VR FOR EDUCATION

What is virtual reality learning?

Virtual reality, or VR, is taking off in education with an increasing number of schools adopting the technology.

VR allows students to experience destinations from across the world without ever having to leave the classroom. Imagine students being able to explore the pyramids of giza whilst sat at their desks. This is what virtual reality education allows.

Given the growth of VR within education, and the positive response from schools, we wouldn't be surprised if VR made it onto the curriculum at some point in the future. Curriculum aligned content and structured VR lesson plans have already been developed and are available in the UK.

How can virtual reality help students?

There are so many ways in which virtual reality can help students but the main points are below:

1. Students learn better through experience

VR provides students an opportunity to learn through experience, in contrast to the traditional methods of reading and writing.

2. VR has the ability to inspire

Being able to see and experience extraordinary locations within the classroom is completely unique to VR and it is inspirational to students.

Students are “transported” out of the classroom and their imagination is allowed to flourish.

4. VR in education promotes peer interaction

Throughout the VR experience, students are encouraged to interact with each other. Afterwards, they are eager to share their thoughts and discuss their experiences.

5. VR engages students

Many students get bored with classic teaching methods. The modern technology of VR gets students’ attention like nothing else. We find that students instantly want to try out the VR.

6. VR provides realistic travel experiences

Using VR, schools can provide students with travel experiences that would not be possible or practical. Schools can save time and money whilst providing students with incredible experiences.

7. VR in the classroom is inclusive

With VR, every student gets the same opportunity to enjoy the experience. Unlike traditional school trips that can be too expensive for parents or too impractical for their children, VR is for all students.

8. VR offers memorable educational experiences

Long after the VR has finished, students remember the experience and they are eager to reflect on it in future lessons.

Implementing VR in the classroom

There are two main ways in which VR is implemented in the classroom: VR headsets, and immersive classrooms.

An immersive classroom is a teaching room in which images are projected onto the internal walls of the room. This creates a virtual environment within the classroom.

An Immersive Classroom

Students can be “transported” to a different place, without having to leave the classroom. Without the need for VR headsets, students can enjoy the experience together, and are encouraged to interact with each other.

Unlike VR headsets which some students can find difficult or uncomfortable to use, immersive classrooms are suitable for all students. The pupils are able to enjoy the VR content in a more familiar environment.

VR headsets in the classroom

VR headsets are a common, practical way of implementing VR in the classroom. With minimal cost, equipment, and space needed, an increasing number of schools are turning to VR headsets.

For a classroom of 30 students, typically up to 15 headsets are required. These are usually standalone headsets, which means they don’t have to be

The main benefit of VR headsets is the level of immersion they provide. Although they can be a little more tricky to use than immersive classrooms, they provide an incredibly realistic experience. An experience that students aren't likely to forget in a hurry.

VR in primary schools

VR can be effectively used in primary education, and is becoming increasingly common in the UK.

Immersive classrooms tend to be more popular than VR headsets amongst primary schools. This is because every student can be easily monitored, and young students do not need to be shown how to use headsets. This ensures that the experience is smoother and equal for all the students.

Pupils are asked to look around and talk about what they see. This provides opportunities for students to collaborate and can particularly improve interaction amongst more introverted students.

Reducing social barriers at a young age is extremely important and is one of the reasons many primary schools are turning to VR.

Virtual reality in secondary education

Within secondary education, VR headsets tend to be more popular than immersive classrooms. This is because the impact on older students tends to be greater with the headsets.

With the entire field of view enclosed, the sense of immersion with a VR headset is unparalleled. Also, unlike with primary school pupils, secondary students are better able to use the headsets, requiring less input and guidance from the teacher.

By utilising VR headsets, teachers are able to provide secondary students with a feeling of actually “being there” – this is what we mean when we talk about immersion. For many students this is an incredible experience, and it is something that really has to be tried before it can be judged.

VR for students with learning difficulties

VR can be great for those students with learning difficulties. Students can learn about the world around them in a safe and controlled environment.

As with primary school students, immersive classrooms tend to be the most popular form of VR for helping students with learning difficulties.

It is not uncommon for students to struggle with using VR headsets. With an immersive classroom, teachers can take the lesson in a much more normal way. The students are still able to look around and explore the virtual surroundings, but they can do so in a familiar way, without feeling closed in.

VR has been found to be helpful for students with autism. A study by Strickland et al. (2007) showed that children with autism could apply skills