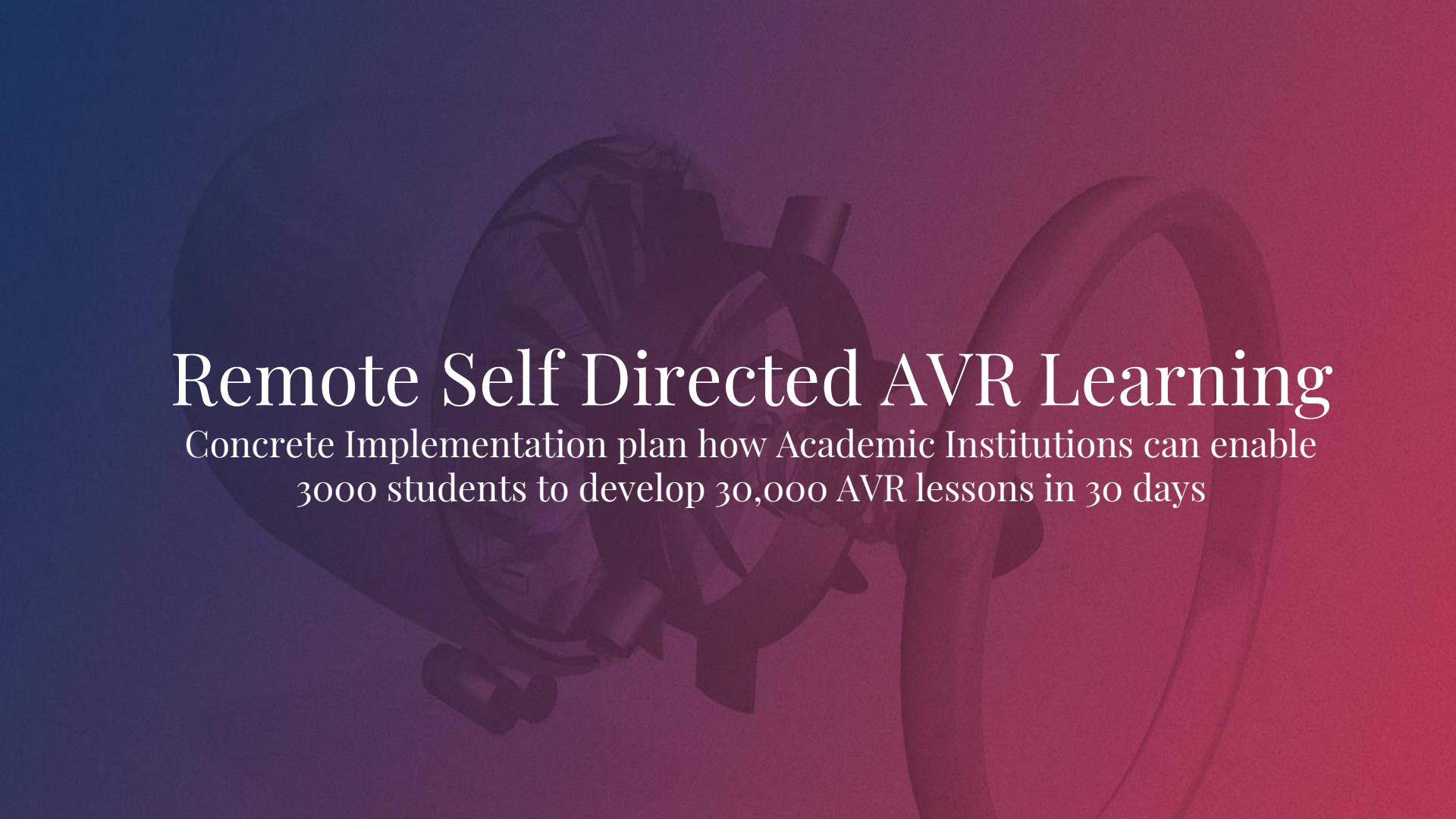


Remote Self Directed AVR Learning

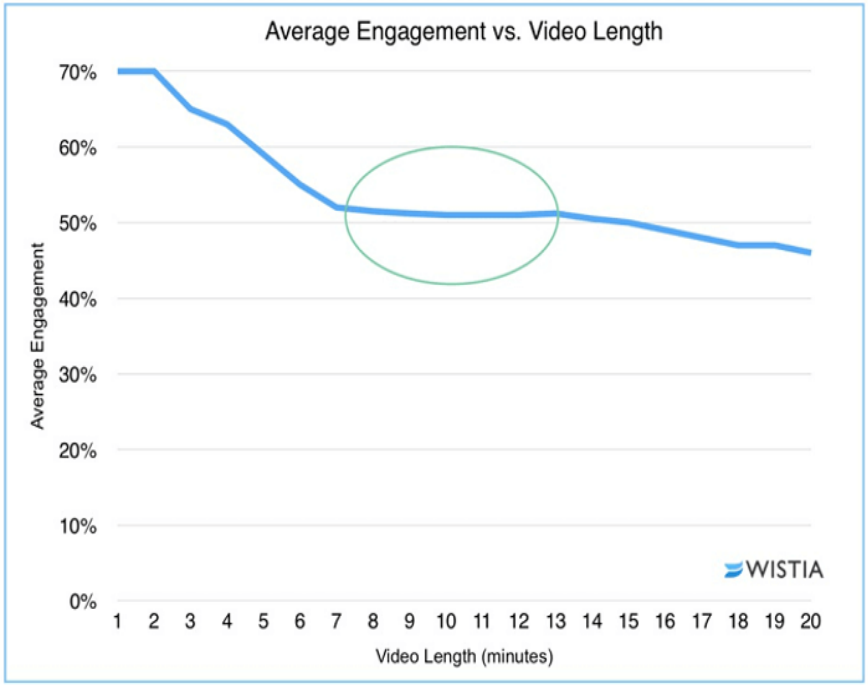
Concrete Implementation plan how Academic Institutions can enable 3000 students to develop 30,000 AVR lessons in 30 days

Self-Directed Learning with the AVR Platform

March 26, 2020

The Need for Remote Self-Directed AVR Learning Today

Online Problem: Students tune out after 6 minutes of Online Video



- As classrooms become the latest casualty of the virus, **how can we provide further support** to minimize disruption to classroom activity?
- For larger classes, the obvious option is to **shift the classroom lecture to a streamed video or broadcast.**
- However, studies have shown that **students are likely to tune out after 6 minutes of watching an online video**, regardless of its length.
- In contrast, general research findings suggest that students don't experience an attention **decline until after the first 10-15 minutes of an in-person lecture**.
- An **other significant challenge** is not just what happens in the classroom, **but how assessment is conducted.**
- In many places, assessment is still very conventional paper-based written exams with many students sitting together in a large exam hall.
- A number of schools **are beginning to conduct digital assessment** instead of these traditional exams and now, with Covid-19, there is some urgency to these changes.

The Problem with Student Engagement

According to a survey conducted by Indiana University, about **30 percent** of the students indicate they **are bored** due to lack of interaction with teachers and **75 percent** report material being taught **is not interesting.**

What students want

Students want more interactive classes and prefer **activities that involve interaction** with teachers and peers.

30% are bored

75% not interested

Why the Need for Self-Directed Learning using EON Reality's AVR Platform

There is now a mountain of research to show that **students learn better** through **active and participatory learning** than when they are given information through didactic means such as lectures.

The **Guidelines on Learning** that Inform Teaching (developed at the **University of New South Wales** and used at schools such as **MIT**) are a **distillation of this research** into a form that instructors can apply to their management of student learning.

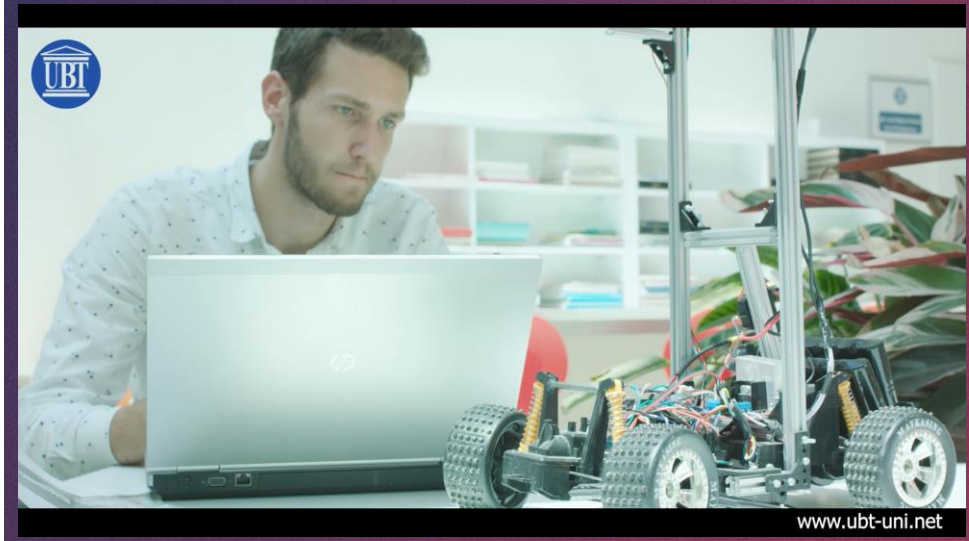
What are the elements and benefits of Self-Directed Learning?

- **Active Learning**; Engagement of students in the learning process
- **Developing 21st century critical skills** of critical evaluation, analysis and inquiry from research and scholarship
- Developing **digital skills and creativity** using AR/VR technology
- Students learn to **explore, question, react and respond** to learning material relevant to them
- **Collaborative and cooperative learning** with peers to develop professional, interpersonal and cognitive skills
- **Allows students to become experts** in their subject matter and take responsibility for their learning

Use Cases

University for Business and Technology (UBT) Creates 20,000 AVR Lessons in 30 days

- This Partnership enables a **large-scale adoption of the self-directed learning initiative** at University for Business and Technology (UBT) in Kosovo.
- Educators and employers around the world turn to the AVR Platform as a means to **learn and train remotely during the current COVID-19 pandemic**.
- As outlined in the Global Emergency Initiative, **EON Reality's primary goal is to provide as many AR and VR lessons and resources as possible** to the people who need them most.
- Many members of **EON Reality's global network** are joining the self-directed learning movement as a way to **effectively educate current students** while also **preparing their curricula for the future**,
- The addition of the extra lessons will allow schools and businesses around the world to **obtain and maintain comprehensive online AVR courses** for daily usage through the AVR Platform.



UBT **students and professors** are utilizing the AVR Platform to create approximately **20,000 lessons** — on subjects spanning **20 different programs** — over the course of the **next two months**.

Catalog of Turn-key AVR curricula

BACHELOR PROGRAMS

- Mechatronics Management
- Architecture
- Construction Engineering
- Media And Communication
- Energy Engineering
- Nursing
- Integrated Design
- Food Science And Biotechnology
- Pharmacy
- Dentistry
- Agricultural And Environmental Engineering
- Digital Art And Media
- Anesthesiology Technician
- Radiology Technician

MASTER PROGRAMS

- Media And Communication
- Construction Engineering
- Mechatronics Management
- Architecture
- Pharmacy
- Dentistry
- Food And Technology Sciences
- Electricity And Power Markets

“By introducing this first batch of new student-created lessons to the AVR Platform, we want to show people **how easy and effective it is to create lessons, courses, and even entire curricula** in a **very short amount of time**. It is our goal that after adding the first 20,000 lessons approximately two months from now, we’ll be able to replicate that around the world for teachers everywhere and of all levels. For now, we are very pleased with how self-directed learning is **helping to take the pressure off of teachers** while also serving as a valuable and unforgettable learning experience for the students.” - Dan Lejerskar, Founder of EON Reality

.

National Rollouts to conquer the biggest pandemic learning challenges

- Larger National Partnerships with Governments based on **Private Public Partnerships**
- A concrete Example is the national rollout in **Singapore &** the implementation plan **for Morocco** developed together with USAID
- **Stage I Establish the IDC**, deliver 6,500 licenses including deliver 220 boxes, the equipment, etc., install and inaugurate within 4 months
- **Stage II Needs assessment** - jointly develop and agree upon the needs assessment with the local partner within 6 months, Send the team of 2 VRIA teachers and specialists to conduct a needs assessment
- **Select Target academic level**, University technical vocational training or elementary school, They will review out existing library
- **Select Regions teachers and students** for the VR innovation Academy knowledge transfer activities For each of the 3 levels outlined Above Under the AVR knowledge transfer mechanism
- **Stage III pilots** in selected regions and academic institutions within 8 months
- **Stage IV National rollouts** adapted based on feedback from the pilots within 18 months

The Global Movement

EON's Remote AVR™ global roll-out

Example of EON's Remote AVR™ global roll-out where the AVR Platform is being adopted

EON's Remote AVR™ global roll-out

ASSAM ELECTRONICS DEVELOPMENT CORPORATION LIMITED AND EON REALITY ANNOUNCE FIRST AUGMENTED AND VIRTUAL REALITY CENTER IN INDIA

EON REALITY AND THE COMMUNITY OF CANARY ISLANDS INAUGURATE THE FIRST CLASSROOM 3.0 CAMPUS IN SPAIN

LUCERNE UNIVERSITY OF APPLIED SCIENCES AND ARTS AND EON REALITY ANNOUNCE AR/VR CENTER IN SWITZERLAND

EON's Remote AVR™ global roll-out

MOHAMMED VI POLYTECHNIC UNIVERSITY HOSTS THE NEW AUGMENTED AND VIRTUAL REALITY CENTER IN MOROCCO IN COLLABORATION WITH EON REALITY AND USAID

EON REALITY AND SUS CO., LTD. ANNOUNCE VR INNOVATION ACADEMY FOR KYOTO

CENTEXS AND EON REALITY ANNOUNCE FIRST AUGMENTED AND VIRTUAL REALITY CENTER IN MALAYSIA

EON's Remote AVR™ global roll-out

EON REALITY AND THE JINSHUI SCIENCE AND TECHNOLOGY BUREAU ANNOUNCE PARTNERSHIP TO BRING INTERACTIVE DIGITAL CENTER TO HENAN PROVINCE, CHINA

EON REALITY AND MOHAWK COLLEGE INAUGURATE AUGMENTED AND VIRTUAL REALITY CENTER IN ONTARIO, CANADA

EON REALITY AND UNIVERSITY FOR BUSINESS AND TECHNOLOGY ANNOUNCE PARTNERSHIP TO BRING AVR CLUSTER CENTER TO THE REPUBLIC OF KOSOVO

EON's Remote AVR™ global roll-out

EON REALITY ESTABLISHES DISTRIBUTION PARTNERSHIP WITH ACCUTEQUE FOR AUSTRALIA AND NEW ZEALAND

EON REALITY AND REGIONE EMILIA ROMAGNA INAUGURATE IDC IN BOLOGNA ITALY

EON REALITY AND ORAL ROBERTS UNIVERSITY PARTNER TO CHANGE GLOBAL EDUCATION WITH AN AUGMENTED AND VIRTUAL REALITY LEARNING CENTER

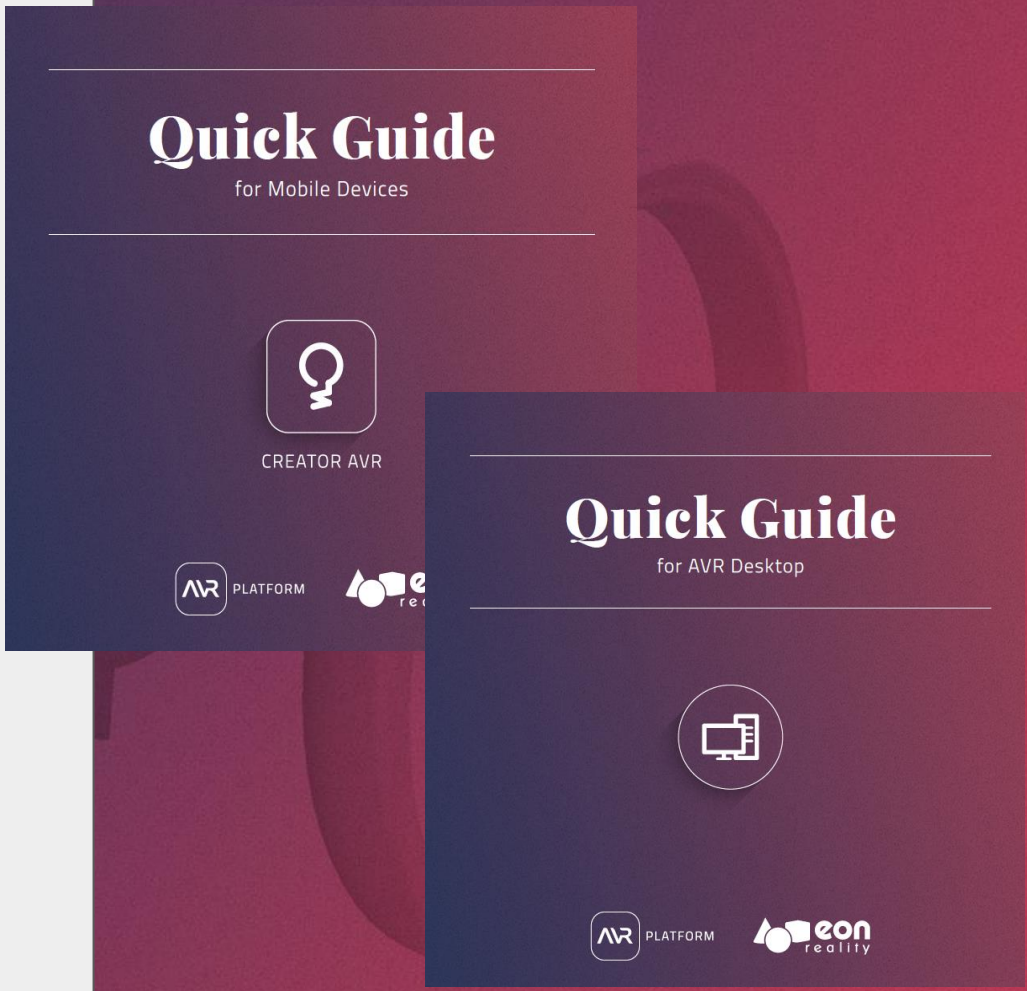
The 9 Step Implementation Plan For Self-Directed Learning Modules with the AVR Platform

Step 1: Identify lecturers in your institution who have undergone the Level 1 training to define where the AVR platform can integrated into a current lesson plan

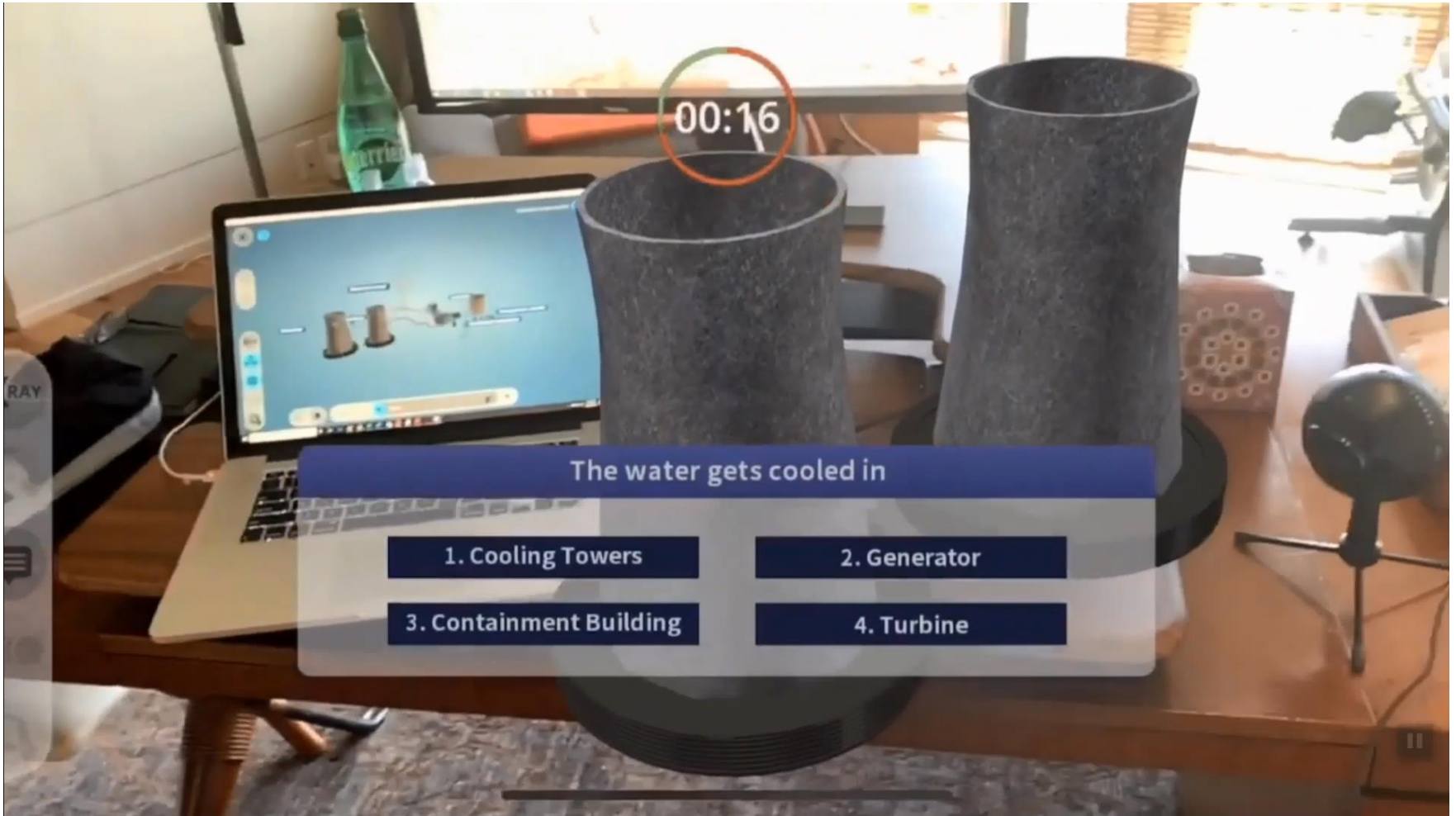
Step 2: Identify 3000 students or more in undertaking the courses under the teacher's instruction to enroll for an AVR platform account

Step 3. EON Reality will host a series of workshops and provide various resources including videos for students to learn how to create content on the AVR platform

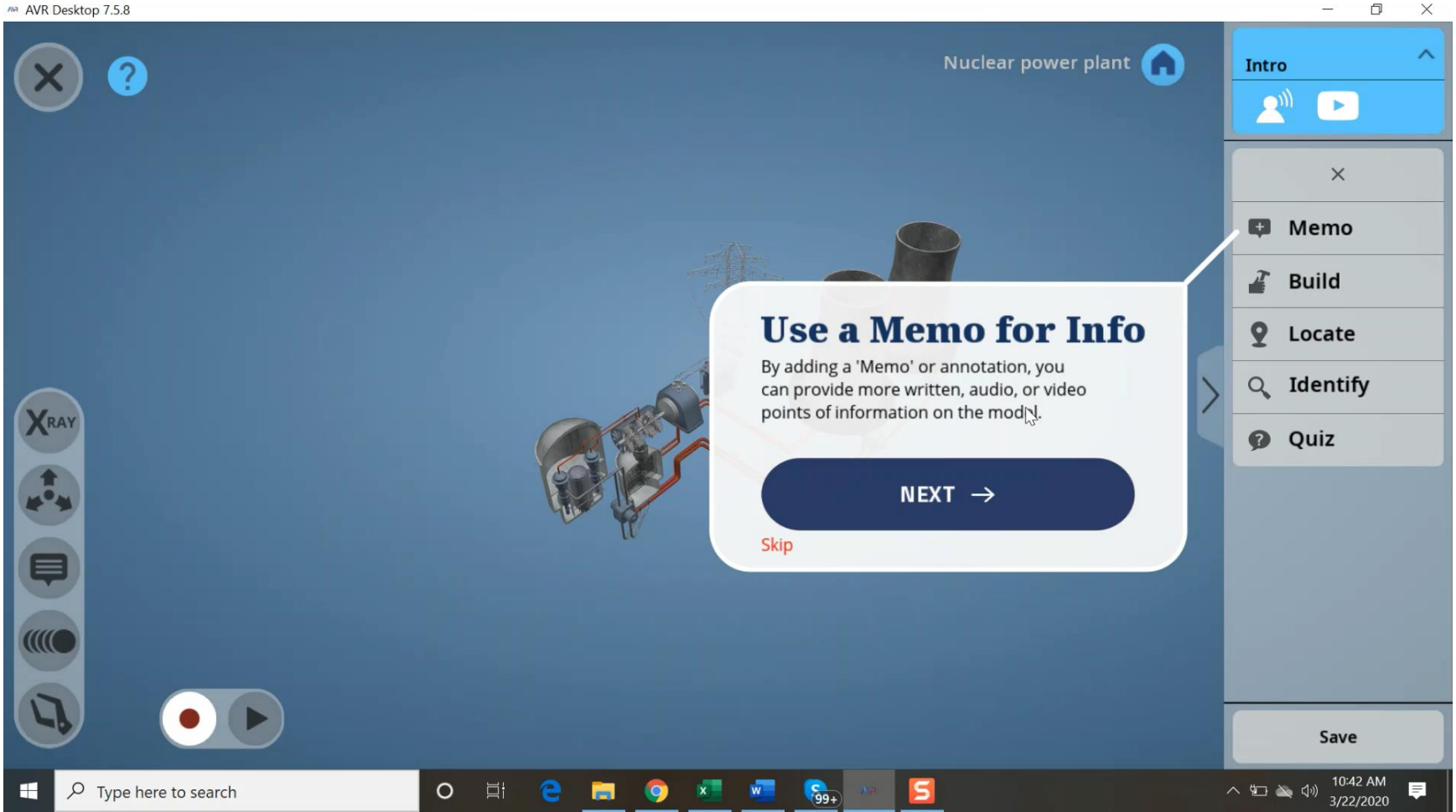
1. Create content on the AVR platform on mobile devices
2. And the desktop and key components of a quality lesson.
3. They will also have to read the Lesson Creation Guide for the Mobile
4. The Lesson Creation Guide for the Desktop.



Create Content On The AVR Platform On Mobile Devices



Create Content On The AVR Platform On Desktop



Lesson Creation Guide For The Mobile

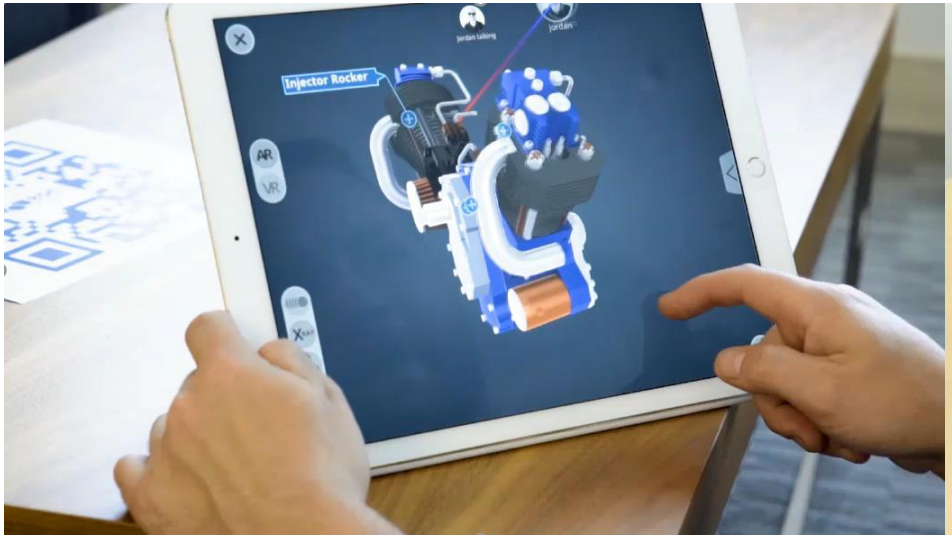
Lesson Creation Guide For The Desktop

Remote AVR – Safe and Secure Remote Knowledge Transfer Solutions

Self-Directed Learning

- The AVR Platform's intuitive **user-friendly interface** requires **no coding or programming knowledge**, which provides both students and teachers with **the ease and ability to create on-the-go lessons** to demonstrate key learning concepts.
- The lessons can be **recorded and shared across the student cohort** and can empower students with peer-designed lessons.
- **Students** can be compelled to learn the material better by being entrusted with the responsibility of being the expert when **creating their own lessons.**
- As we experiment with online teaching methods in a time of crisis, shouldn't we take this opportunity to **help students become more invested in their learning?**
- Whether it is in a time of planned circumstances or emergency, being prepared for virtual learning will not only **reduce our vulnerability in a difficult period** of forced school closures, but also pave the way to **more effective online learning methods** in the future.

EON's augmented virtual reality collaborative platform enables large groups to gather, interact and learn without any risk of physical exposure

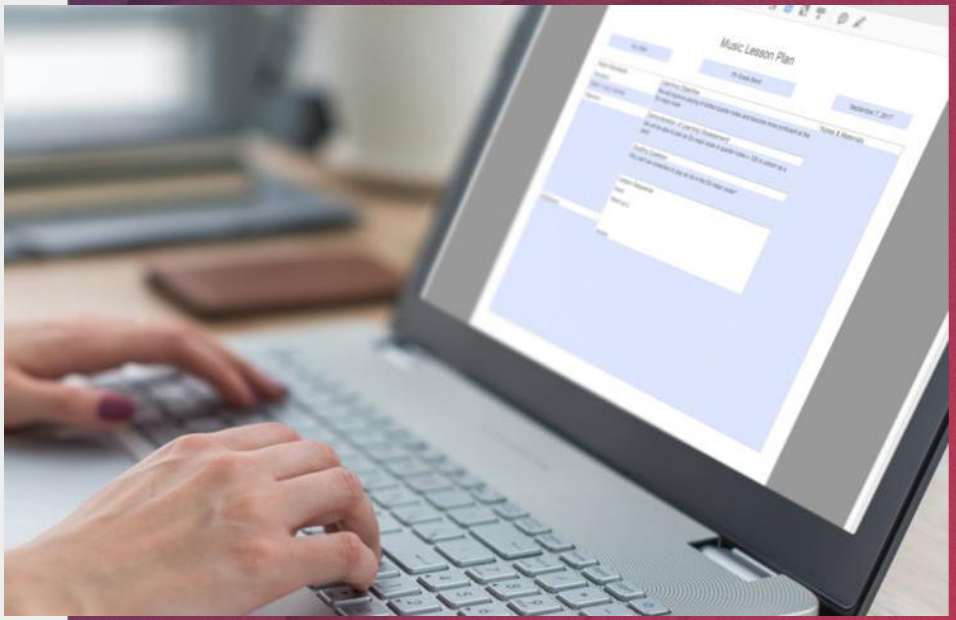


Multi user Remote Pre-training
Sales Training

Remote Procedure Practice
Remote Training
Remote Virtual Certification

Remote Expert Assistance
Real Time Distance Data Display

Step 4: Teachers to outline the learning outcomes and assign each student to create 10 lessons on identified specific topics within a defined timeline of 30 days



Guidelines:

- Set a relatively **open-ended topic** for the subject.
- **For example**, if students need to learn about the circulatory system, the instruction could be “The goal is to construct a lesson that demonstrates how blood gets around the body.”
- It is then **up to the students to choose** the right model, videos, explanatory memos, and so on.

Step 5a: Teachers to set criteria that are appropriate to the self-directed learning task with support from EON Reality's Chief Learning Officer, Dr. Peter Looker

Qualitative Guidelines:

- For example, students should **connect components of the event** with memos and use text-to-speech (rather than their own audio).
- They should include only **videos that they can connect** directly to the **context.**
- **Quizzes should be used for concepts**, not the naming of parts, and so on.
- In other words, students are to be encouraged to **think in terms of analysis, synthesis and logic** rather than in a random cut-and-paste way. (The labelling of parts is proven to be a very poor way for students to learn and does not transfer to everyday problems, so it should be avoided unless it is explicitly tied to conceptual thinking.)

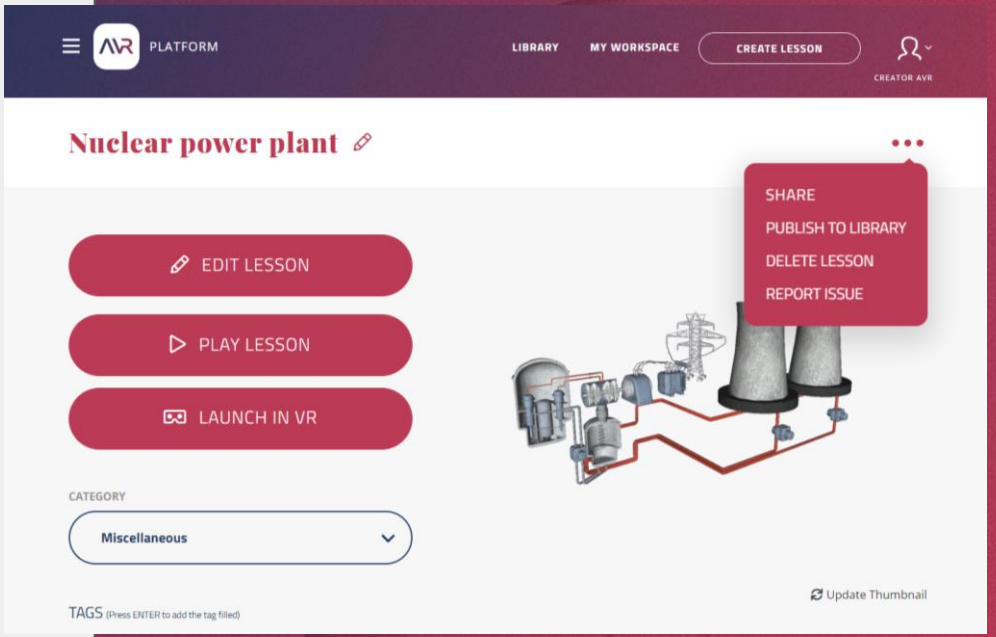
Step 5b: Teachers to set criteria that are appropriate to the self-directed learning task

Quantitative Guidelines:

- **Introduction with 1 x Audio Narration & 1 video** (1 min in length for each voice-over, either text to speech or voice recording)
- **2 x Contextual Information points (**Memos) – (Either editing the current annotations or to add new ones, to allow the lesson to be more relevant and contextual)
- **1 x Audio Narration** (1 min in length for each voice-over, either text to speech or voice recording)
- **3 x Activities** (Choose any suitable 3 out of the 4 types of activities possible. The choice must be made so the activity becomes meaningful and at the right challenge level. Not too easy and not too difficult)
- **1 x Additional supporting media** - YouTube video (Choose a suitable section or sub-section where this video would add value to the 3D lesson.)
- **1 x 3D Recording o**f a lesson focus on process such as a step by step procedure (Ensure recording is clear with clear voice and good step-by-step explanation)

Step 6: Students to publish/share the lessons created in the defined institution with teachers and fellow students

- **Teacher assessment:** Teachers students will be able to see in the when the student have created the lesson and who has created the lesson and has the ability to review it
- **Peer assessment:** Teacher will also assign each students to review at least 10 lessons created by other students to achieve peer review and the students
- **Statistics on Assessment of Learners**: Teacher will also assign Students to play a lesson to aseess their own skills in the topic

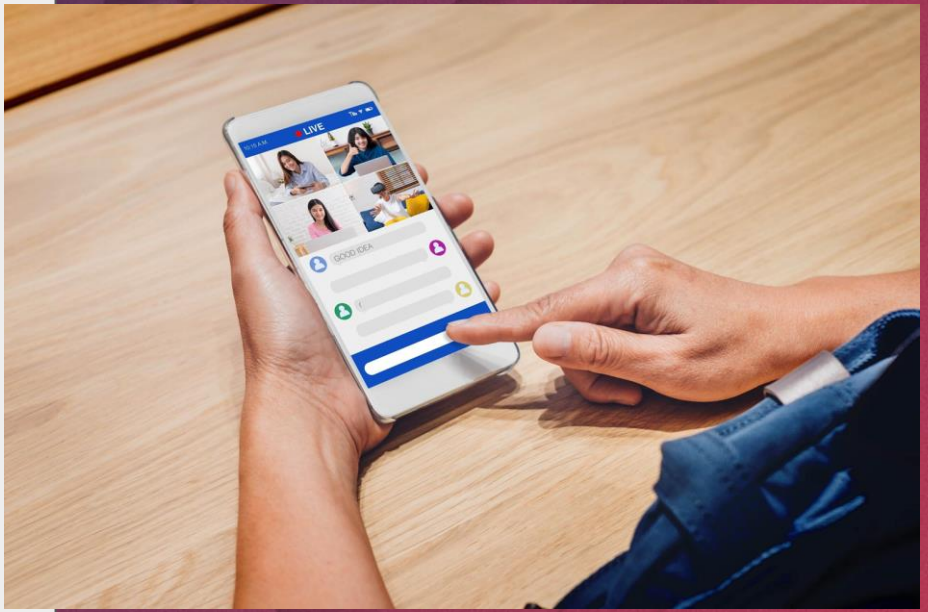


Step 7: Evaluating the lessons.

- In order to ensure high quality, the **criteria** against which they are to be judged should be **clear and encourage deep learning and coherence**.
- **Each component** of the session — whether it be a memo, x-ray, on-screen recording, or something else — **should have meaning** as part of the whole.
- **Videos** should be chosen not in a cut-and-paste way because they mention the topic, but because they have **intellectual quality and depth.**

Step 8: Guiding the students to self and peer evaluation on the effectiveness of the lesson

- After they have created their lesson, ask **students to explain what they were trying to achieve** and how successful they were.
- Alternatively, **peers can be asked to say how successful the lesson is** for learning.
- This can be done **remotely on the AVR Collaborative Classroom Feature** or any video conferencing tool



Step 9: Incorporating the top student created lessons as part of the standard learning curriculum and continue the model for future student intakes

How is the AVR Platform uniquely suited for Self-Directed Learning?

- Can be **used anywhere and anytime** on mobile, tablet, desktop, or VR headset.

- Requires **students to learn contextually** by seeing, analyzing, and manipulating the content in 3D
  .
- The **multi-user remote features motivate students to share** and undertake **peer learning.** There is a greater likelihood of peer review, as **students can show one another** what they have created and get feedback.

- A key feature for student learning is the **on-screen Immersive recording**, which requires a degree of effort and discipline to manipulate the model and discuss it in a meaningful way. Using the **text-to-speech feature in 28 languages** also disallows cut and paste plagiarism

- Allows the **easy creation of multimedia learning activities** and experiences with voice recordings, videos, text. This means **students need to develop their skills** at using different elements to create a coherent and meaningful product.

Reference Materials

- news release
- Safe Knowledge Transfer Solution for Schools, Governments, and Enterprises video.
- "Safe and Secure Knowledge Transfer for Schools, Governments and Enterprise" next Monday, 30th March by clicking this registration link.
- **Comprehensive PowerPoint presentation of the Remote AVR packages**
  PDF version
  Full PPT version
- **Client Outreach**
  Generic Letter
- **Some examples of social media messaging, I encourage you to follow my LinkedIn profile for the latest updates)**
- https://www.linkedin.com/posts/danlejerskar_ar-vr-remotelearning-activity-6648634961194688512-nzko
- https://www.linkedin.com/posts/danlejerskar_eon-reality-releases-new-remote-ar-and-vr-activity-6648331631423827968-kc34
- https://www.linkedin.com/posts/danlejerskar_how-to-save-lives-defibrillator-activity-6648278256460148736-GZWo
- https://www.linkedin.com/posts/danlejerskar_coronavirus-and-the-rise-of-the-edtech-industry-activity-6648205863549046784-Ht7f
- https://www.linkedin.com/posts/danlejerskar_5-creative-ways-teachers-can-use-the-avr-activity-6647860289050157056-ZMtC
- **Blog and articles published by EON Reality in relation to remote learning and training:**
- EON Reality Release New Remote AR and VR Packages for Education, Government and Industry
  https://eonreality.com/ar-vr-remote-packages-covid-pandemic/
- 5 Creative Ways Teachers Can Use The AVR Platform To Teach At Home
  https://eonreality.com/5-creative-ways-teachers-can-use-the-avr-platform-to-teach-at-home/
- Delivering Safe and Secure AR/VR Knowledge Transfer Solutions for Schools, Governments and Enteprises
  https://eonreality.com/delivering-safe-and-secure-ar-vr-knowledge-transfer-solutions-for-schools-governments-and-enterprises/
- How can AR and VR Help In A Pandemic
  https://eonreality.com/vr-ar-remote-learning-working-coronavirus/

Thank You