Benefits of Virtual Reality in Education

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Educational technology is opening up incredible opportunities for students, with virtual and augmented reality leading the way. Around the world, millions of students are already experiencing the benefits of virtual reality in education. Instead of relying solely on textbooks and diagrams, students now have the opportunity to learn through *experience*. They can venture anywhere and explore anything... without even needing to leave the classroom! So, what are the benefits of VR in education?

How Can Virtual Reality Benefit Students?

Using virtual and augmented reality as a tool to deliver immersive learning, students can travel the world, explore the impossible, delve deep into complex concepts and experience learning directly in the palm of their hand – all from a safe, secure and familiar environment: the classroom!

These incredible opportunities mean virtual reality in education can benefit students in SO many ways!

Studies have shown that VR can be a more effective learning tool than many other traditional teaching methods, as seen in this benefits of virtual reality in education pdf. For example, by immersing students in the lesson, virtual reality creates more associations between subjects and environments than other teaching methods - helping them better understand, engage with and remember concepts.

Advantages of Virtual Reality in Education

From improving memory power to supporting SEND learning, the benefits of using virtual reality in the classroom include:

- Enhancing student engagement

- Boosting knowledge retention

- Improving student learning outcomes

- Developing collaboration and social skills

- Building empathy

- Supporting SEND learning

Enhancing Engagement

Student engagement is potentially the MOST talked about advantage of using virtual reality in the classroom. Using VR, students can experience their learning and actively participate in the lesson - boosting excitement and engagement while inspiring their imaginations!

Imagine you were a student learning about dinosaurs and the prehistoric period. You have two options. You can either look at some photos of dinosaurs in a textbook, or you can use VR to travel back millions of years and walk with actual dinosaurs in their natural environment. Which sounds more engaging to you?

By stepping *into* the learning topic and experiencing it first-hand, students are more focused, more excited, and more engaged!

What's more, the opportunity to use virtual reality technology is exciting in itself! Modern technologies are now a massive part of student's everyday lives and many have possibly played a game or two in VR themselves. By providing that familiarity and bringing exciting edtech into education, the classroom becomes a place of excitement and memorable learning experiences!

Boosting Knowledge Retention

You're more likely to remember something that you've experienced than something you've read. It's as simple as that!

Research shows that learning through experience improves knowledge retention by up to 75%. When learning and retaining knowledge, your brain creates a mental mind map made up of

information collected by your five senses. The more information your senses collect, the more developed the mental maps become. This is why it's easier to remember a concert you attended than one you read about – your senses collected more information, so you remember more!

Using virtual reality as part of a smart classroom, you can fully immerse students in a virtual environment and completely focus their visual and even audio senses on the teaching topic. By experiencing this content as if it's reality, the students' brains will create clear, detailed mental maps – helping to retain the knowledge they've learnt. This is why learning with virtual reality is truly unforgettable!

Improving Student Learning Outcomes

"All students have learning objectives and outcomes to meet, whether it's being able to define a key term, understand a quadratic equation or achieve a predicted grade in an exam. VR creates lots of opportunities for teachers to focus on their pedagogy and deliver personalized, immersive lessons – helping students achieve these individual learning outcomes!" **Educational Specialist, Avantis Education**

Another key benefit of virtual reality in education? [VR can help improve test scores by up to 20%](#)!

With virtual reality, students are fully immersed and engaged in the lesson through experiential learning, which improves a range of student outcomes. Whether it's developing a greater understanding of the topic, creating a positive emotional response to the lesson or increasing students' self-confidence – virtual reality has the potential to improve learning outcomes across the board.

In particular, VR and AR technology help make [complex, conceptual topics easier to grasp](#) and understand. From exploring *inside* a human vein to holding and examining an animal cell in the palm of your hand, virtual and augmented reality make the impractical and impossible… possible!

Moreover, [immersive VR teaching allows for individualized learning](#). With no two virtual reality experiences the same, it allows for different learning styles, speeds, and abilities - ensuring teachers can deliver personalised learning experiences that improve student outcomes on an individual level.

So, in summary, improving student outcomes and ultimately improving test scores is another important benefit of virtual reality in education!

Developing Collaboration and Social Skills

Collaboration is crucial, whether that's in the classroom or beyond!

Advances in technology like social media have created endless opportunities to communicate, meaning people are working together across communities, cultures and countries, and this level of collaboration potential makes it *even* more important for children to develop group working and social skills in school.

With virtual reality at their disposal, teachers can create exciting, collaborative learning environments for their students. From Ancient Rome to Romeo and Juliet, educational tools like [Avantis World enable students to explore educational VR scenes as a group](). While investigating these immersive virtual reality scenes, students can safely communicate and investigate together – supplying ample opportunity for group work and even social skills in a secure and exciting learning environment.

Building Empathy

"Empathy is where you put yourself in someone else's shoes, and with VR, teachers can actually do this! When learning about topics like the First World War, teachers can help their students understand what life was like for a soldier in the trenches. They can experience the conditions first-hand and imagine how the soldiers would've felt in that situation. It's such a powerful experience." **Educational Specialist, Avantis Education**

Developing empathy is a [*key* skill for children to learn](), and virtual reality is an incredible tool to help achieve this.

Empathy is all about putting yourself in other people's shoes and being able to understand their situation or circumstance. By building empathy, teachers can help students develop happy and healthy relationships in society. Empathy also helps boost academic success in education and can make people more productive in learning and work environments!

Using virtual reality in education, teachers can build empathy by providing meaningful learning experiences. For instance, with VR [students can experience what life is like for refugees and asylum seekers round the world]() - a topic that can typically be difficult for some children to understand. Through seeing life from the point of view of a refugee, students can truly understand and empathise with their situation. There aren't many better tools to help build student empathy than VR!

Learn more. Contact PowerUpEDU. [Click HERE]() or [mailto:moreinfo@powerupedu.com]()

Supporting SEND Learning

Finally, one of the most powerful benefits of virtual reality in education is opening up accessibility and opportunities for SEND (Special Educational Needs and Disabilities) students.

By implementing VR in special education, teachers can provide students with personalised learning experiences. For example, students with physical limitations can set off on exciting adventures around the world, or students who struggle with new experiences can control their environment by first visiting locations in VR. This ability to create your own content means teachers can truly meet their students' individual needs with virtual reality.

The possibilities for empowerment are endless, so keep an eye out for future blogs on the advantages of using VR in SEND learning!

So, in summary, using virtual reality in the classroom helps boost student learning outcomes by creating immersive and engaging lessons that are memorable for students. These VR experiences help students build important interpersonal skills such as empathy, collaboration, and social skills needed for the future. It's a hugely powerful teaching tool and the future of education!

Interested in introducing virtual reality to your school?

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