

Welcome to VRinSIGHT



A BRIEF INTRODUCTION

29th of September 2020

Welcome to VRinSIGHT



Virtual Reality: A viable solution for education
and business in a post-Corona world?

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General guiding questions from practice

- What is VR ...?
- What's that good for?
- This is for gamers!
- Much too expensive for the quantities we need!
- No time now, but maybe in the future ...?!
- What does it mean VR again ...?
- Yes, maybe helpful, show me!

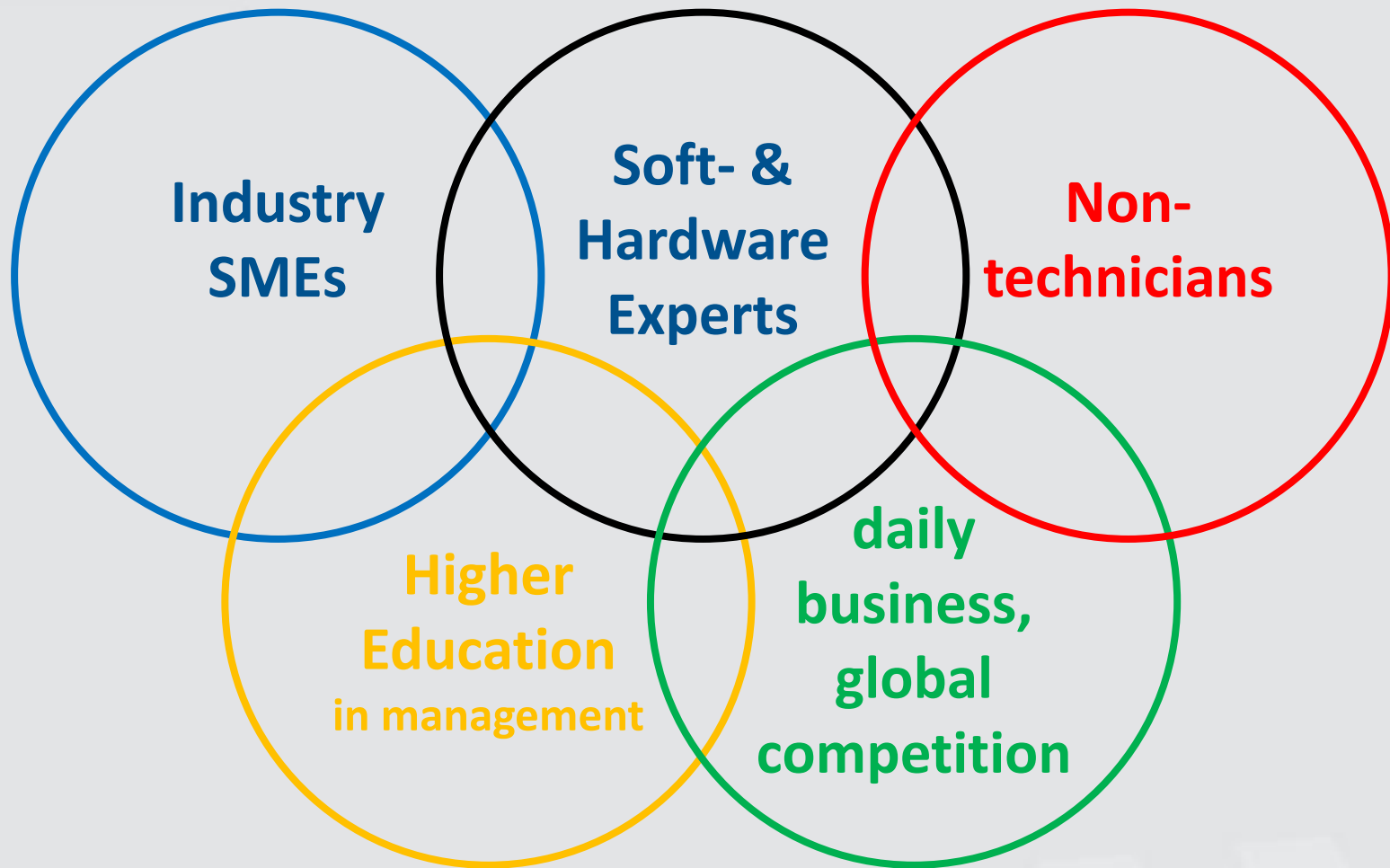
Welcome to reality



Project Motivation

*“The VRinSight partnership concluded early in its establishment that the Higher Education institutes of Europe were not only **key to addressing this challenge** but also bear a responsibility to wider economy and to the students they are educating, in ensuring that these **graduates in Europe are adequately prepared** with the relevant technical skills to fulfill their role in management of SMEs and ensuring that Europe’s industry remains competitive. It is therefore **incumbent on the institutes of higher education** across Europe to make sure that their professors, lecturers and academic staff **possess the key knowledge on VR technology**, so that the necessary skills can be acquired by business and management graduates.”*

Core Idea & Strategic Targets



Core Idea & Strategic Targets

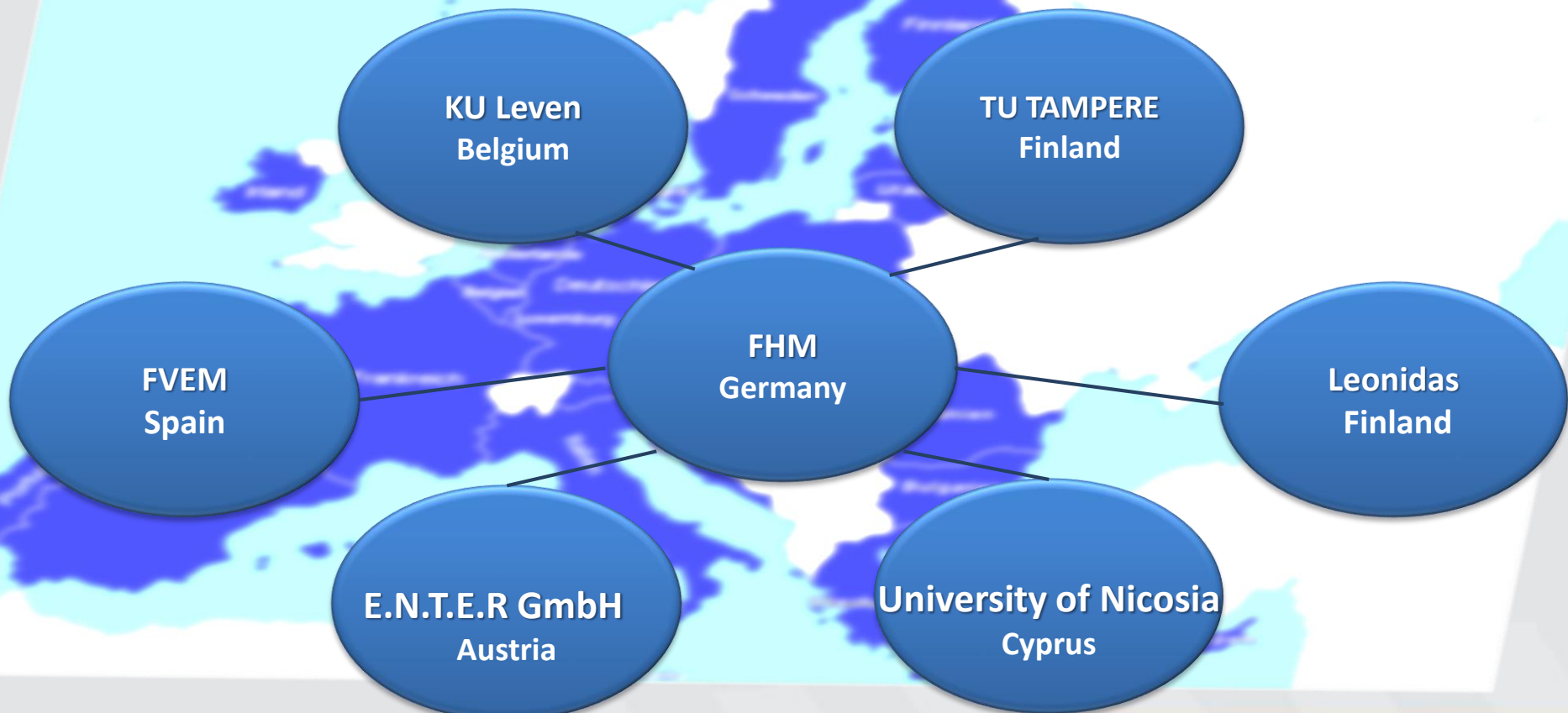


„a project to pro-actively address the evolving skills gaps that SME in Europe are increasingly facing and will continue to face as VR technology begins to revolutionise how business is conducted in the modern global economy“

The Partners in VRinSight



Boosting Virtual Reality Learning within Higher Business Management Education



Source: picture/map <https://www.europakarte.org/europakarte-eu/>

10/2018 – 09/2020

The Partners in VRinSight II

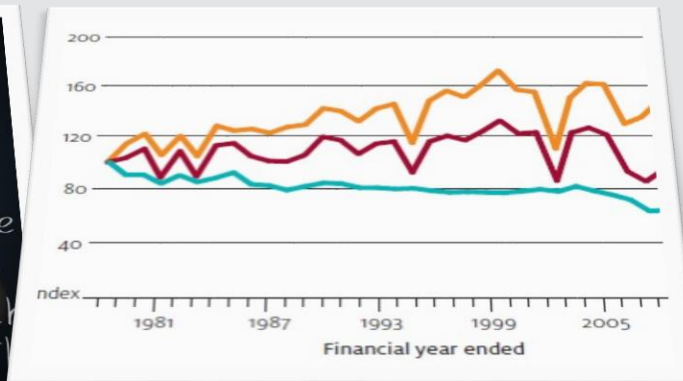
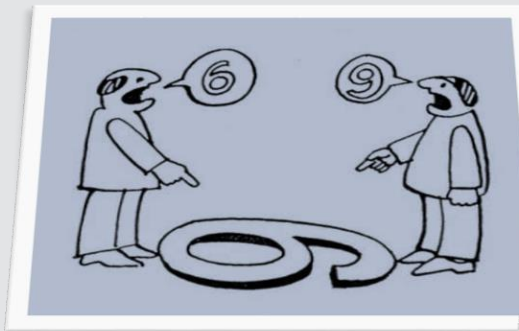


VR training programme beneficial to :

- academics within the discipline of business management
- academics outside the discipline of business management
- current SME management

Do research!

■ Main tasks



Do research!



3 study survey:

- perceptions, attitudes as well as experiences of VR
- two target groups: HEIs & SMEs
- Survey of suitable hardware and VR eco systems
- tangible case studies and best practice examples of VR use in education and business.
- Survey report publication ([link](#))
- Foundation for VR Curriculum and training programme

Do research!



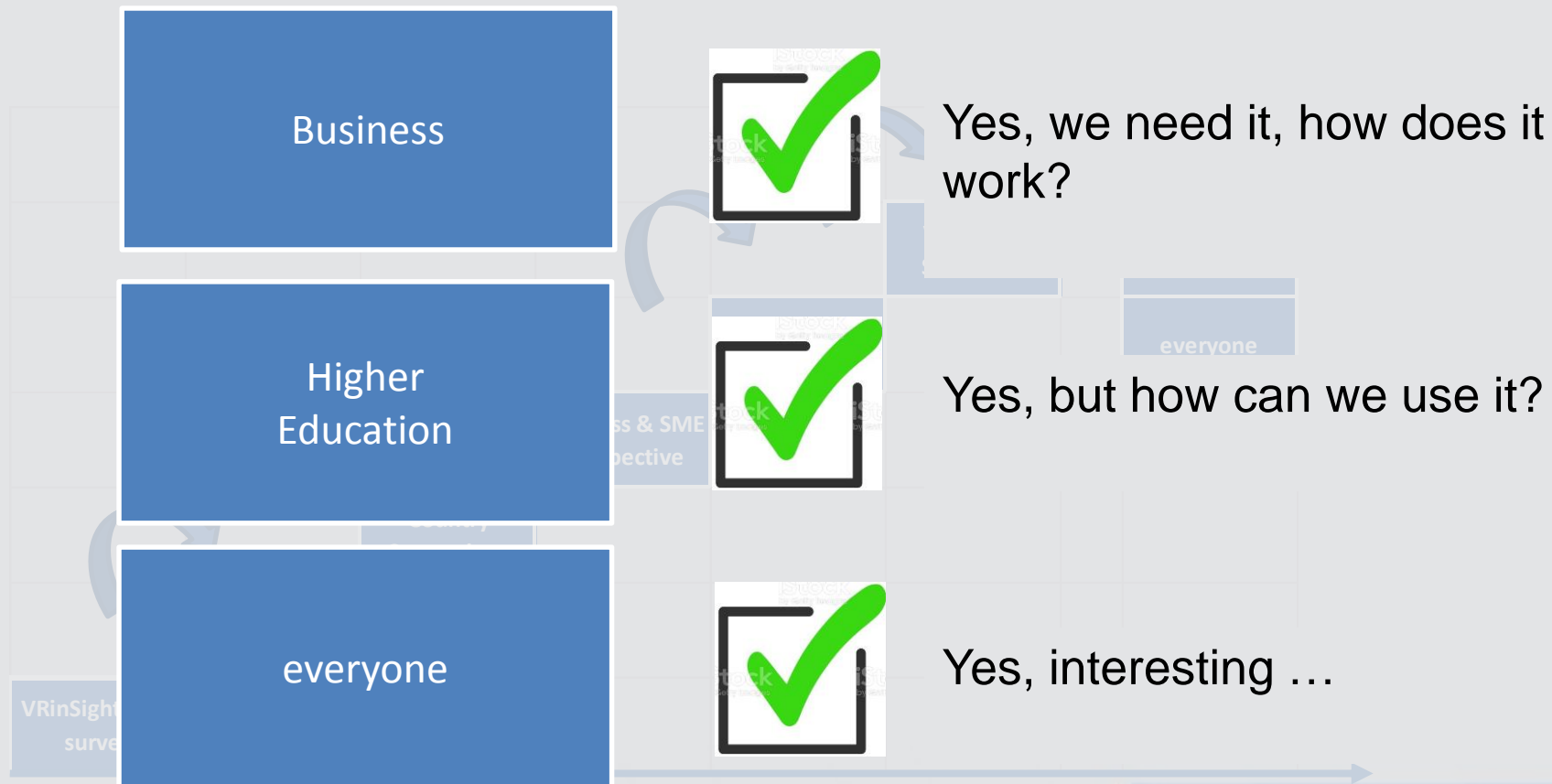
Survey uncovered:

- sporadic VR developments across European universities
- isolated instances of VR adoption
- limited awareness of the practical use in education and its potential for learning.
- VR is largely confined to the research laboratories of these institutes.

SURVEY



■ VR nowadays



Main Result



VRinSight Curriculum - Introduction to VR technology:

- basic functionalities of VR equipment,
- basic handling of VR hardware, working with suitable software, and
- how to integrate VR technology into a classroom setting, as well as providing a - showcase of the best 25 VR applications available suitable for use in a classroom setting
- Pedagogic aspects to be considered be when integrating VR into the classroom and
- how VR can enhance the learning experience for students (link to module).
- Practical applications of VR in Business and industry

Virtual Reality Curriculum



■ Main Result

VR Curriculum



1	Outputs for the European Survey of Higher Education and Business
1	VR for business and industry
1	A comparison of VR developments across the globe
2	Pedagogic considerations in VR learning
3	VRinSight Showcase: 25 VR applications for education Purpose built
4	VR Classroom – Purpose built VR application for learners

DETAILS



■ VR nowadays



BUSINESS

HIGHER
EDUCATION

EVERYONE

RESULTS - Virtual Reality Curriculum



■ VR nowadays

Business



Industry 4.0, and **especially key enabling technologies as Virtual Reality**, are becoming critical to face the company challenges and client needs.

- Level of connectivity between component involved in the organization process.
- Awareness of Digitization

An organization is always in search of new technologies which can achieve the desired results in **minimum input and in short time period**.

■ VR nowadays

Business



- Conception
- Research and design
- Development and assembly
- Prototypes
- Inspection, maintenance and repair
- Marketing and promotion
- Control of Robotics
- Workflows and benchmarking
- Training
- Floor planning

Main Hindrances to Use of Virtual Reality



■ VR nowadays

Business



- Level of digitalization
- Lack of expertise
- Return of the investment (ROI)
- Technology integration



A Europe fit for the digital age

■ EU > Strategy > Priorities 2019-2024

Business



Artificial Intelligence



European data strategy



European industrial strategy



High Performing Computing (HPC)



Online platforms



Cybersecurity



Digital skills



Connectivity

- more
information &
support

A competition with a globalized economy

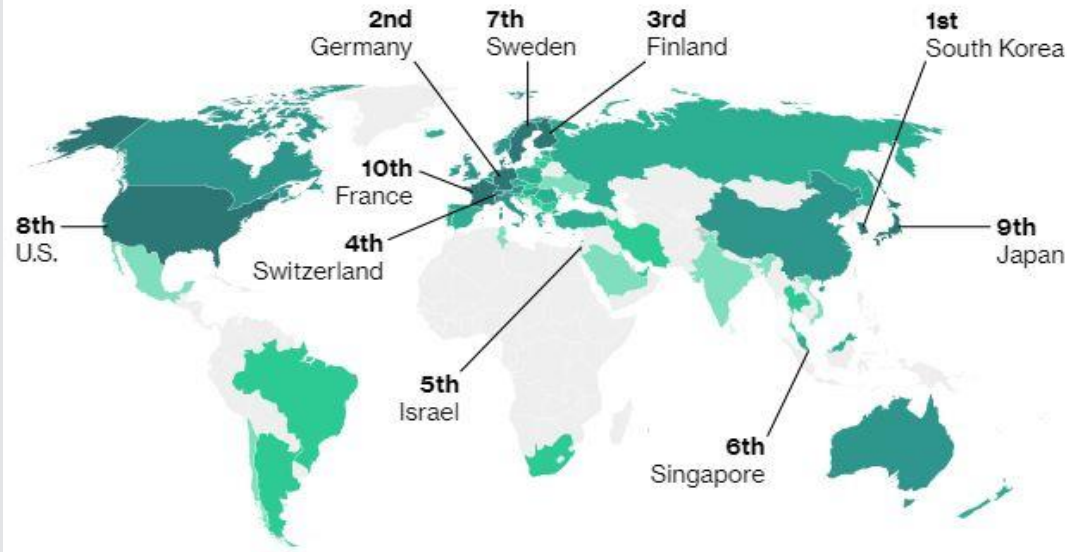
■ Korea, Europe, RoW

Business

World's Most Innovative Economies

South Korea, Germany lead the index in 2019

Innovation score
Lowest Highest



A way to succeed successfully



- Recommendations for increasing the level of digitalization – VR implementation
 1. Monitor Industry 4.0 technology and other business opportunities.
 2. Contact VR experts in the region to contrast the strategic vision.
 3. Attend informative meetings usually set up by public organization, universities and professional organizations for understanding and testing the technology.
 4. Study the current internal expertise.

Business



A way to succeed successfully



■ Recommendations for increasing the level of digitalization – VR implementation

1. Consider the implementation of a VR team as a department for spreading the technology inside the company and conceptualization smart products and services portfolio. Learn how to do it.
2. Invest in developing and maintaining an innovative company culture and start involving more people within innovation processes.

Business



RESULTS – Training Programm



■ VR



Business



Yes, we need it, how it works?

Higher
Education



Yes, but how can we use it?

everyone



Yes, interesting ...

Main Result



The [VRinSight training programme](#) was structured with flexibility and

VRinSight Classroom

- illustrates in a VR experience the key learning contents of training programme
- compliments the learning undergone in training modules
- a new and innovative novel perspective on how learning and education can be experienced.

RESULTS – A new world



■ VR nowadays

Virtual Reality:

- simulated reality
- immersive environments
- interactive
- computer generated

VR can be used for:

- Training
- Virtual tours
- Games

Higher
Education



RESULTS – A new world



- Typical VR characteristics

Higher
Education

immersive

interactive

artificial sensory stimulation

unaware of the interface

induce targeted behavior



Source: https://www.nieuwsblad.be/cnt/blgpe_025488

Independence and flexibility



■ Use cases

Global Teleportation: students can virtually visit places that are beyond their means in the real world

Higher
Education



Independence and flexibility



■ Use cases

Higher
Education

Contextualised Learning: VR can also show the context of the learning topic (compared to AR).



■ Use cases

Active Autonomy: students can choose where to look and to explore the virtual environment freely

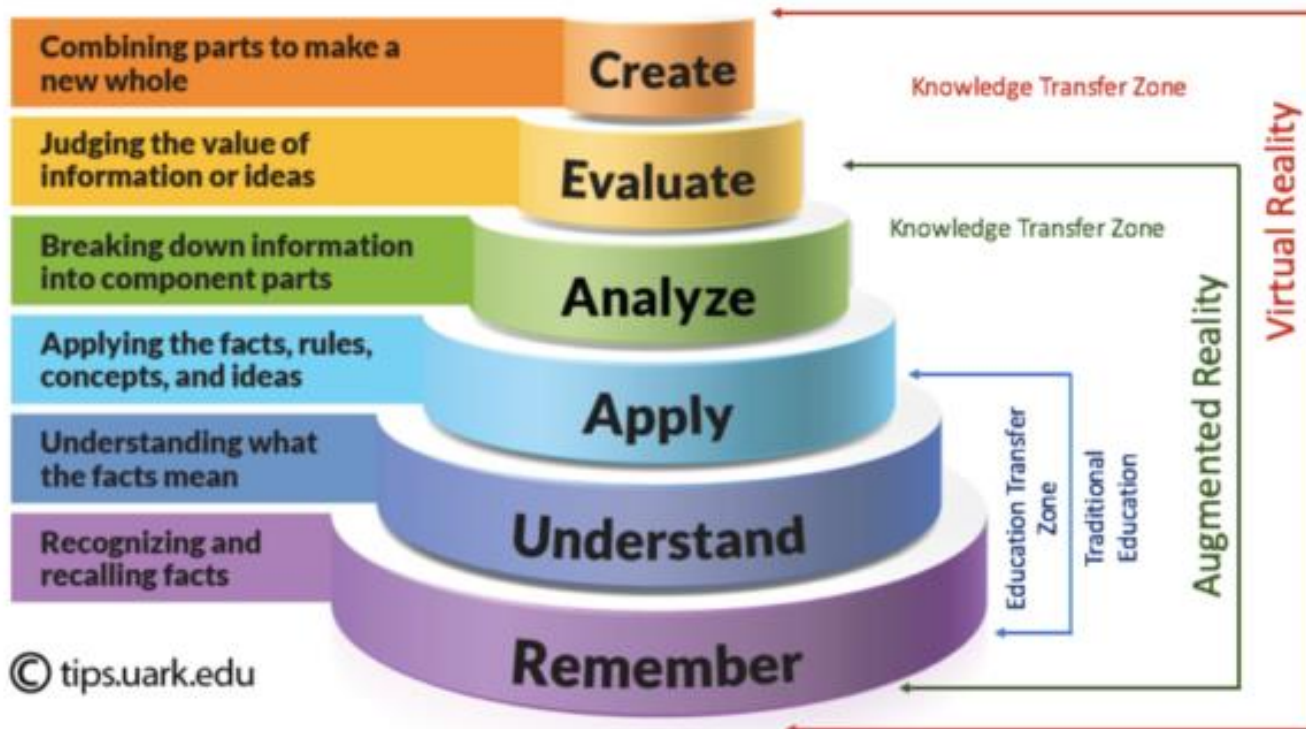
Higher
Education



RESULTS

Higher
Education

- Application + utilization + experience = success



Ongoing research
is pointing to
benefits

1. engagement
2. concentration
3. retention

RESULTS – Virtual Reality Curriculum II



■ VR nowadays



Business



Yes, we need it, how it works?

Higher
Education



Yes, but how can we use it?

everyone

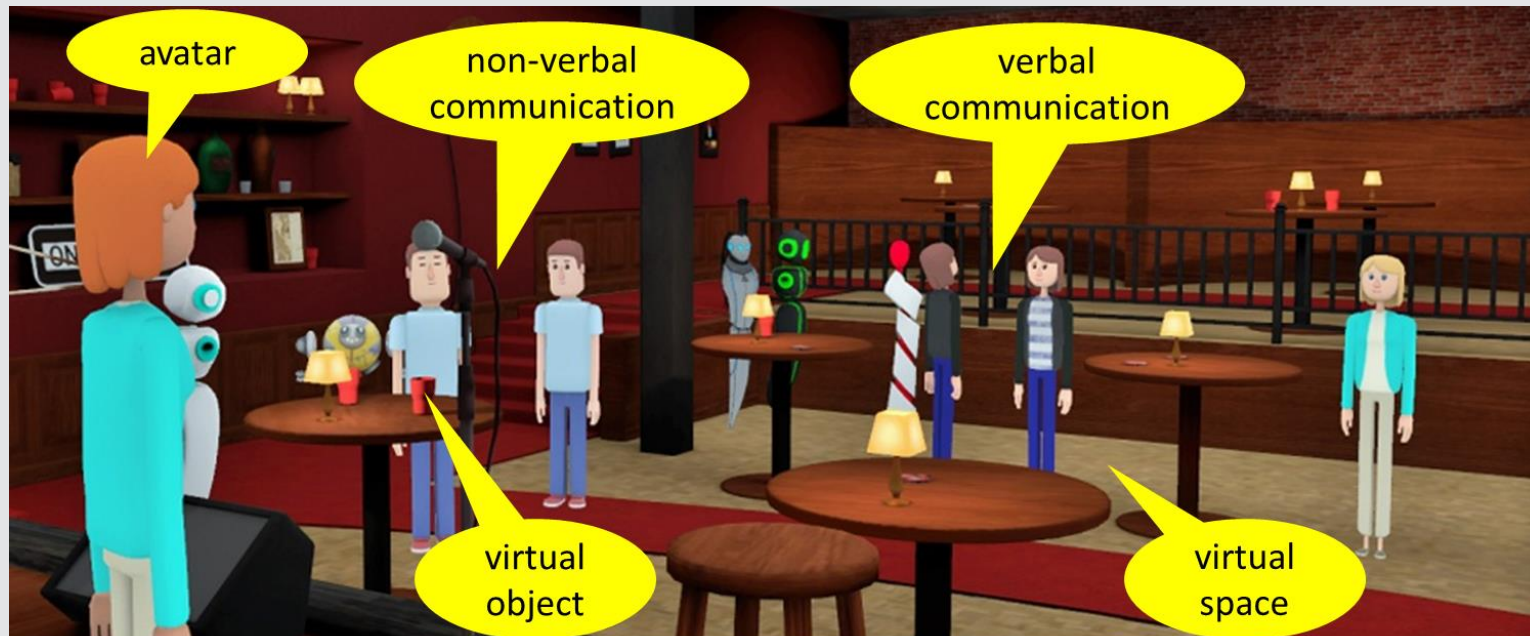


Yes, interesting ...

RESULTS

■ VR nowadays

everyone



A new social experiment on Facebook reveals introverts open up more in VR

VR Training Programme



- Let's start



1	5 day training course (5 days self learning)
2	Knowledge of VR technology & Competence in VR equipment
3	VRinSight Showcase and familiarize with available application
4	VRinSight VR Classroom with a new VR learning environment for everyone
5	Trainings for higher education & business

<https://www.vrinsight.org/results/vrinsight-training/>

The aim of 25 Best Practice Applications?

- Quick overview of 25 applications to demonstrate how VR technology can enhance Higher Business Management Education
- Provide information of how to evaluate VR apps

AND MOST IMPORTANTLY:

- Providing information of **how to apply the lessons learned** (i.e., what is the *logic/value/novelty* behind each of the Apps)



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

VR CLASSROOM

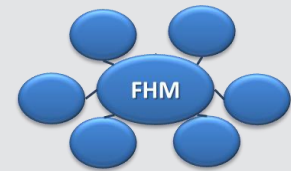


- Purpose built application as introduction to VR as learning tool
- Linear VR experience to illustrate theoretical learning content of training programme



<https://www.youtube.com/watch?v=27gJzz3Y2Kk>

LEARN, EXPERIENCE, DISCUSS AND DISCOVER FOR YOURSELF



- National Training Pilots
- please ask the VRinSight-Project for detailed support in your region



<https://www.youtube.com/watch?v=gDjtQlJnDlq>

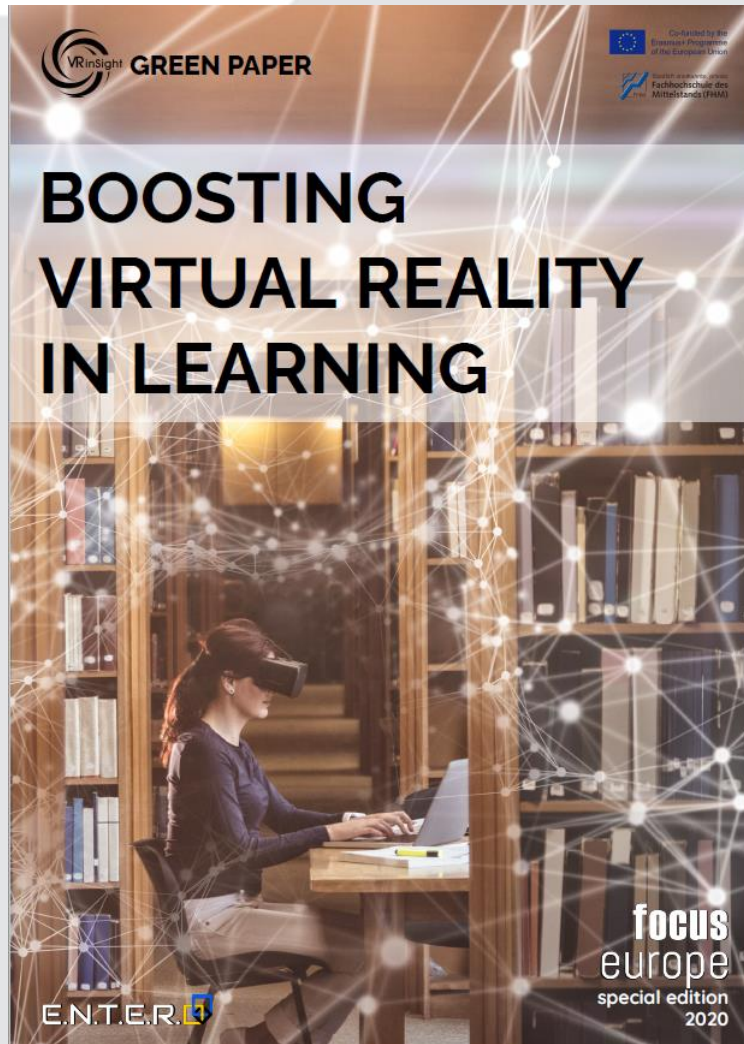
Main Result



Green Paper

- target groups; academics, SME management, stakeholders at a political level and the level of educational strategy and in industry
- Key note articles from experts across Europe, each outlining
- Sharing VR experience and potential for education.
- Lessons learned and recommendations from project across Europe
- guiding key stakeholders their choices and decisions regarding educational policy and strategy

ATTENTION, PLEASE!



120 pages content

VRinSight.org

Size: 116 MB

What's next?



VAMR Realities

- Virtual, Augmented and Mixed Realities (VR/AR/MR)

How can you find out quickly and reliably which VAM solutions are the most useful and target-oriented for your needs?

<https://vam-realities.eu/>


What's next?



- Cooperation of higher education institutions & companies
- Guideline on latest technology developments and use cases
- online platform will offer unique networking opportunities,
- Europe's largest network of VR/AR/MR experts and a comprehensive showcase of related EU projects.
- Intensive Coaching scheme of SMEs
- Call for Apps Competition

<https://vam-realities.eu/>

Call for Apps Competition



VAM Realities Challenge 2021

VAM Realities Challenge is a competition to uncover the best European XR solutions and make them available for the SMEs of tomorrow.

Winners will receive a wide exposure and access to European industrial sector in Belgium, Cyprus, Estonia, Finland, Germany, Italy, Spain and the Netherlands.

Read more and participate: www.vam-realities.eu

European wide XR competition - present your solution to industrial companies in several countries!

How to participate?

TIMELINE

VAM Realities Challenge will start accepting submission on the 7th of October 2020 and phase 1 participation will close on the January 15th 2021. A limited number of teams will advance into the next phase.

WHO CAN PARTICIPATE

Competition categories

- 1) Company - Any company with an XR solution that will be production ready by May 2021 can participate.
- 2) Student - Any student or a team of students in any European education institution can participate.

WHERE AND HOW

Details for participating can be found from the project website www.vam-realities.eu on the 7th of October.



<https://vam-realities.eu/>

Contact Details



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