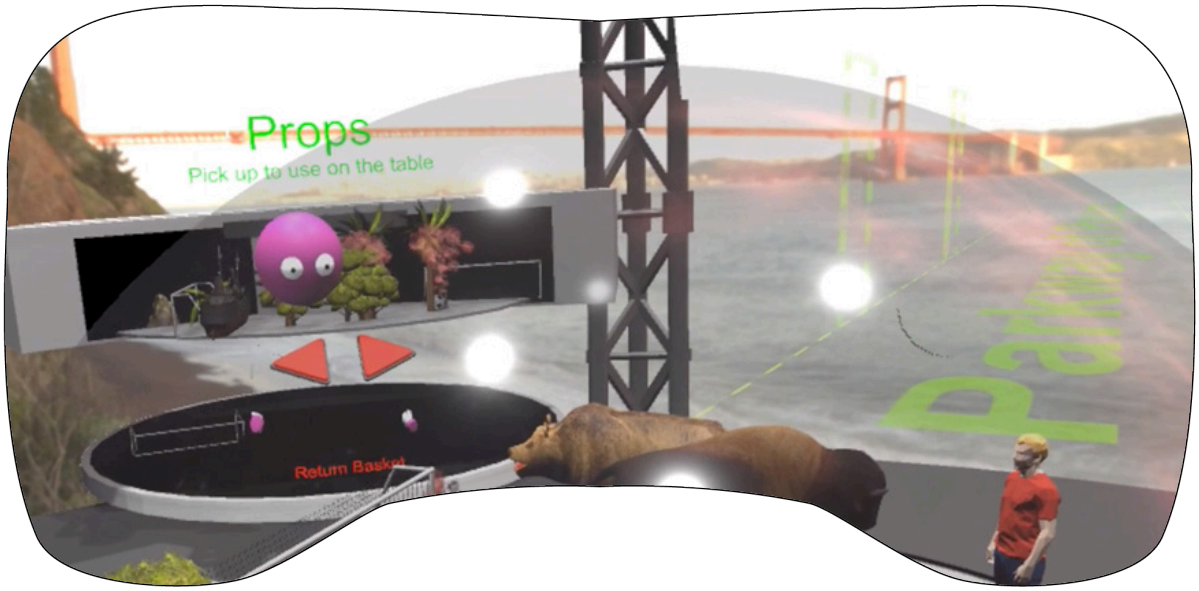
NORTH THEN WEST CASE STUDY

Education

RealityNext

Learning Advanced Concepts in Virtual Reality Through Play



Virtual Reality | Education | Value Proposition | Product Design | Curriculum Design

Education Startup Fosters a Love of Learning with Students Creating Their Own VR Games

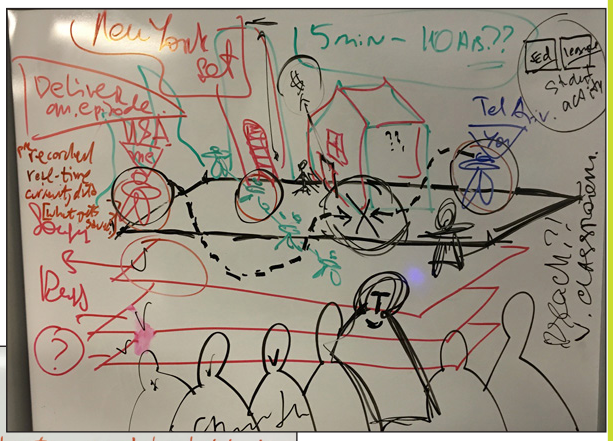
Overview

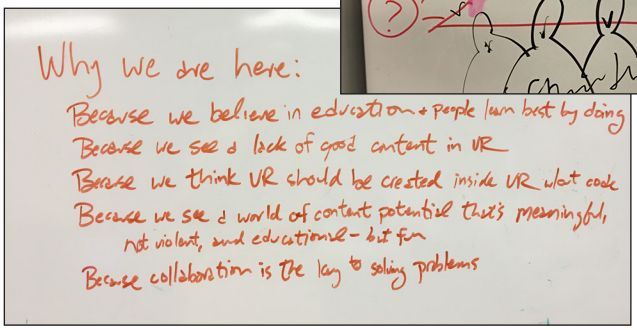
RealityNext co-founder Alex wanted to transform an in-person learning program he'd helped to develop into a similar program — but this time in a virtual world. Alex and North Then West's principal Joel Magalnick came together to design the product and, ultimately, build it. In essence, the value proposition was to make educational subjects such physics and history exciting and interesting by giving the students virtual building blocks to develop stories that allowed them, for example, to embody Newton's second law of motion.

Process

Joel and Alex spent the better part of a year creating a vision of the form the RealityNext VR product would take. This process started with establishing the value proposition:

> To execute education in VR social spaces, there needs to be an engaging and "sticky" process in place. RealityNext uses theater and narrative building as a method for educational content creation: Unlike any other product on the market, our methodology calls for the creation of stories and games for kids by kids in a series of collaborative workshops using our 360º Immersive Story-Game Making process.
>
> In an increasingly technological world where parents have legitimate concerns about the online content their kids consume, we need to recognize that removing them from the technology is a losing battle. We therefore must meet our children virtually— inside the computer—and lead them on a path of organic self-development by active exploration. We want to update the knowledge delivery system and speak the same language from the "inside the box."





The discovery process also included gathering information from experts such as:

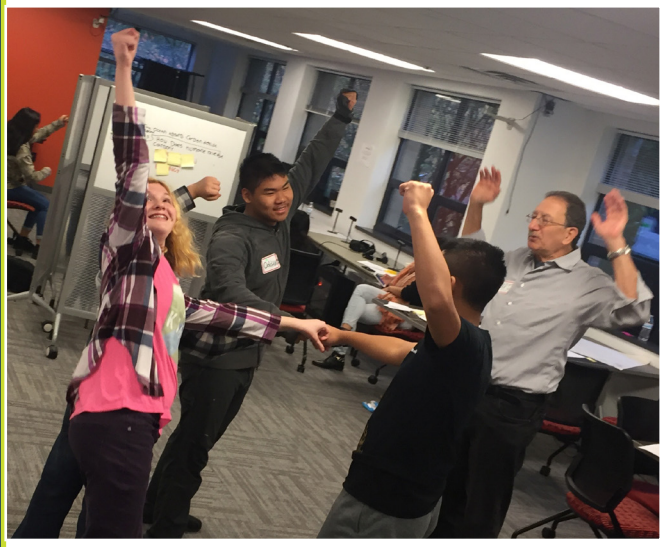
- VR engineers to share what at the time was technologically possible.
- VR arcade owners who explained their business models and current structures of virtual play spaces that showed the possibilities and limits of integrating an educational model
- Potential funders who had an interest in changing traditional educational models.
- Educators and curriculum designers with an interest in alternative styles of education to help with materials to guide the students.
- Playwrights, theatre directors, and filmmakers who had an understanding of using choreography to prompt the students as they navigated through the curricula.
- User experience designers at VR device manufacturers to better understand how the equipment could facilitate learning as well as understanding how screen resolution, goggle weight, and latency all affected the experience.

- Motion capture experts to demonstrate how systems could catch body movements beyond simple avatars' virtual faces and handsets.

At the same time, the team drew out and repeatedly iterated on scenarios for different experiences in different types of spaces (both expansive and limited), how the technology would behave, and how the students themselves would potentially behave while using the technology. In essence, asking the question, "What could possibly go wrong?"

With a product roadmap established, the team then set out to prototype. This was the fun part!

First, the team developed two initial curricula: the first based on Newton's laws of motion, the second based on a period of American history. Rather than rote learning of lectures, readings, and exams, the methodology provided some re-enactment of the history, then prompted the students to create games based upon the initial learnings. This could be interacting with virtual objects to understand how when one collides with another it creates an equal or opposite reaction, or putting on virtual costumes to make a silly retelling of a moment in history.



To actually create a prototype, the RealityNext team didn't write any code. Instead, over the course of multiple sessions, student groups from grade 7 to the university level came to the RealityNext workshop to put on props and work their way through the curriculum activities in real life. This exercise would include advancing through multiple levels until they reached the end of the sequence, which would result in a deliverable of a game the students had created, based upon the curriculum. To add a bit of a wow factor, the students would also have an opportunity to try on a motion capture suit. This partial-body outfit with groupings of sensors is used by film studios, gaming companies, and other digital simulation creators to emulate

the movement of living beings in CGI or digitally rendered graphics. The students enjoyed viewing themselves overlayed onto imaginary situations while they moved in real time with the creatures they could see on-screen.

The prototyping gave the RealityNext team insights into which features of the product would work, which could scale, and what may need to have human intervention.

From there, they began to build. Working with a VR developer, the minimum viable product of the product featured a study of physics on a farm. Players in the game could create their game by wearing the guise of the animal of their choice while taking multiple virtual objects to test velocity, mass, resistance, and other physics content.

While the team was successful in building their MVP, the success in building a company was another story. Throughout the development process, Alex and Joel had been meeting with potential funding partners, attending learning sessions about startup investment, and participating in pitch sessions to attempt to obtain seed funding to continue development. While they did complete a successful crowd-funding campaign, that was not enough to create a runway to build out what they had hoped would be a sustainable business model.

Result

While in the end the financial pressures overtook the challenges of building upon a successful product release, the end product showed that there was a capability to realize the vision of the RealityNext team and enough demand from interested educators to look at virtual reality as an effective way to make learning fun. Some even saw potential to create opportunities for students in different locations to meet and collaborate in a virtual space!

How can North Then West help your company refocus your value proposition to become customer centric? Reach out to us!
Contact joel@norththenwest.com or call 825-436-2035