Acclimate VR is changing the learning game for kids with autism

For people with autism, learning practical life skills can be a huge challenge.

Learning to shop, use public transit, or call 911 – abilities that most people take for granted – can mean the difference between freedom and dependence, or even life and death, for someone with autism.

But it's not so easy to pick things up on the fly just by observing others. The nuances of navigating unfamiliar places and interacting with strangers are not intuitive and self-explanatory.

Many people with developmental disorders like autism *can* gain these skills. They just need time to practice, to learn step-by-step and try repeatedly with the help of someone they trust, until they become comfortable.

Real world practice is ideal, but it can be impractical and overwhelming.

Going out to real places in the community exposes students to the sights, sounds, and surprises they must learn to cope with. Therapists and teachers would love to do this every day, but they know well the obstacles to making that happen.

Time is a big one. When kids are in school and have therapy sessions of less than an hour, going out may be impossible – they would spend more time in transit than in productive practice.

Even if there is a suitable place close enough to make it worthwhile, logistics hamper the effort. Teachers need to organize supervision, transportation, permission forms, medical papers, and reimbursement before they can take their students anywhere.

Safety is a major concern as well. It's tough to predict how a child with autism will react to a new situation, and it can be hard to strike a balance between allowing independent practice and providing adequate supervision.

Virtual reality (VR) creates a way to practice in a safe, convenient environment.

VR makes a life-like experience of other places accessible anytime, anywhere. It's a perfect complement for real-world learning. Students can practice far more often and with less stress, gradually building towards readiness to go out in the world and try their new skills.

Right now, several groups are developing VR software for teaching people with autism. But they are all using computer animation. This allows for a wide range of user interactions in the simulation, but it's a far cry from what a student would see and hear in the real world.

Acclimate is changing the game of VR learning by listening to the autism community.

When we talked to therapists, teachers, and parents, what they wanted was clear.

More computer-generated graphics, immersive or otherwise, are not going to cut it. They just don't capture the visual intensity, ambient noise, and chaos of the real world, and that's exactly what students with autism struggle with so much.

Expensive devices are no use either. Few schools can spare thousands of dollars for high-tech immersion set-ups with multiple monitors, cameras, and hand controls.

Students need a rich library of content, too. There are so many situations they must learn to handle – shops, restaurants, travel, school, work, home, emergencies, and the list goes on.

There's nothing like this out there...so we decided to make it ourselves!

We want the experience to be as close as possible to the real thing – that's why we're using 360° video instead of animation.

Acclimate VR is the first to combine interactive VR with 360° video for teaching people with autism.

Our camera captures real people and places, with all their colors, noises, and imperfections. The 360° technology lets users see the whole scene – they can turn and experience what's going on all around, not just what's in front of them. They can even interact with the video, using their eyes and one simple button to choose how to respond to the situation.

We're using a well-known therapy technique called point-of-view video modeling. That's just a fancy way of saying that the student learns a skill by watching a video from the perspective of someone who's doing it. Research shows that this technique works well for teaching social and communication skills to children, so we're confident that our tools are built on a solid foundation.

We want our technology to be as accessible as possible – that's why we're creating it for the devices everyone already has in their pockets.

VR technology is now cheaper than ever. Once, you needed a special headset or a dedicated room full of projectors. Few people other than tech junkies and researchers used it.

Now, all you need is your smart phone and a $5 viewer.

We're making our software compatible with the Google Cardboard VR viewer so that anyone can use it, no expensive cameras or controls necessary.

We want our learning tools to be for people with autism, by people with autism – that's why we're partnering with Wildwood Programs.

No one knows better what kids with autism need than the dedicated therapists, teachers, and parents who care for them every day. We wouldn't dream of doing this without them.

Wildwood Programs is an organization that supports people with special needs throughout their lives, and we couldn't ask for a better ally. They are involved in every step of the process to make sure we're creating learning tools that really work.

We want to be a resource for you!

Join us on the cutting edge of education for people with autism. On this blog, we'll be sharing what we learn from our research and pilot tests, as well as helpful information for teachers, caregivers, and other members of the autism community.

As our name suggests, Acclimate VR is here to help people with autism become comfortable in their environments, so they can be safe and free.

Be sure to subscribe so you don't miss a thing!