



CLASSVR®

# Virtual & Augmented Reality for Education

[classvr.com](http://classvr.com)



Our 50 Creative Ways booklet gives you a taster of the creativity we've seen develop as schools worldwide explore the possibilities that Virtual and Augmented Reality can offer in the classroom.

50 Creative Ways is a practical and inspiring guide to using ClassVR as a teaching tool. You'll find out how students of all ages have explored a wide range of content. Lessons used 360 degree images, videos or interactive experiences as an incredible stimulus across the curriculum, from Antarctica to Ancient Maya and the Maldives to the Moon. Others gave students the opportunity to examine 3D models up close using Augmented Reality; imagine holding a snowy owl, Roman sword or distant planet in your hands!

[www.classvr.com/50-ways](http://www.classvr.com/50-ways)

Contact us for a paper copy:

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✉ [community@classvr.com](mailto:community@classvr.com)

ClassVR is a complete Virtual and Augmented Reality system for the classroom. It provides an engaging, immersive experience for students of all ages, and allows them to view and understand subjects and topics through personal experience. The immersion and engagement students gain from VR dramatically increases their ability to understand and retain information. The key benefits of VR and AR in the classroom are:

- IMPROVED OUTCOMES THROUGH INCREASED ENGAGEMENT
- BETTER KNOWLEDGE RETENTION THROUGH PERSONAL EXPERIENCE

## THE MOST AWARDED VR SYSTEM FOR SCHOOLS



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### EVERYTHING YOU NEED FOR THE CLASSROOM

ClassVR is a groundbreaking technology designed to help raise engagement & increase knowledge retention for students of all ages. It gives you everything your school needs to enhance learning and deliver immersive experiences in the classroom...



#### Classroom Headset Management

The ClassVR portal is a simple way to discover and deliver engaging VR/AR content and lessons. Providing full control and management of multiple headsets in the classroom from a simple web page, the ClassVR portal makes classroom-based VR a reality.

#### Standalone VR Headsets

ClassVR's headsets are standalone, classroom-ready devices, delivering a fully immersive VR/AR experience under the teacher's control. Unlike other VR headsets, ClassVR does not require any additional devices, such as phones. Everything is fully integrated into the device, making it easy to use and incredibly reliable.



#### Secure Storage & Charging

ClassVR offers multiple options for charging and storage; ruggedised portable cases for 4 or 8 headsets, or a 36 capacity mobile trolley featuring our revolutionary UVr™ headset cleansing technology. All options feature fully integrated charging and cooling, helping keep devices safe and ready for use.

#### Curriculum Aligned Content

Our structured lesson plans and highly engaging curriculum aligned resources help spark the imagination of students to greatly improve knowledge retention. With VR and our innovative Augmented Reality Classroom (ARC), there are thousands of experiences available... and counting!



#### Installation & Training

Comprehensive installation and immersive in-class training is available from our educational specialists. Not only will we ensure that everything is up and running, we will give you an overview of the ClassVR portal and some great lesson ideas too.

## HARDWARE

### STANDALONE HEADSETS - NO MOBILE DEVICE NEEDED

The ClassVR headsets have been designed for the use in the classroom, and can be used in multiple ways to achieve a Virtual, Augmented and Mixed Reality experience.

#### CVR-255

- ✔ Octa-Core Qualcomm Snapdragon™ XR1 Processor
- ✔ 3GB DDR RAM & 32GB Internal Storage
- ✔ 5.5" 2560x1440 Fast High Resolution Display
- ✔ 13MP Auto-Focus Front-Facing Camera
- ✔ USB-C Input/Charging
- ✔ Combination Fresnel/Aspherical Lens 100 Degree FOV
- ✔ 4,000 mAh Polymer Lithium-Ion Battery



#### CVR-155-A

- ✔ Quad-Core ARM Cortex-A17 Processor
- ✔ 2GB DDR RAM & 16GB Internal Storage
- ✔ 5.5" 2560x1440 High Resolution Display
- ✔ 8MP Auto-Focus Front-Facing Camera
- ✔ Full Size USB-A Port & Micro USB Port for Charging
- ✔ Aspherical Lens with Adjustable Distance
- ✔ 4,000 mAh Polymer Lithium-Ion Battery



### SECURE, MOBILE STORAGE & CHARGING

Maximising the investment in VR means making it available to as many students as possible. That's why all ClassVR charging and storage options have been designed to be as portable as possible, allowing teachers and students to easily and safely move the headsets from one classroom to another.

### OPTIONAL HAND CONTROLLER

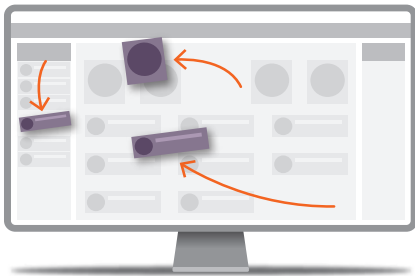
Adding to the excitement of ClassVR's innovative gesture controls, ClassVR now has a wired hand controller to simplify interaction and deliver an even more immersive experience. As we understand the pain of bluetooth connectivity with multiple devices in the classroom and having another piece of hardware to charge, ClassVR's optional hand controller is wired, so there's no set up involved when pairing to a specific headset.

### EASILY CREATE AND PLAN YOUR LESSONS

At the heart of ClassVR is our teacher-friendly portal, providing all the necessary content and tools to successfully deliver engaging lessons to your students.

#### SEARCH

With a simple to use search function and pre-made collections, it's easy to find VR and AR resources for your lesson. There are thousands already available, all of which are easily searchable by subject, topic or keyword.



#### BUILD, SAVE & SHARE

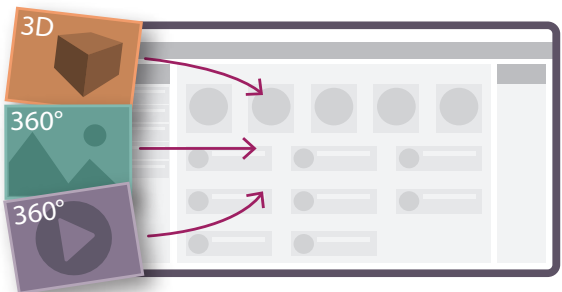
Using our intuitive drag and drop functionality, you can easily create custom resource 'playlists' in seconds, ready for you to deliver to your class at the click of a button.

Prepare your lessons ahead of time, then save them in your own 'My Playlist' library for easy access later.

#### UPLOAD YOUR OWN

The ability to create, upload and use your own content gives you maximum flexibility when teaching.

Find and upload your own VR content, including 3D models, 360 degree photos and videos, and build them into your own custom 'playlist'.

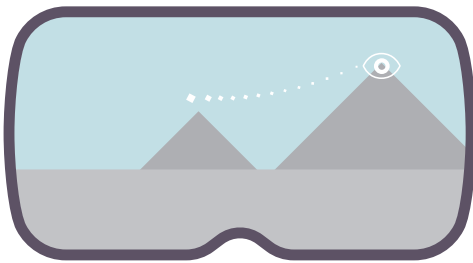
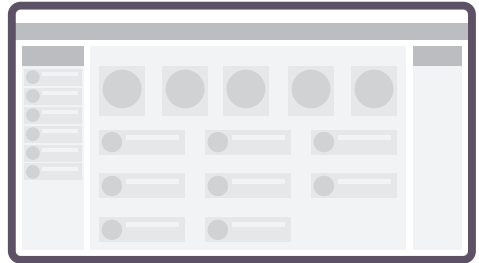


## DELIVER SEAMLESSLY WITH SIMPLE CLASSROOM CONTROLS

### LAUNCH ACTIVITIES SIMULTANEOUSLY

The ClassVR portal allows the teacher to deliver a defined playlist of resources to multiple headsets simultaneously.

A simple set of 'play' and 'pause' controls sends resources to headsets and starts experiences. Videos are sequenced so that every student will see the video at the same point, allowing teachers to explore and explain as it plays.

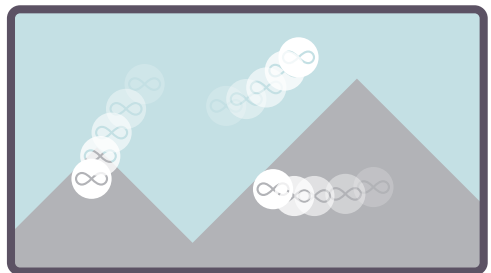


### DYNAMIC POINTS OF INTEREST

Students can be so immersed in a VR experience, it can be hard to get their attention. With ClassVR's dynamic 'Point of Interest' (POI), teachers can guide students to look at a specific part of a VR experience, by simply clicking anywhere on the 360 degrees resource that is playing. Students will see a trail of 'breadcrumbs' leading them to the POI.

### TRACK STUDENT FOCUS

Understanding where children are looking is almost impossible when they are wearing other VR headsets. ClassVR's innovative focus tracking feature allows teachers to see exactly where student attention is directed. Our unique ClassView functionality gives you the ability to see 'through the eyes' of each student allowing you to view what they are seeing, on an interactive display.





1000s OF  
IMMERSIVE  
EXPERIENCES  
INCLUDED

## CONTENT OVERVIEW

ClassVR comes complete with thousands of pedagogically sound curriculum-aligned Virtual, Augmented and Mixed Reality content, for use across all subjects, topics and age ranges. Choose from 360 degree photos, 360 degree videos, 3D models and explorable virtual scenes, that help teachers deliver fully immersive, exciting and engaging lessons. All resources are categorised, tagged and organised by subject matter, topic and age range and are fully searchable. Simple descriptions of each resource, along with key data and key questions are available online; alongside additional downloadable structured lesson plans, teacher guides and student worksheets.

## CREATE YOUR OWN CONTENT

Creativity is always at the heart of teaching, that's why ClassVR allows teachers and students to create their own content, from 360 degree photos and videos, to 3D models and even explorable scenes. Using devices such as 360 degree cameras, or creative packages such as Paint 3D, CoSpaces or ThingLink, you can build and create exciting Virtual or Augmented Reality content. It's simple to upload or link to your content in the ClassVR portal, ready to distribute simultaneously to multiple headsets. Upload and save multiple resources and file types, which can then be organised into lesson appropriate playlists, and even shared within the school.



## CURRICULUM ALIGNMENT

The ClassVR portal is available in over 20 languages and supports localised character sets and right-to-left layouts. Understanding the importance of aligning content to national curriculums, ClassVR's team of in-house teachers work closely with ministries and local in-country teachers to ensure that content is correctly mapped and organised logically for schools all over the globe. ClassVR's extensive library of resources are all tagged with key pedagogical information, such as subject area, topic, grade levels and key words, as well as specific alignment to teaching standards by country or region.



## SHARED CONTENT WITHIN THE CLASSVR COMMUNITY

Connect with educators around the globe by adding your creations to the ClassVR Community library. Imagine using a 360 degree camera to capture your local landscape, then sharing those images with schools all over the world - and widening your students' perspectives by bringing far-flung continents into the classroom.

Teacher created playlists can be submitted to the ClassVR community and once approved, they can be accessed by all subscribers, creating a huge bank of community





## 360° PHOTO

## VIRTUAL REALITY

1000s  
of 360°  
IMAGES

360 degree images are a great way to give students unique experiences, allowing them to visit remote places, see historical monuments, or experience locations they couldn't in real life. ClassVR includes access to a huge resource bank of 360 degree images, all categorised and grouped for easy access. Images can be searched by educational subject, topic and even keywords, and each image includes a detailed description, facts and even key questions to ask your students.



### UPLOAD YOUR OWN 360° PHOTOS

The ClassVR portal has been designed to work easily with 360 degree cameras. Students can use cameras to take photos and teachers can upload them into the portal, ready to send to connected headsets. Imagine sharing a group field trip with the rest of the students back at the school, or empowering them to create their very own guided tours or innovative photography. Alternatively, source and upload any 360 degree image then view it directly in the ClassVR headset.

### EXAMPLE - MAKING CONNECTIONS TO CURRENT EVENTS

A great way to harness the power of 360 degree images and give students an immersive perspective of any location is to create a lesson on current affairs. Countryside Elementary in Illinois, USA, created an excellent lesson studying the tragic fire at Notre Dame and were able to visit the cathedral in VR prior to the devastating fire and experience images of the exterior and the internal structure before it was destroyed.



Paige Green



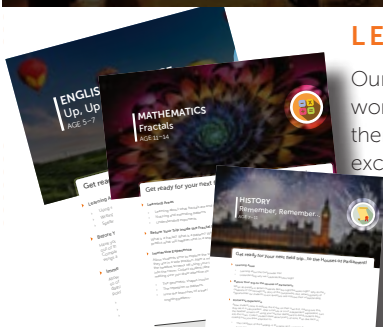
Countryside  
Elementary School,  
Barrington, Illinois,  
USA

***“ClassVR turned a current events lesson into a culminating experience. It connected my students to the news events in a way that printed word or an online video could not.”***

Find out more detail in our 50 Creative Ways booklet alongside some other great case studies!

### LESSON PLANS

Our 360 degree images are supported by pedagogically sound worksheets and lesson plans. The lesson plans support teachers by giving them the structure, activities and questions needed to integrate these exciting 360 degree images into their lessons. The ClassVR portal is updated regularly and you can find brand new images and lesson plans every month!





## 360° VIDEO

## VIRTUAL REALITY

100s  
of 360°  
VIDEOS

Our growing library of 360 degree videos takes immersion to the next level. Each video has been carefully chosen for its educational benefits: go swimming above a coral reef, visit the summit of Mount Everest, take a guided tour of London, witness a solar eclipse, or get into the carnival spirit in Rio De Janeiro! Get ready to take your students deeper into learning as you deliver video simultaneously to all headsets, keeping everyone focused and on task.



### UPLOAD YOUR OWN 360° VIDEOS

By using a 360 degree camera, teachers and student can take video footage of a school activity, the local area or even further afield on school trips. Capture everything and simply upload the file to your ClassVR portal to share the experience after the event. This truly makes activities accessible for all students and enables teachers to recap on key points back in the classroom. You can also source thousands of 360 degree videos online, covering a magnitude of topics, enabling teachers to immerse the class in different cultures or take them places not humanly possible.

### EXAMPLE - GENERATION OCEAN: CORAL REEFS

Immersing students in a 360 degree video, which has motion, sound and a multitude of activity taking place, provides for a dynamic and enriching learning experience. The ANGARI Foundation, in conjunction with the Academy of the Holy Names, in Florida, used a bespoke 360 degree video to support their students in learning about corals and reef ecosystems in preparation for a field trip to the Florida Keys. The objective was to explain a coral reef's geographical, societal, and scientific importance, as well as providing students with the opportunity to analyse modern corals and better understand how Florida's coral reefs have changed over time.



Dr Amanda Waite



ANGARI Foundation  
& the Academy of  
the Holy Names,  
Florida, USA

***"The students were engaged, asked thoughtful questions, and readily drew connections to other topics that they'd covered in their courses."***

Find out more detail in our 50 Creative Ways booklet alongside some other great case studies!

### LESSON PLANS

Unsure how to use integrate 360 degree videos into your lessons? Access and download our online lesson plans and guides, providing teachers with unique and exciting ways to use these engaging resources across the curriculum. Lesson plans are linked to specific resources and provide ideas and suggestions on how they can be used, including key questions to ask students and suggested follow up activities.





## 3D MODELS

## AUGMENTED REALITY

100s  
of 3D  
MODELS



Augmented Reality brings educational content to life, allowing students to view and interact with exciting 3D models, providing greater engagement, understanding and ultimately knowledge retention. Using the ClassVR headsets' front-facing camera, students can get up close and personal with content, such as a beating heart or an ancient artefact. For an even more interactive experience, bring our ARCube into view of the camera and the 3D model will attach to the cube, allowing you to manipulate and view the model as if you were holding it.



### CREATE YOUR OWN 3D MODEL

For a truly creative lesson, have students build a 3D model, convert to a supported file format and upload it to the ClassVR portal. SketchUp, Vectary, Sketchfab and Microsoft Paint 3D files are fully compatible, so even young students can easily build a 3D object. Within minutes, that object can appear in front of their eyes, or in the palm of their hand with ARCube.

### EXAMPLE - THE HUMAN BODY

3D models are dynamic, flexible and highly enriching learning tools, which allow students to access hard-to-reach or historical objects with ease. The objective of this lesson was for the students to understand why certain parts of the body were designed in such a way and how the shape, size and structure of different aspects of the human body contributed to a healthy human being. By using the Human Anatomy playlist to explore different sections of the body, students were provided with a detailed view of body parts to interrogate and ask questions about. After the experience, children wrote down as many body parts, facts, questions and key words that they could.



James Tromans



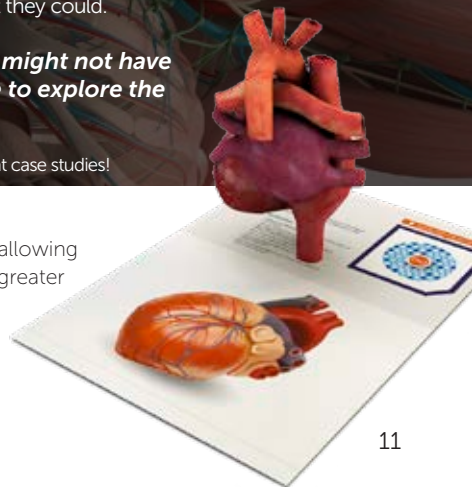
Heathfield Primary  
School, Birmingham,  
UK

***"Using ClassVR exposed students to language that they might not have experienced normally and gave the children the chance to explore the human body in a safe and purposeful way."***

Find out more detail in our 50 Creative Ways booklet alongside some other great case studies!

### AR WORKSHEETS

Augmented Reality worksheets bring educational content to life, allowing students to view and interact with exciting 3D models, providing greater engagement and knowledge retention. ARC, our proprietary Augmented Reality Classroom app, is built into the ClassVR headset interface and, once running, the content comes to life, delivering interactive 3D models, such as machines, historical artefacts, planets, blood cells and many other exciting educational resources.







Explorable scenes allow students to move around in VR, fully immersing them in virtual worlds and environments. Each scene has numerous things to explore, explain and research, and provides contextual learning in a highly immersive way. Objects within the scene allow teachers to pose questions to students and promote group discussions and scenes can be used in many different areas of learning, across all curricula. There are many different scenes to select, from the surface of the moon, to a volcanic island and from an Egyptian Temple to a Roman Villa.



### CREATE YOUR OWN SCENE

As well as using our pre-made scenes, teachers can customise a scene, selecting environments, adding in objects and selecting relevant sounds or music, to help create a more exciting and immersive experience for students. For more advanced use, teachers can even create their own environments with 3D creator tools such as Blender. Simply create your scene, save it and upload to the ClassVR portal, then share it on student headsets for a fully customisable immersive experience.

### EXAMPLE - APOLLO 11 LANDER MODULE

Using an explorable scene brings a whole new dimension to the ClassVR experience. Allowing students the freedom to explore the surface of the moon for themselves opened up a brand new way of learning. By examining and exploring the scene and its features from every angle, students were fully immersed in the topic. The objective was to explore the design features of a landing craft suitable for the Moon and by walking around the model of the lander site, students were able to explore as if they were really there. By combining this with a lesson focused on the atmosphere and gravity on the moon, students were able to create 3D models based on a combination of research and first-hand experience.



Jemma Evans



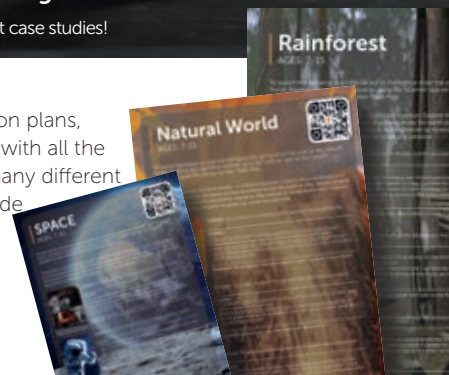
Penybont Primary  
School, Bridgend,  
Wales, UK

***“Exploring such a historically important and mysterious scene was incredible. The children were able to make connections between so many different aspects of space exploration, the Apollo 11 journey and begin thinking about what life might be like on the Moon.”***

Find out more detail in our 50 Creative Ways booklet alongside some other great case studies!

### LESSON PLANS

All of our explorable scenes come complete with structured lesson plans, guides and printable student resource sheets, providing teachers with all the information they need to help use these engaging scenes with many different subjects and topics across the curriculum. The lesson plans include suggested areas to explore, activities to undertake and key questions to provoke student discussion.



### PARTNERSHIPS

The ClassVR system is an open platform that enables third-party Virtual, Augmented and Mixed Reality content to be used on ClassVR headsets. We're continually talking to Virtual Reality publishers to incorporate great content and tools in the ClassVR portal, and we've teamed up with select content partners around the globe to make exciting new content available to your students.

### COSPACES



ClassVR and CoSpaces work together to support teachers in creating exciting, dynamic and interactive content. The CoSpaces integration allows teachers and students to make exciting new content, such as building 3D worlds and then adding code to them so students are practising both digital design skills, as well as rigorous coding skills. Once a CoSpaces world has been created, teachers can send these creations directly to their headsets, using the innovative drag-and-drop system in the ClassVR portal.

Imagine the creative possibilities: get students using their reading skills to make a story setting, integrate art, design and mathematics to create a 3D world like no other, and finish off the process by getting students to program and code their environment, so each CoSpaces world is a truly unique and bespoke creation!



### THINGLINK



ClassVR has partnered with ThingLink, a free, online platform that allows you to seamlessly create interactive images and videos with labels, hotspots, tours and much more. The ThingLink integration provides teachers with the opportunity to seamlessly use ThingLink created content and add this into your ClassVR library: to save, organise and use whenever.

You may wish to annotate a 360 degree image of famous places, or even get students to annotate their own 360 degree video - all of this can be done with our ThingLink partnership. This means that you are able to create even more specific, bespoke and personalised playlists with ClassVR, using content from both the ClassVR library, as well as ThingLink's bank of resources.



### USING CLASSVR TO DRIVE PROGRESS AT ST WILFRID'S



Nathan Ashman

Serving the Borough of Blackburn with Darwen and parts of Pennine Lancashire, St Wilfrid's Church of England Academy places a strong emphasis on engagement for all students. The staff are committed to embracing modern technology to maximise learning, making them an ideal Pioneer school for ClassVR.

Nathan Ashman, St Wilfrid's Lead Teacher for New Technologies, is always on the lookout for how modern technology can enhance and enrich students' learning experience..

“ Ever since the emergence of virtual reality and accessibility of it through smartphones, I've been eager to use it in a classroom situation. What ClassVR allows us to do is take students into another environment anywhere in the world. What's great about it is that they can experience that environment in full 360, looking all around them so that they can imagine themselves actually being there. This has a huge impact on their retention of information and their learning experience because they are having a real experience while they've got the headsets on. ”

### INDEPENDENT LEARNING

Immersive learning is really moving forward in schools. The students aren't just isolated in their own immersive world, they're putting the headsets on then taking them off and talking to each other about their experiences naturally because they are keen to share this with people around them.

ClassVR provides a whole virtual reality solution which is both accessible and easy to use. It is also flexible in that, as a teacher, you can lead your students through a particular topic or you can allow students to navigate themselves, dipping in and out of experiences as they choose. It's good to give the students a little bit of autonomy in what they do but at the same time as a teacher it's nice to know that you still have that control.

### TEACHER MANAGEMENT PORTAL AND ADDING PERSONALISED CONTENT

The portal is very easy to use; you can just drag and drop activities you want to use and there is an amazing amount of content on there to choose from. We want to make our curriculum specific to our students so being able to put our own content on there really makes it more purposeful and relevant.

We've been fortunate enough to get a 360 camera so taking images wherever we are is relatively straightforward. Once we have those images, we just upload them to the portal where they are ready to use. If, for example, we were to go to place of worship and take some images there we can then take that back to the classroom for students to see in all year groups rather than just those that went on the trip.

Gwen Rees, Assistant Principal at St Wilfrid's, was sceptical at first about using ClassVR with her students but now sees it as an invaluable resource in the classroom.



## DRIVING PROGRESS

“ When Nathan came to me to ask about using ClassVR headsets with my students, my initial reaction was unease and worry. The idea of having these boys in a space with technology was quite daunting, I'm a bit of a technophobe myself and I was concerned about behavioural issues that could arise. It turned out that I didn't need to worry. The boys were so engaged and excited about using this technology that there were no issues with behaviour.

From the second you open the box and show students the headsets, it creates an amazing buzz around the classroom; they're excited to get involved. I've used ClassVR with my Year 8 boys, a lower-attaining Literacy group, when introducing them to war poetry. I knew that this was going to be a very daunting task; the vocabulary in the text was going to be extremely challenging for them.

When I placed those boys within the trenches in that virtual reality space, they were able to answer a lot of their questions themselves, they were making connections and they could really understand what it would be like to be in those trenches. Then, when I introduced the poetry, the students had a level of empathy and understanding that they wouldn't have had without that experience. Their writing about those poems clearly demonstrated the progress that they'd made.

## DESIGNED FOR THE CLASSROOM

ClassVR is different because the package is complete, there's no need for mobile phones which means that the students can pick it out the box and use it straight away.

If you're at all unsure about using this technology in the classroom my advice would be have a go yourself. Put on the headset and see how this would captivate your students. ”



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# THE ONLY SOURCE OF KNOWLEDGE IS EXPERIENCE

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ALBERT EINSTEIN



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Simple Classroom Technology

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educational technology at

[www.avantiseducation.com](http://www.avantiseducation.com)