and structure of DAY1:

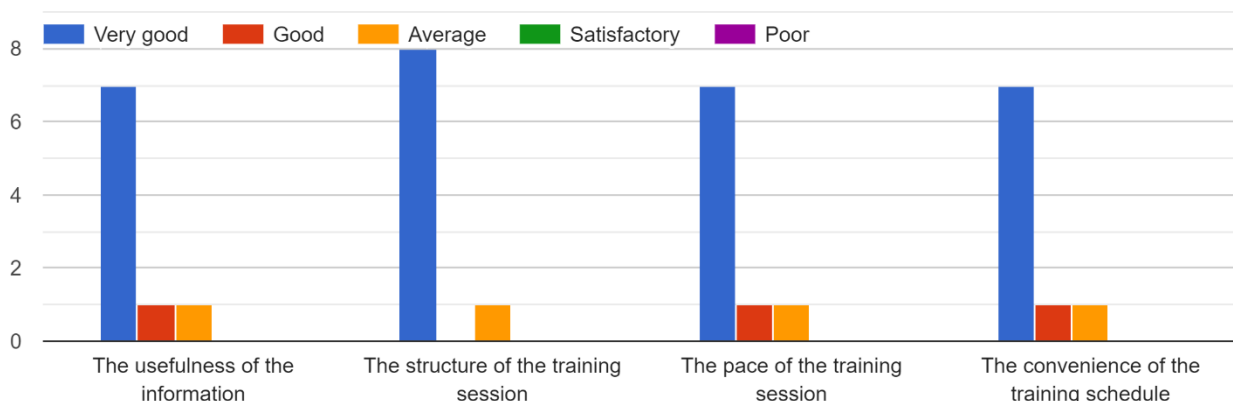


Day 2: 12th April 2022 [09h00 – 17h00]

To what extent do you think you the training has contributed to the achievement of the foreseen learning objectives:



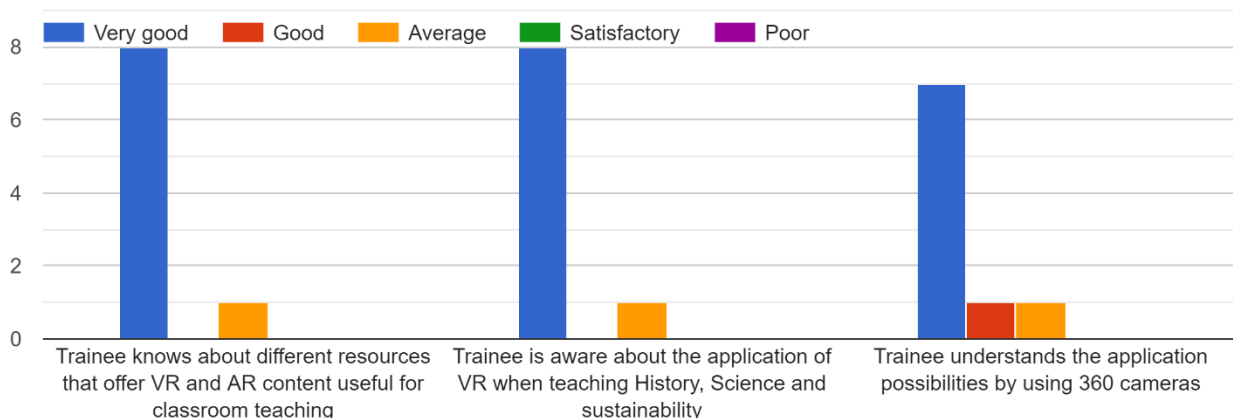
Please rate the content and structure of DAY2:



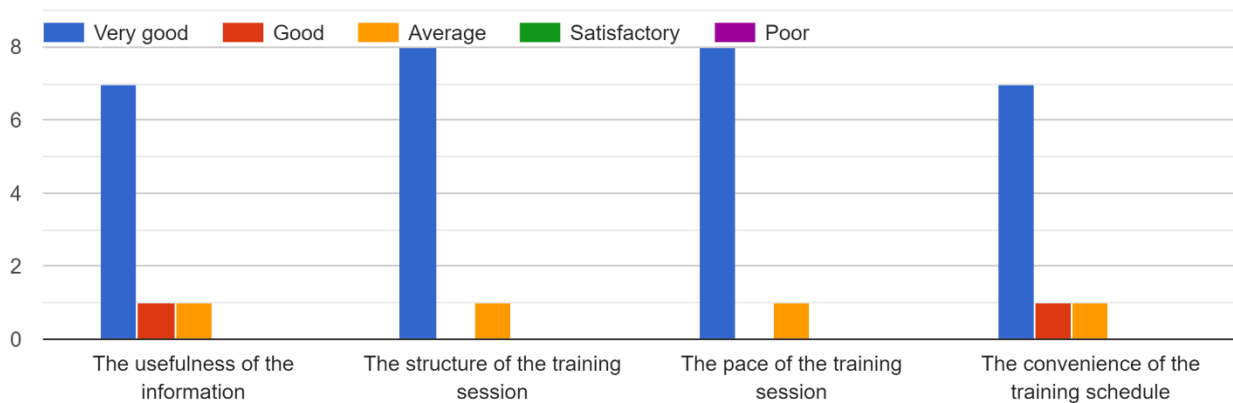


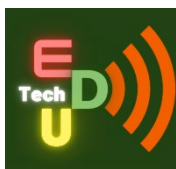
Day 3: 13th April 2022 [09h00 – 17h00]

To what extent do you think you the training has contributed to the achievement of the foreseen learning objectives:



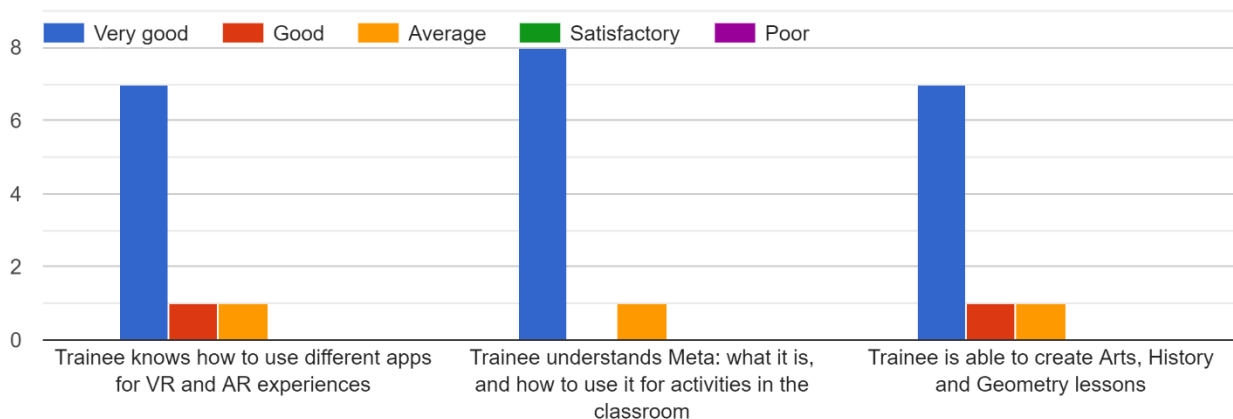
Please rate the content and structure of DAY3:



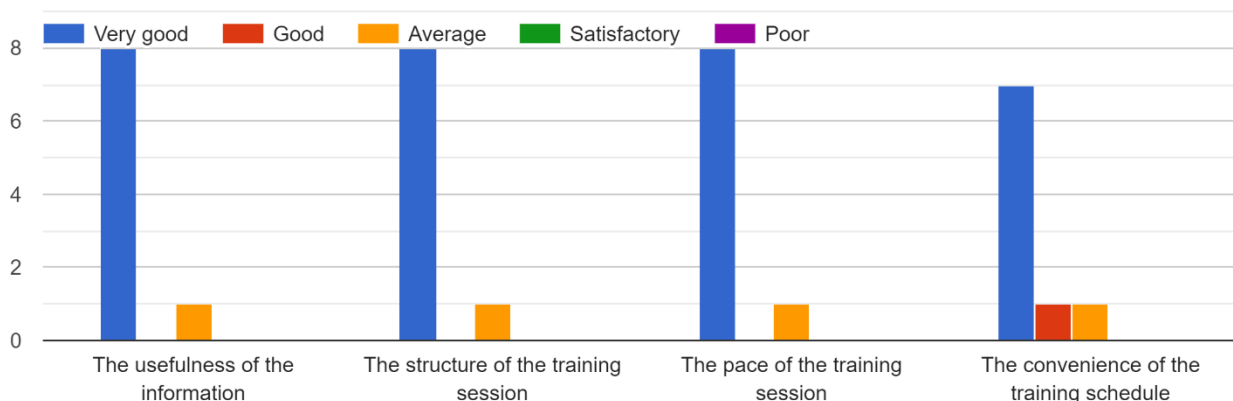


Day 4: 14th April 2022 [09h00 – 17h00]

To what extent do you think you the training has contributed to the achievement of the foreseen learning objectives of DAY4:

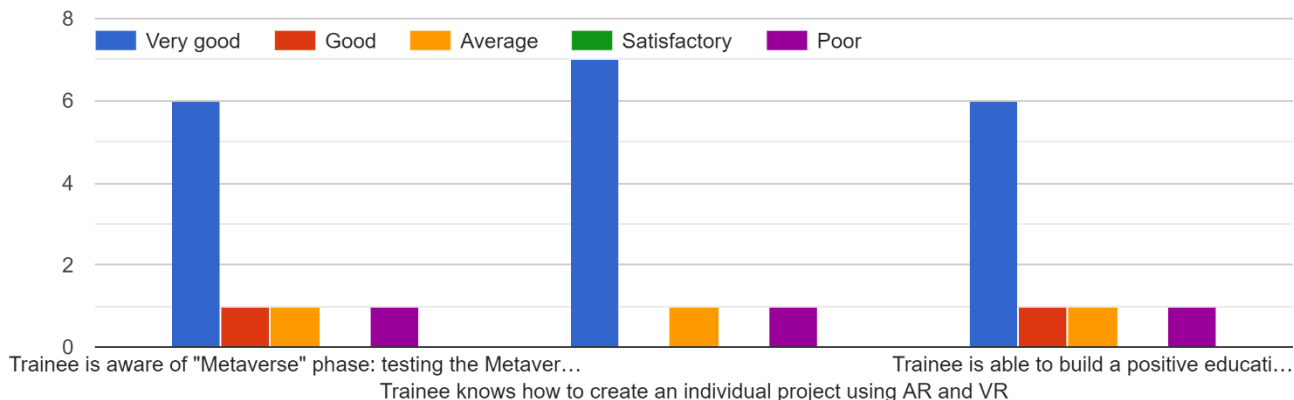


Please rate the content and structure of DAY4:

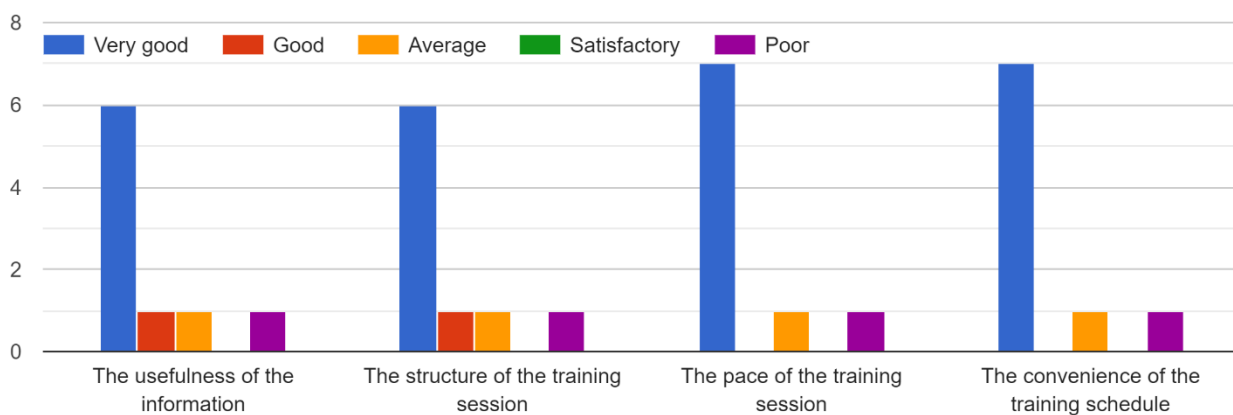


Day 5: 15th April 2022 [09h00 – 17h00]

To what extent do you think you the training has contributed to the achievement of the foreseen learning objectives:



Please rate the content and structure of DAY5:





Co-funded by the
Erasmus+ Programme
of the European Union



Annex 1. Attendance certificate

CERTIFICATE OF ATTENDANCE

This certificate is presented to

Name, Surname

For participating in the 2nd C2 – Augmented Reality in the classroom, held in Palermo – Italy, from 11th to 15th April 2022, for the purposes of the Project

EDU TECH: Acquisition of Innovative Teaching Methods

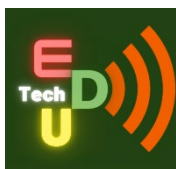
Project ID: 2020-1-ES01-KA204-082180

Alessandro Melillo
Chairman

Palermo, 15th April, 2022



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prisonline.eu



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Annex 2. Training Material



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2nd LTTA – Augmented Reality in the classroom



EDUTECH: Acquisition of Innovative Teaching Methods
[Reference: 2020-1-ES01-KA204-082180]

11th – 15th April 2022 \\\ Palermo, Italy

PRISM Impresa Sociale s.r.l.

www.prismonline.eu/edu-tech



An introduction to the Virtual Reality Technology

What is it?

Virtual reality (VR) is a simulated experience that can be similar to or completely different from the real world. Applications of virtual reality include entertainment (particularly video games), education (such as medical or military training), business (such as virtual meetings) and so much more...



All its different variations

We are going to focus mainly on the following technologies:

- Virtual Reality
- Augmented Reality
- Mixed Reality

Virtual Reality (VR)

Currently, standard virtual reality systems use either virtual reality headsets or multi-projected environments to generate realistic images, sounds and other sensations that simulate a user's physical presence in a virtual environment. A person using virtual reality equipment is able to look around the artificial world, move around in it, and interact with virtual features or items. The effect is commonly created by VR headsets consisting of a head-mounted display with a small screen in front of the eyes, but can also be created through specially designed rooms with multiple large screens. Virtual reality typically incorporates auditory and video feedback, but may also allow other types of sensory and force feedback through haptic technology.



Virtual Reality (VR)

Completely digital environment.
Fully enclosed, synthetic
experience with no sense of the
real world.

Augmented Reality (AR)

Augmented reality (AR) is an interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information, sometimes across multiple sensory modalities, including visual, auditory, haptic, somatosensory and olfactory. AR can be defined as a system that incorporates three basic features: a combination of real and virtual worlds, real-time interaction, and accurate 3D registration of virtual and real objects. Augmented reality is used to enhance natural environments or situations and offer perceptually enriched experiences. With the help of advanced AR technologies (e.g. adding computer vision, incorporating AR cameras into smartphone applications and object recognition) the information about the surrounding real world of the user becomes interactive and digitally manipulated.



Augmented Reality (AR)

Real world with digital information overlay. Real world remains central to the experience, enhanced by virtual details.



Augmented vs. Virtual Reality



Cinematic VR

Cinematic virtual reality (Cine-VR) is an immersive experience where the audience can look around in 360 degrees while hearing spatialized audio specifically designed to reinforce the belief that the audience is in the virtual environment rather than watching it on a two-dimensional screen. Cine-VR is different from traditional Virtual Reality which uses computer generated worlds and characters more akin to interactive gaming engines, while cine-VR uses live images captured thorough a camera which makes it more like film.

Augmented Virtuality

Augmented Virtuality is the realtime representation of the current state of the real world elements in media and information technology environments.

The difference with Augmented reality comes down to where the user interaction takes place. If the interaction takes place in the real world it is AR. If it occurs in a virtual space, then it's AV.

For example, an aircraft maintenance engineer who is able to visualize a real time model of an engine in flight is an example of AV as it occurs on a computer screen with real world elements that are physically thousand of kilometers away.



Mixed Reality (MR)

Real and the virtual are intertwined. Interaction with and manipulation of both the physical and virtual environment.

Mixed Reality

Mixed Reality is the merging of real and virtual worlds to produce new environments and visualizations, where physical and digital objects co-exist and interact in real time. Mixed reality does not exclusively take place in either the physical world or virtual world but is a hybrid of augmented reality and virtual reality. To mark the difference: Augmented reality takes place in the physical world, with information or objects added virtually like an overlay; Virtual Reality immerses you in a fully virtual world without the intervention of the physical world.

There are many practical applications of mixed reality, including design, entertainment, military training, and remote working. There are also different display technologies used to facilitate the interaction between users and mixed reality applications.

In short...

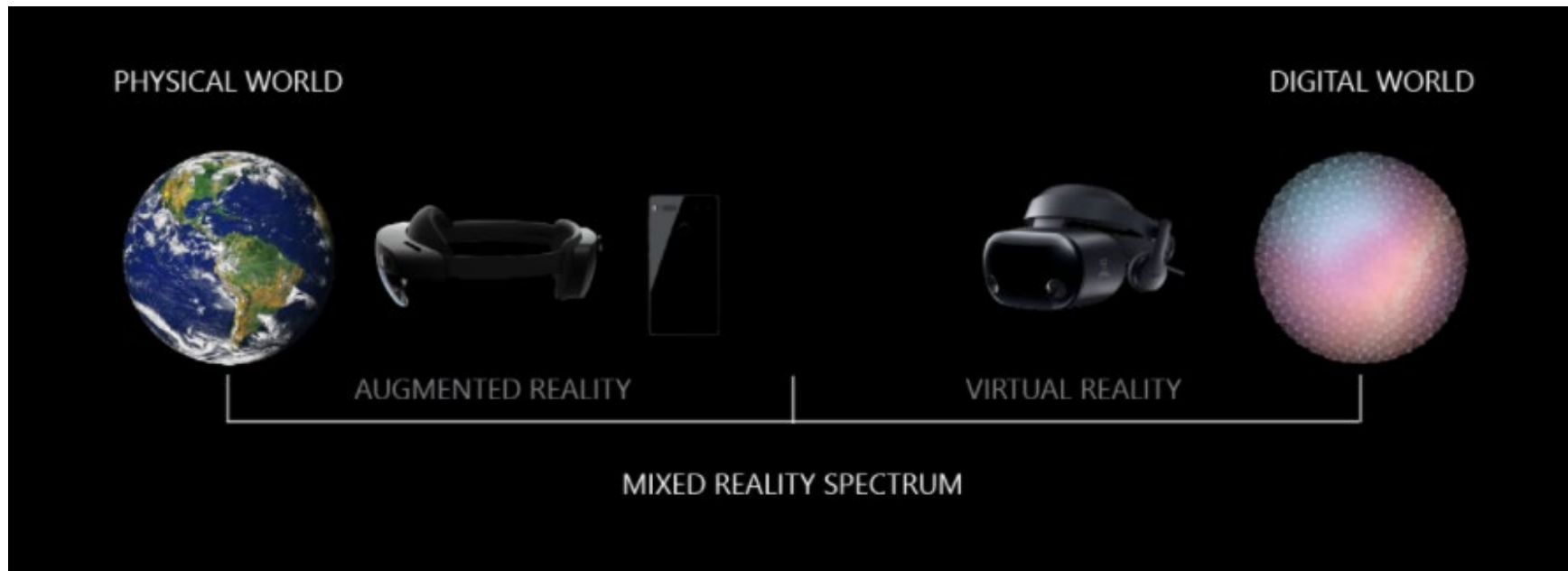
Virtual reality totally replaces the real environment with a virtual yet interactive world. Despite unique experience it creates, VR business solutions require full user attention and can't be utilized without specialized headsets such as Smart Glasses.

Augmented Reality interferes into the existing reality, allowing to transform it into virtual objects. Unlike virtual and mixed reality, augmented reality apps are available to customers with no extra devices.

Both technologies enhance user's perception by delivering artificially created digital content.

In short...

Mixed Reality is the spectrum in which VR and AR features combine in variable percentages, allowing to place virtual objects in the real environment, and vice versa, and manipulate with them. Any apps operating inside this spectrum may require the use of dedicated devices.



Health and Safety

To deliver the intended experience, VR devices use sight occlusion, hence there are risks while using them:

- Personal Injury
- Discomfort
- Property Damage



Health and Safety

- **Headset Adjustment.** To reduce the risk of discomfort, the headset should be balanced and centered, and the distance between the lenses (the intra-axial distance, or IAD) should be appropriately set for each user.





Health & Safety

Use Only When Unimpaired.

A comfortable virtual reality experience requires an unimpaired sense of motion and balance. Do not use the headset when you are experiencing any of the following (as it may increase your susceptibility to adverse symptoms):

- Tiredness or exhaustion;
- Need sleep;
- Under the influence of alcohol or drugs;
- Hung-over;
- Have digestive problems;

- Under emotional stress or anxiety; or when suffering from cold, flu, headaches, migraines, or earaches.

Health & Safety

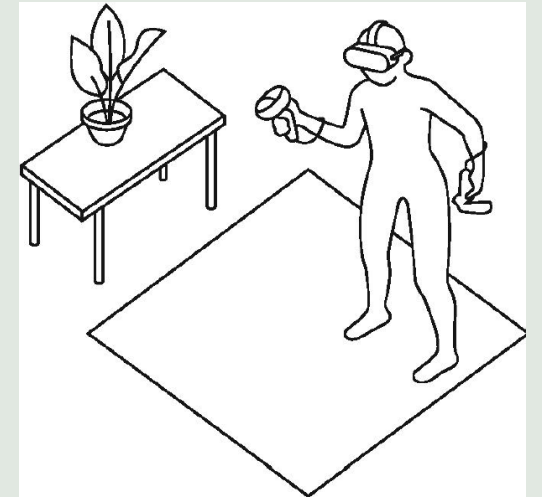
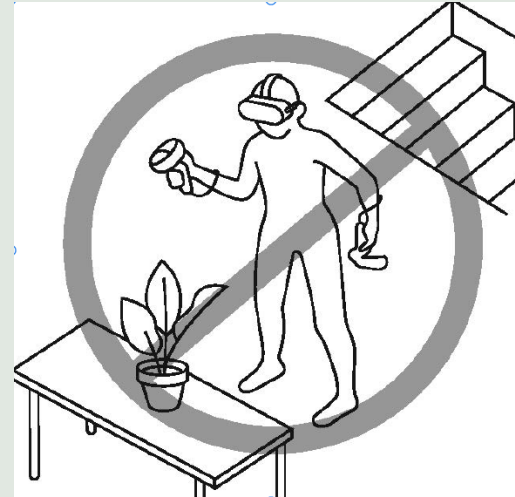
Interference with Medical Devices.

The headset and controller(s) may contain magnets or components that emit radio waves, which could affect the operation of nearby electronics, including cardiac pacemakers, hearing aids, and defibrillators. If you have a pacemaker or other implanted medical device, consult your doctor or the manufacturer of your medical device before using the headset or controllers. Maintain a safe distance between the headset and controller and your medical devices.

Health & Safety

Always be aware of your surroundings before starting and while using the headset. Use caution to avoid injury.

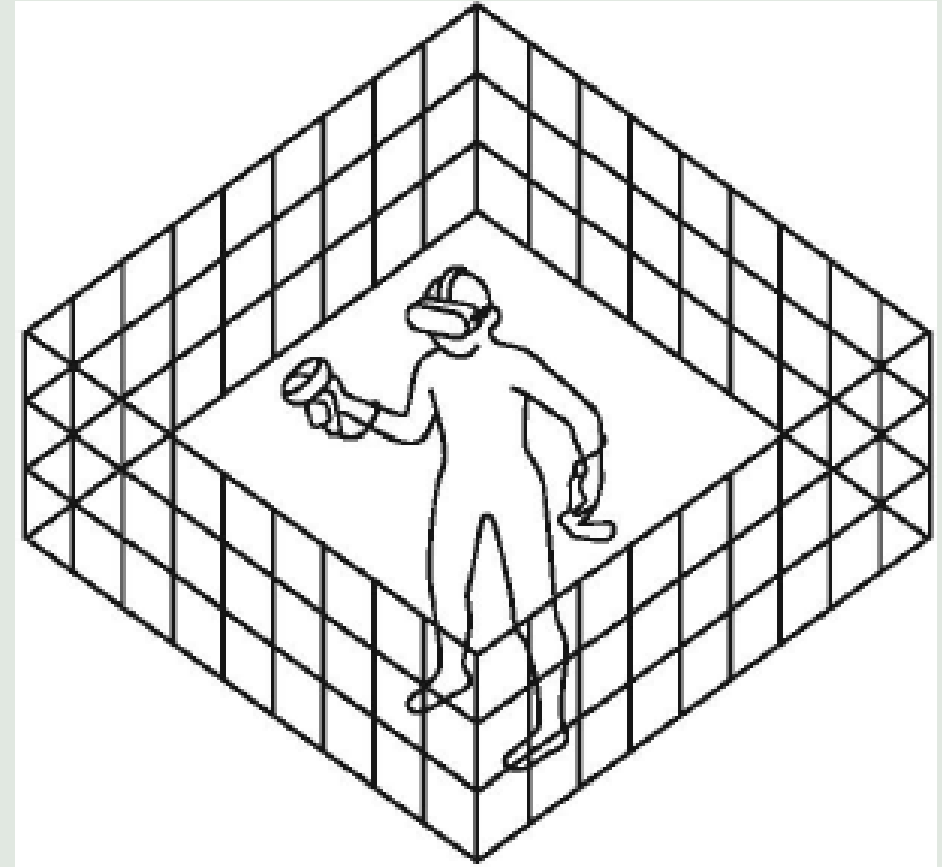
- You are responsible for creating and maintaining a safe play space.
- Only use your headset indoors. Clear a safe area all around you, including overhead, before using the headset. Serious injuries can occur from tripping or running into or striking walls, furniture, objects, or people.
- Move carefully while you explore the virtual world. Fast or abrupt motion may cause a collision or loss of balance.



Health & Safety

The Guardian System.

- The headset contains a virtual boundary system feature-called the Guardian system-designed to help you stay in your play space and avoid collisions with objects in the physical world while you are in your virtual environment.
- The Guardian system works best in a cleared space with walls and surroundings that create different patterns for the sensors to track.
- The Guardian system will only alert you to the boundary of your play space. It cannot prevent you from moving out of your play space or other objects from entering your play space.



Health & Safety

Immediately discontinue using the headset if any of the following symptoms are experienced:

- Seizures;
- Loss of awareness;
- Eye strain;
- Eye or muscle twitching;
- Involuntary movements;
- Altered, blurred, or double vision or other visual abnormalities;
- Dizziness;
- Disorientation;
- Impaired balance;
- Impaired hand-eye coordination;
- Excessive sweating;
- Increased salivation;
- Nausea;
- Lightheadedness;
- Discomfort or pain in the head or eyes;
- Drowsiness;
- Fatigue; or
- Any symptoms similar to motion sickness.



Use of VR and AR in classroom and their pedagogical opportunities

Use of VR and AR in classroom and pedagogical opportunities



Increasing engagement in the classroom



Anything can be viewed anywhere, despite its size or dangerousness



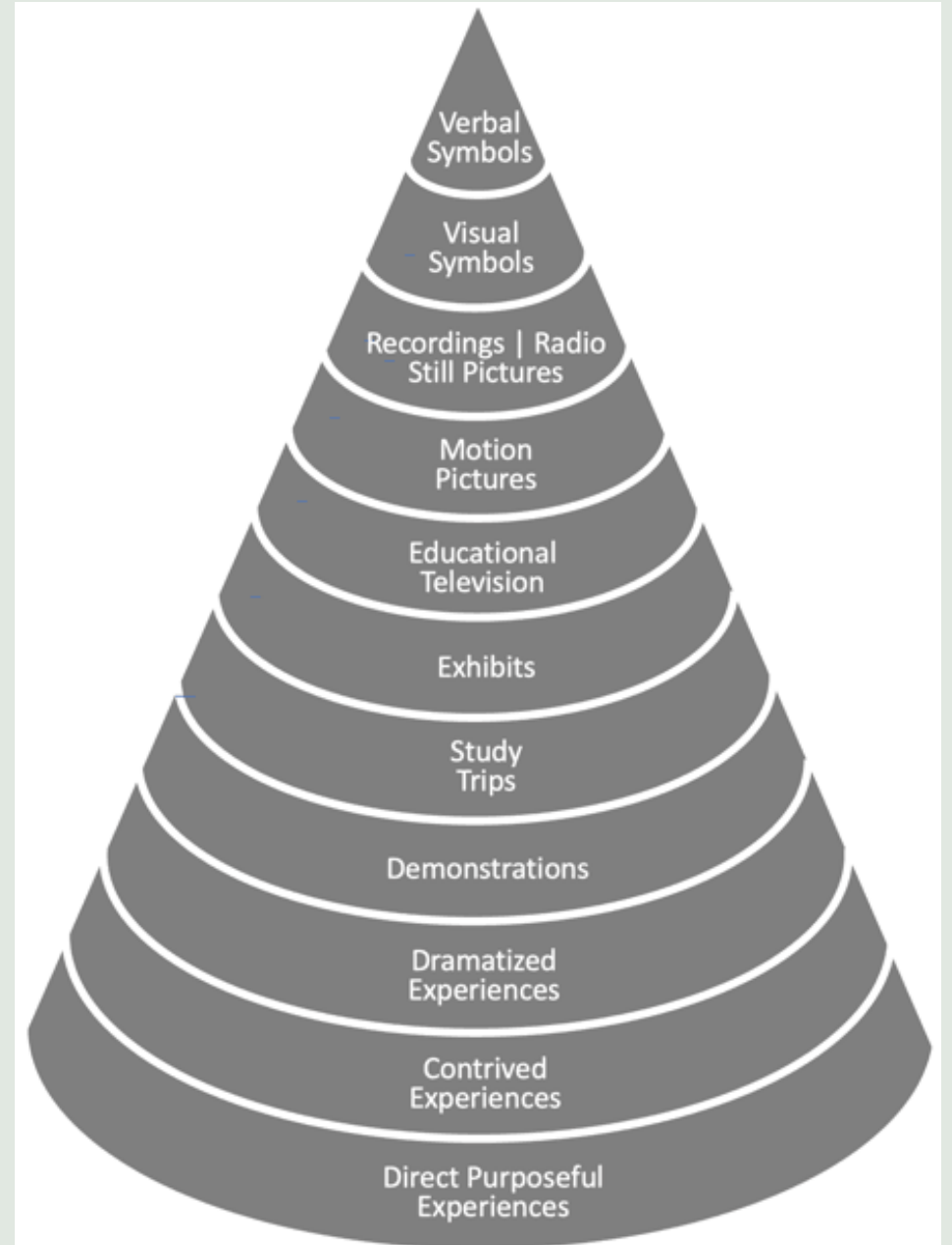
We can now reach a level of immersion that has never been practiced in the class

Benefits of Virtual Reality



What opportunities are there with VR?

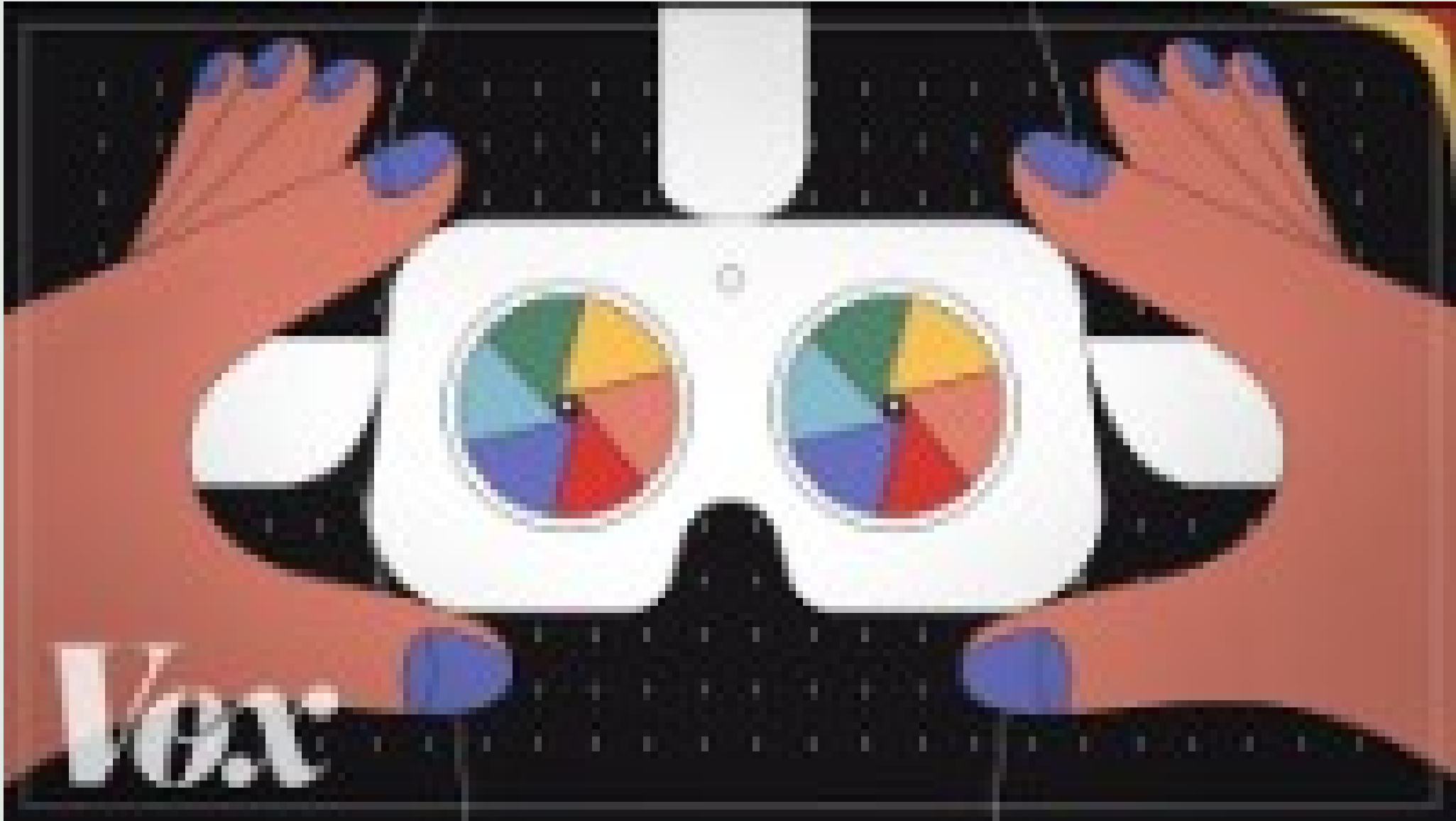
Virtual reality provides one of the most important aspects of learning that no other technology can match, that of experience. In his **Cone of Experience**, **Edgar Dale** theorized that we retain around 10% of what we read, yet 90% of what we experience ourselves. Virtual Reality facilitates knowledge retention at the highest possible level, through immersive and engaging personal experience. Bringing personal experience into the classroom, and engaging children in new activities not normally possible, holds the potential to truly transform knowledge retention.



What concerns are there with using VR?

Virtual reality opens a wide range of concerns and fears, from health and safety, to emotional well-being. There are many important factors to consider, such as the long-term effect on children's vision, the transfer and spread of diseases from the shared use of headsets or the emotional development of children using immersive and sensory manipulation.

Careful consideration should be given to these issues, and strategies to address them, before any equipment is purchased and used.



Erasmus+

Is Virtual Reality Bad For You?



State of the Art

Virtual, Augmented and Mixed Reality technology has been available for several years, but it is only recently, towards the end of 2016, that this technology has developed to a level that will now start to penetrate the consumer space.

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State of the Art

OCULUS RIFT

The Oculus Rift was one of the very first commercially available VR headsets. Now owned by Facebook, Oculus is an integrated headset that requires a tethered connection to an external PC. Oculus is primarily a gaming device and as such has limited educational content.



ADVANTAGES	LIMITATIONS
High Performance Device	PC Required to Operate
Headset Positional Tracking	Primarily a Gaming Device
Immersive Experience	Expensive
	No Curriculum Content
	No Classroom Controls

State of the Art

HTC VIVE

Backed by mobile phone maker HTC, Vive is an integrated VR headset driven by a Windows PC or Mac. Vive predominantly targets the gaming market, but has recently started targeting education with the Vive Group Edition bundle of headsets and PCs.



ADVANTAGES	LIMITATIONS
Top Quality Experience	High Price
Active Developer Community	Limited Educational Content
Wide Range of Hardware Peripherals	Requires High-end PC
	Complex Setup & Management
	External Sensors Needed
	No Classroom Management

State of the Art

SONY PLAYSTATION VR

A dedicated headset for Sony's PlayStation video games console. The PSVR headset provides a simple way for home users to experience high quality VR gaming.



ADVANTAGES	LIMITATIONS
Lower cost Relative to PC-Based Headsets	No Educational Content
Simple Setup & Configuration	Tethered by Wire to a Required PlayStation Console
High Quality Games Available	Requires Monitor or TV for Setup
	Closed Ecosystem & Content
	No Classroom Management

State of the Art

SAMSUNG GEAR VR

In collaboration with Oculus, Samsung GearVR combines a Samsung mobile phone with an active headset to deliver a high-quality VR experience. Access to Google Expeditions and some educational apps make it suitable for the classroom.



ADVANTAGES	LIMITATIONS
High Availability	Requires Mobile Device
Tether-free Operation	High Cost
	Overheating Devices Cause Lesson Disruption
	No Classroom Management

State of the Art

Hololens

<https://www.microsoft.com/en-us/hololens/hardware>

State of the Art

AVANTIS CLASSVR

ClassVR is the first fully dedicated end to end classroom VR & AR system. It comprises a standalone headset, a storage and charging unit, pre-installed 360 degree images and videos, a classroom management and control portal and the ability for schools to upload their own content.



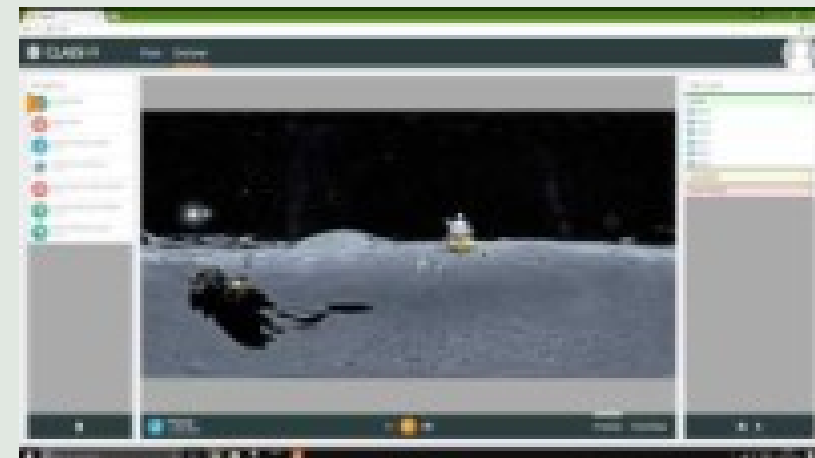
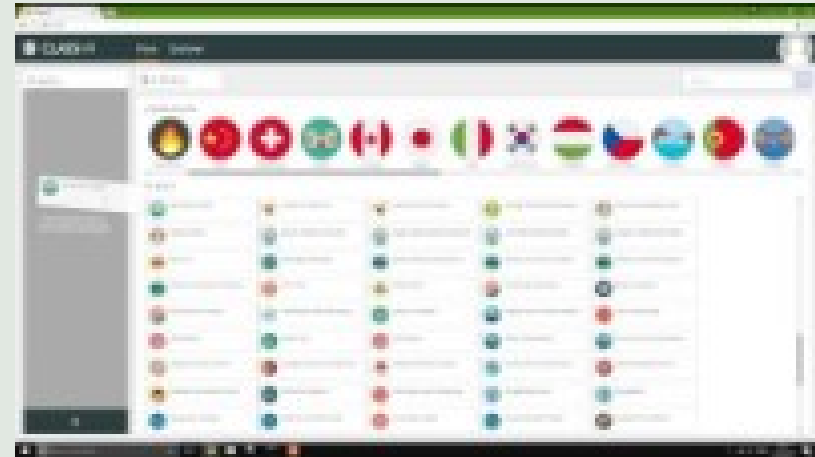
CLASSVR[®]

ADVANTAGES	LIMITATIONS
Low Cost Standalone System	No Positional Tracking
Classroom Device & Content Management	
Curriculum Aligned Resources	
Ability to Create Own Content	
Supports VR & AR	

State of the Art

At the time we are speaking there is only one manufacturer that offers multipacks of VR headsets for the classroom that also offers solutions for the teachers such as:

- Each display can be controlled at once by the teacher
- Content for the lessons is centralized in one app and it can easily be arranged for the lesson

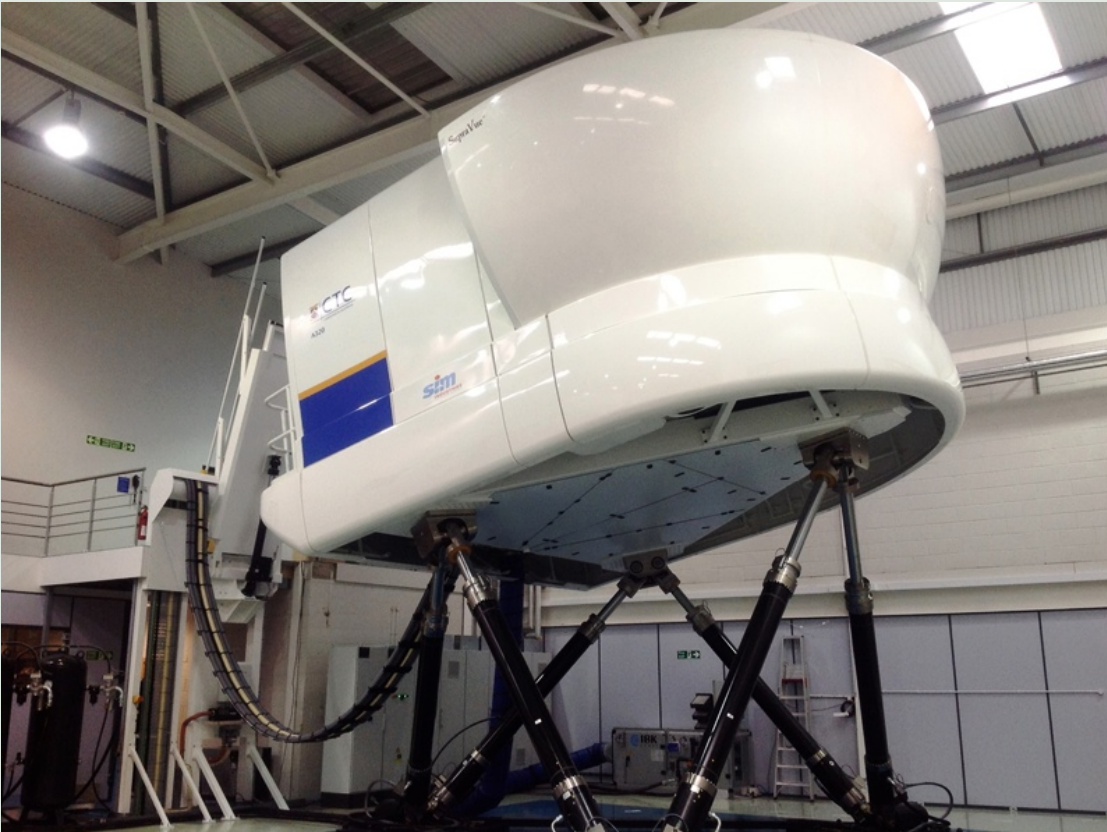


The applications of VR



Virtual reality may have popped into the headlines only in the past few years, but its roots reach back four decades, in the late 1950s. And in the meantime, it has mainly been used for medical and military training and flight simulation.

The applications of VR



The applications of VR



One of the scenarios dear to IKEA was to educate their coworkers by creating awareness about different job functions and how leaders are inspired by the IKEA Key Values in their jobs.

The objective of the VR-experience was to enable co-workers to experience one of the many IKEA environments in IKEA's value chain and experience a leadership role. One aspect of being a good leader at IKEA is how you practice leadership inspired by IKEA's 8 key values. Examples of some of the key values are; "Togetherness" & "Simplicity".

The first release happened in 2018 and the experience was so well received that an improved VR solution was used in 2019.

IKEA

HUMAN RESOURCES

IKEA

LOGISTICS



Karuna Labs



KARUNA

Rewire Your Brain.
Unlearn Your Pain.

Founded in 2016, Karuna Labs has been using VR technology for years to provide personalized chronic pain management programs for patients suffering from chronic pain in their lower and upper limbs, neck, and lower back that's neither invasive or pharmacological.

5:40 PM
2/4/2019

KARUNA

Exit
Protocol

Completed Reps: 4



Complete at least 3 reps to each side



Osso VR



While Karuna Labs specializes in providing services to the patients themselves, Osso VR focuses on providing support to the medical professionals who assist them. By offering surgeons in-training a virtual space in which to practice true-to-life surgical procedures, Osso VR has created a cost-effective alternative to the expensive and highly-limited training opportunities currently offered.

Users participating in the program are given hands-on time with all the tools they'll need to master before entering the ER, and introduces them to the many concepts and scenarios they'll be faced with throughout their time behind the knife.



The future of VR



Erasmus+

Meta Phase

∞ Meta

Meta Phase

What is Meta?

- Ex Facebook (therefore also owner of Instagram and Whatsapp)
- Producer of Oculus Quest 2







“This project has been **funded with support from the European Commission**. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.”