

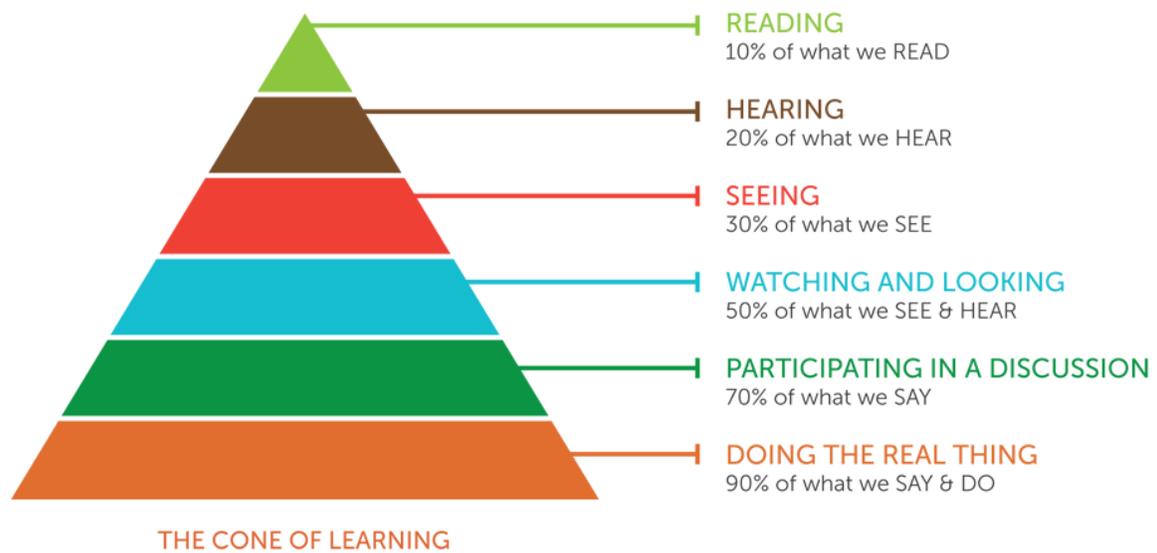
WHY SHOULD VIRTUAL REALITY BE USED IN SCHOOLS TODAY, AND HOW?

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The first virtual reality (VR) headset was created in 1968 by Bob Sproull. VR has changed infinitely since then and is now thought to be used for gaming and watching movies. However, the world of virtual reality is much more than that; it has limitless possibilities! Therefore, today I am asking the question: What if VR was used to teach students around the world and revolutionize education as we know it? From research, it is concluded that there are many ways VR can be used in education such as interactive learning, behavior management and rewards, technology enrichment, and for helping students with social anxiety.

In school, students read, listen, and study. But what about experience? Albert Einstein says, "The only source of KNOWLEDGE is EXPERIENCE." According to ClassVR.com, the brain remembers much more of an experience rather than just reading text. "...90% of what we personally experience we remember..." Rather than "...10% of what we read we remember..."

After 2 weeks we tend to remember...



In a VR lesson students will be able to take adventures through the life of a cell or see the 7 wonders for themselves! And by actually experiencing these lessons rather than reading them as facts in a book, a student's brain will better remember this information. For example, when a child walks outside barefoot, they feel the rocks with their feet and notice their toes getting dirty. Next time the child walks outside with shoes on, because the child learned through experience. Therefore, this shows that VR will bring Interactive Learning to the classroom, which will be beneficial to every student's education. Next is the matter of how VR might help students in their future career.

In the beginning of our evolution, humans learned how to survive. As humans evolved they had to learn how to read and write, because it became a mandatory skill for living in society. Now, we learn how to type as well. The prediction is that soon many careers will require an employee to have some knowledge on how to use a VR headset. Common Sense Media is a non-profit organization that raises money for children, and adults to learn more about modern day technology. This organization has this similar theory, "...VR has the potential to become a major force in entertainment, education, and healthcare..." Even though the Digital Agency Network (D.A.N.) might be a little biased, they also mention VR having a big future in our society. "...virtual reality is becoming a reality for many businesses, healthcare providers, and individuals across the world..." This is further evidence that having VR in classrooms will be a great help to children once they start their career. They will be one of the few who have experience working with VR outside of gaming and other entertainment purposes. Such items on a resume will give them a competitive edge. It's the same principle as not hiring someone who is illiterate. Therefore giving student's access to VR will give the experience, or Technology Enrichment, to the student which might just give them a necessary skill in a future modern society. Now, how does Virtual Reality affect student behavior?

Virtual Reality will most definitely affect a student's behavior when applied using a Behavior Management Rewards system. In most schools, as in our district, there is a reward system for behavior. Make good decisions and students are entered into a lottery for prizes, but make bad decisions and students get nothing. So when the topic of Behavior Management and Rewards is brought up with VR, we're talking about a system that Rewards children for good behavior. At the basis, any rewards system is beneficial. Parents use them every day, with allowance and other household privileges. The Ministry of Education in Guyana writes in an informational passage for parents, "...Rewarding positive behavior reinforces and encourages children to repeat the same behavior..." and "...the child will learn to...avoid behavior that generates no rewards..." Therefore, I am proposing a rewards system that is based around VR. For one, just having the privilege of using the headset could be considered a privilege that can be lost. However the better behavior the student exhibits can earn some free time to play games or watch movies, maybe take the headset home, and so on. Surely this will encourage the students to do what they're asked and be polite. Common Sense Media agrees, "...many educators are thinking about the potential to encourage prosocial behavior among younger children..." VR will be a more efficient rewards system than what's common in your average schools. Now, to dive into a common problem among children, Social Anxiety.



Picture 1 - Beat Saber VR Game

You might be wondering, what does social anxiety have to do with VR in schools? Well, the first the problem of Social Anxiety Disorder is that patients with S.A.D have more trouble learning in big schools than the average student. They are so focused on trying to fit in and not make a scene that it becomes almost impossible for them to actually learn. The National Social Anxiety Center informs, "...someone (a social anxiety patient) finds that being physically present in an anxiety-laden situation is too traumatic..." However, with access to VR these students can cure this issue, or at least diminish it with a new treatment called V.E.R.T. (Virtual Reality Exposure Therapy) N.S.A.C. writes, "...with virtual reality exposure therapy...people with social anxiety can challenge their fears non-physically, in a realistic, safe, comfortable setting, in a situation they can control..." So, S.A.D. patients can work on their problems at school, or even theoretically attend school from the safety of their home, while still getting social interaction and an education. This is just one of many examples of what VR could do for those with medical issues who also deserve an education. Finally, we tackle the problem that nobody wants to talk about, money.



Picture 2 - V.E.R.T

Most schools in the U.S are underfunded, and most likely will not be able to afford VR headsets easily for every student. One company offers exclusive pricing to classrooms that include virtual lessons, charging cases, and of course the headsets themselves.

"...classroom sets are \$2187 and contain eight ClassVR headsets and charging

case..." There is an additional charge of an annual license to be able to distribute these, which costs "...\$272 for primary schools and \$491 for



Picture 3 - Class VR Offer

secondary schools..." (Prices based off a rough conversion from Euros to USD). However, if the price is compared to the price of promethean boards, which range from 1000 to 13,000 each, this will be much more beneficial. Schools could replace the boards with an average projector, and teachers could show videos with their new VR equipment, and use the headsets for many more activities. The cost is less than the price of a student laptop. It wouldn't be necessary to remove the boards or laptops, essentially the schools are not spending hundreds of thousands. So, VR headsets are not cheap, but their value to a student's education far outweighs the price, and when compared to other basic school tools, they can be considered cheaper.

In conclusion, Virtual Reality has so many applications, however using this amazing technology in Schools will be some of the best uses of its capabilities. It could be used for Interactive Learning, Technology Enrichment, Behavior Management/Rewards, and even Social Anxiety treatment. This is just the beginning, who knows how else virtual reality will be used in the future? I have a few ideas...



Picture 4 - Students Enjoying ClassVR

Sources Used:

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