



SYSTEM DESCRIPTION **VR Technology**

VIRTUAL REALITY HEADSETS

The viewer (headset) comes preloaded with VR (virtual reality) content library for the Interactive curriculum. The VR solution only focuses on academic goals (and does not include any entertainment content.)

By default, the VR solution supports BOTH English and Spanish languages.

INTERACTIVE CURRICULUM:

Our immersive VR modules enrich education by promoting higher-order thinking skills, and increasing learner involvement, focused concentration on difficult concepts, and overall academic performance. All curriculum is technology-based and utilizes the latest in technology to bring to the student the best possible learning aids.

VR is a uniquely personal experience that is proven to positively influence student engagement, retention, and desire to learn. The VR modules enrich education by increasing learner involvement, focus, and overall academic performance.

Schools can use VR to supplement or as a replacement for their science labs (physics, chemistry, biology, health). All content is aligned to state and national standards and grade-appropriate. Within the VR content, there are formative assessments for teachers to use.



How VR is ENRICHING EDUCATION

R

RETENTION

Research suggests that visualization and a VR environment strengthen the connection between a student and a concept, heightening retention.

E

ENGAGEMENT

It is about participating in the learning process, having actual/virtual experiences, and enjoying the process, which heightens engagement.

D

DISTRACTION FREE

When students are inside a virtual environment, they are far less prone to distractions such as other students, phones, etc.

SAFE LEARNING ENVIRONMENT

Learning takes place in a safe environment where students learn at their own pace. Students are not under pressure to keep up with the rest of the class and are not in an environment where they are judged. Students have multiple opportunities to master concepts and may attempt tests & assessments numerous times until they master the content.

ANALYTICS for TEACHERS

The VR learning management platform offers unique profiles for students, teachers, and administrators. With actionable analytics, teachers stay engaged with the learning, without needing to hover. The platform was developed to allow teachers a simple way of setting up classes, while also providing data on success and gaps in understanding.

The teacher dashboard helps teachers monitor the performance of a class (a global class report) and individual students (personalized student profiles). Teachers can also access module reports, helping them plan their lessons more effectively and with greater insight.

The VR headsets sync with the platform to provide a quick visual snapshot of a group of students as well as detailed data on individual student performance and progress. Teachers can login to the platform to view the scores of individual students. Teachers also have access to analytics that visually show them how long it took for the individual students to master different concepts and their individual scores in each of the different assessments. The reports and analytics features allow quick visualization of how students are progressing, and easy identification of gaps in learning.

CAPABILITIES

Virtual Science/Math Labs: Public schools/districts and private schools can use VR to supplement or as a replacement for their science labs (physics, chemistry, biology).

The VR modules come with

- Interactive content (active vs passive learning)
- Curriculum aligned to standards (fits with syllabus)
- Formative assessment within the VR environment
- Data and analytics (actionable data based on student performance)
- Grade-appropriate content (not one size fits all)

Virtual Tours: These Virtual Tours create a sense of wonder, transporting students to some of the worlds' great locations (like the Eiffel Tower, Taj Mahal, etc.) where they can form an emotional bond and feel a sense of presence within those environments. VR helps bring traditions and cultures to life and allows for a connection with art, history, engineering, and architecture, making the study of social studies a more personal and memorable experience. STEM is incorporated within virtual tours where possible.

English Language Learning: This is probably the closest immersive experience an ELL student can get with technology. These modules help English language learners to improve their speaking and communication skills. The focus is on conversational English only (and not reading or writing.) Students receive immediate feedback from the device when practicing their English language speaking skills.

Special Education: Our proposed solution will also help students meet any academic goals listed in the IEP and objective development. Virtual reality helps students with special needs develop their knowledge, skills, and attitudes in ways that would not have been possible otherwise. For students with diverse needs and learning styles arising from their disabilities, VR can help accommodate often unique and individual learning experiences. The VR affords a truly personal experience.

VR education solution allows students with special needs to learn at their own pace in an environment that is free of distraction and judgment. Teachers now have an option of offering a truly differentiated learning experience for students with special needs.

A distraction-free experience for students with attention deficiency challenges is essential. The immersive environment of a VR experience encourages sustained attention and a deeper level of focus in students with attention deficiency challenges. The VR solution offers individuals with ADHD high levels of stimulation by allowing them to do things in a virtual world. Virtual reality offers an environment that feels personal and comfortable and makes students with learning challenges less anxious. Learning with VR increases motivation and confidence, eases interaction with teachers and peers, develops cognitive skills, enhances short-term memory, and makes lessons more enjoyable.

LIBRARY vs. STUDENT LICENSING

The VR headsets can be consumed in two modes - Library mode and Student Subscription mode.

Using Library mode, students are able to check out the headsets from the school to view the immersive content at home. However, the students will only use the login associated with the device and hence the teachers will not be able to personalize an individual student's education.

Under student licensing - students will login using their own login id which will allow the teachers to view the student's work and personalize the student's education. This is useful for teachers since they can address the student's weak areas - and help students progress towards mastery of content. Here, teachers get a portal which will allow them to monitor students' performance and run analytics. Teachers will also have factual data to monitor and communicate with the students and student's parents.



Teacher portal:

- Allows teachers to enroll students into a class / course. Very similar to a LMS in functionality
- Allows teachers to monitor students work / performance
- Allows teachers to proctor
- Allows teachers to personalize education based on each student's performance
- Allows teachers to assign work to each student individually or collectively (either in small groups or to the entire class)
- Allows teachers to run analytics to measure student's performance and generate reports

Student's work will sync with teacher portal:

- Teachers enroll students in their classes (assuming student licensing)
- Students get an email invite from the teacher to connect to their class
- Students should be on the network (school Wi-Fi) to interact with the teacher online
- This online interaction allows teacher to control and guide student's performance
- Student's work gets published to the teacher portal when student is connected to school Wi-Fi

When students are not connected to school Wi-Fi, the work done by the student will be pushed to the teacher portal when the student connects to the school Wi-Fi the next time.

CREATE NEW VR CONTENT

Teachers also have access to the creation and editing tool designed specifically for education that allows students and teachers to easily create and share their own VR Experiences. VR project are created and edited on a PC allowing authors to:

- Easily import and view 360-degree videos & images
- Supports various multimedia content: images, videos, audio
- Features include text labels, slideshows, and media overlays
- Navigate scenes through HotSpots or iMenu
- Easily move the VR Experience to an EduPro headset
- Make edits directly from within a VR headset

SUMMARY

The proposed virtual reality solution:

- Promotes Active learning – better outcomes
- Offers a learning environment that is distraction & judgment-free
- Includes formative assessments in every module
- Is aligned to national and state curriculum standards
- Provides robust data analytics
- Is easy to use by both teachers and students
- Is affordable, scalable, easy to deploy