# **IO1: Good Practices**



Practice	ClassVR
Source/Link	https://www.classvr.com/
Country/region/city	United Kingdom
Time frame	Avantis Education (owner) founded in 2007 ClassVR (solution) conceptualised in 2014 launched in 2017
Sector	<ul> <li>VET</li> <li>School education</li> <li>Higher education</li> <li>Continuing vocational training</li> <li>Other (spec)</li> </ul>
Target group	Teachers
Short description	ClassVR is a versatile platform using the power of Virtual and Augmented Reality for education and training from the classroom to the boardroom. Introducing a whole new concept in educational technology: a 'standalone' Virtual Reality headset complete with a unique student-friendly interface, gesture controls, embedded educational resources and simple-to-use teacher controls. ClassVR is a groundbreaking new technology designed to help raise engagement and increase knowledge retention for students of all ages. And it's affordable too, really affordable VIRTUAL & AUGMENTED REALITY USED FOR VOCATIONAL TRAINING Vocational training will really begin to feel the impact of virtual and augmented reality over the next year or so. The ability to experience training in 360 is invaluable – and imagine budding mechanics viewing a working engine from all angles without leaving the classroom. All this is possible right now with ClassVR. VR & AR FOR FURTHER EDUCATION Universities and colleges have always been at the cutting edge of new technologies, driving development and creating the next generation of scientists, developers and entrepreneurs. Virtual and augmented reality technologies are at the frontier of development right now; the market is forecast to reach \$13.9 billion in 2017 (IDC), and change is happening at a frenetic pace.
Methodologies and animation techniques used	VIRTUAL & AUGMENTED REALITY USED FOR VOCATIONAL TRAINING will really begin to feel the impact of virtual and augmented reality over the next year or so. The ability to experience training in 360 is invaluable – and imagine budding mechanics viewing a working engine from all angles without leaving the classroom. All this is possible right now with ClassVR.



# EXPERIENCING WORKPLACES

Giving students the opportunity to experience the reality of being in an unfamiliar working environment is absolutely key to success in vocational training – but often difficult and expensive to achieve. 360 videos from the perspective of an employee can work alongside traditional shadowing and workplace visits, allowing students to revisit challenging situations at their own pace.

## LEARNING SKILLS

Vocational training is all about the balance between gaining knowledge and building experience – learning through practice. The ability to go back through scenarios again and again, without additional expense or inconvenience, is a great advantage. Augmented reality is particularly powerful in this context; see how a technique is performed or a machine functions in the real world.

## GAINING A NEW PERSPECTIVE

In addition to putting themselves in the shoes of an experienced employee, VR gives students a unique method of empathising with customers, service users and clients. What does it really feel like to be an elderly person receiving residential care? How can this shift in perspective encourage reflective practise in trainee care assistants?

## **VR & AR FOR FURTHER EDUCATION**

## STAYING AHEAD OF THE TECH CURVE

How can your institution stay ahead of the curve without investing millions in every emerging technology? Much of the commercially-available virtual and augmented reality equipment is prohibitively expensive for all but the most committed departments and requires a high-spec PC to run – an extra cost. Not so with ClassVR headsets. Their all-in-one design, gesture control and browser-based management portal bring affordable AR and VR within reach of every institution.

ClassVR gives you the opportunity to open up access to virtual and augmented reality technologies across your college or university – not just within the Computer Science building.

# VR AS AN AIDE TO DEEP LEARNING

Researchers in science and medical fields are already making great use of immersive technology. Although augmented simulations and views inside the body are obviously great tools for learning, something as simple as experiencing the world from the perspective of an elderly patient with dementia can have an enormous lasting impact on a medical student's approach.

The empathic response triggered by a 360 video is so much more powerful than reading case studies alone (Oh, S.Y., Bailenson, J., Weisz, E. Zaki, J., 2016).

## **NEW MEDIA & ARTS APPLICATIONS**



	Implications for the arts are just as profound. Immersive, 360-degree photography and videography have enormous potential as new forms of media. ClassVR allows students to easily load self-created content onto headsets through a simple web portal. Empower your students to build immersive, multi-perspective films; give them the tools to tell stories in new ways and portray the world from limitless perspectives.
Digital solutions used	VR-Virtual reality using ClassVR googles 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) and business (such as virtual meetings). Other distinct types of VR-style technology include augmented reality and mixed reality sometimes referred to as extended reality or XR. 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. 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. The overlaid sensory information can be constructive (i.e. additive to the natural environment), or destructive (i.e. masking of the natural environment). This experience is seamlessly interwoven with the physical world such that it is perceived as an immersive aspect of the real environment. In this way, augmented reality alters
Contents/issues on which methodologies and animation techniques are applied	//

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Technical equipment	The Standalone Virtual Reality Headset for Schools The Standard ClassVR Headset, the first of its kind, is a revolutionary, award-winning VR & AR technology for immersive learning. Unlike other solutions, ClassVR is designed specifically for education to ensure create engaging lessons with virtual reality is possible for schools. The Virtual Reality Headset Designed for Education Our most advanced virtual reality headset yet. The latest ClassVR Premium Headset (64GB) includes upgraded storage capacity, processor and RAM for a reliable, streamlined and efficient VR & AR experience in the classroom, with everything you need to get started!
Experiences, findings, results, lessons learnt (Project internal view)	AS this is not a project I do not have access to an internal view, however they provide a lot of useful information in their blog https://www.classvr.com/school-virtual-reality-news/educational-vr-lesson-ide as/
Strengthen	ClassVR is targeted to a wide age range; from early preschool to students enrolled in universities and colleges and in a study conducted this year, 70% of students ages 8 to 15 express interest in some type of VR (Tanne, 2018). So how does this tool differ from other VRs out there?
	The most obvious is that they do not require the use of any mobile devices, making it more accessible for the younger students who do not have phones. Teachers can also access the devices classroom portal that has a number of pre-uploaded, curriculum-aligned resources.
	Don't have exactly what you are looking for? You can upload your own content, making this device pretty accommodating for lessons.
	Once students put on the headset, they have access to the "holodeck," which is the interface of the device. To choose a resource within the holodeck, students can use simple gestures like a "thumbs up" or tilting their head.
	From there, they are free to explore the teacher-chosen content. An additional bonus is a use of correlating worksheets that go along with the lessons available through the program.
Weaknesses	Paid third party solution Cost. A set of 8 headsets, charging case and storage would cost a school about \$3000.00 so it could be a pretty expensive investment depending on the quantity needed. You can purchase and request a quote at http://www.classvr.com/contact/get-a-quote/.
	There are also some general concerns with VRs that should be taken into account.
	The setup time for ClassVR can be consuming, as each device does need to be connected to the school website and classrooms need to be set up along with class rosters.



	Safety should also be considered, once students put on those headsets, the real world is blocked out, so there is the potential for students to walk into objects and get hurt. However, it should be noted that the camera in this particular headpiece is also used to provide a 'classroom view' through the headset, helping students stay safe and aware of their surroundings. Also, teachers should be mindful of the experiences students are accessing. Jeremy Bailenson (2018) suggests that "if you wouldn't want your children to live with the memory of the event in the real world, then don't have them do it in VR." Be mindful of the content students are viewing, in addition to the time, they are spending viewing it.
Other relevant information	Avantis Education (owner of classvr) has been supporting teachers to embed classroom technology for almost twenty years and has delivered its products to tens of thousands of schools in more than 20 countries globally. Driven by the ethos of developing simple, effective and innovative solutions to classroom challenges, Avantis now boasts a diverse portfolio of classroom-focused products and services that are in daily use by millions of students. With award-winning brands; LearnPad, ClassCharge and ClassConnect and the launch of the revolutionary ClassVR, Avantis is continually reinventing how technology is used within schools to support teachers to raise engagement and simplify the use of classroom technology.
Comments	This practice represents a practical usage of VR in education as such. They have an in-depth knowledge of teacher lessons planning, classroom management, AR content, and approved testimonials by professionals and they have started to work with the technology very soon. It can increase the general professional knowledge about VR, and AR, because it shows the way how they handle the technical equipment and the class management. Furthermore as a company which is working on helping teachers globally.
A contribution by	Virsabi