



PLAY • LEARN • DISCOVER

Dear Educator,

We are excited to take this opportunity to introduce a new field trip option to you. Xperiment Virtual Reality is a great way to keep your students engaged in the school curriculum!

We have programs that can be integrated into the computer science, social studies and science curriculum. Using the Next Generation Science Standards, we can plan a Virtual Reality field trip to meet your specific grade level or class needs. We offer VR experiences that can help students explore the four disciplinary core ideas that span the K-12 curriculum.

If you have a vision for using VR with your students, we are happy to brainstorm ideas with you. Virtual Reality is so new and exciting that we are still discovering ways we can integrate it into learning!

Please see the attachment for a detailed description of our current educational offerings. You can also check out our website <https://www.xperimentvr.com>. Do not hesitate to reach out, we are happy to answer any questions you may have!

### **Option 1**

#### **(2.5 hours) VR Only**

Up to 28 students

Two students per headset

30 minute orientation

90 minutes using VR equipment

30 minutes for lunch

Price: \$20 per student

### **Option 2**

#### **(2.5 hours) VR + STEAM**

Up to 56 students

Two students per headset

30 minute orientation

45 minutes in classroom for STEAM activity

45 minutes minutes using VR equipment

30 minutes for lunch

Price: \$22 per student

- Price effective as of January 1st 2020
- There is a \$50 surcharge for groups less than 20.

Sincerely,

The Xperiment Virtual Reality Team



PLAY • LEARN • DISCOVER

Virtual Reality can be used in early childhood to graduate level courses to enhance student learning & engagement. VR can transform the way educational content is delivered. Being immersed in what they are learning motivates students to fully understand it.

**Creates Interest • Increases Engagement • Encourages Collaboration**

Using the Next Generation Science Standards, we can plan a Virtual Reality field trip to meet your specific grade level or class needs.

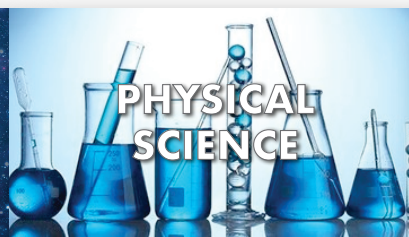
We have VR experiences that can help students explore the four disciplinary core ideas that span the K-12 Curriculum. Tell us which core idea or standard you wish to explore and we can design a program for you!



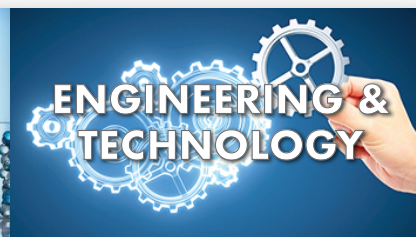
**LIFE  
SCIENCE**



**EARTH &  
SPACE SCIENCE**



**PHYSICAL  
SCIENCE**



**ENGINEERING &  
TECHNOLOGY**



## VR Experiences by Category

### INTRODUCTION TO VR

Virtual Reality is an exciting emerging technology. Listen to our staff describe the history of VR and its uses in education and career training. The bulk of your time will be spent with a variety of experiences that showcase what VR has to offer in a variety of genres. Spend some time exploring travel experiences, collaborative games, dance games, sports, and more! The possibilities are endless.

### LIFE SCIENCE

#### **VR Frog Dissection Simulator - VictoryXR (Pig & Feline Dissection Available as well)**

Join Wendy Martin, a national award winning science teacher, to make Ribbit-ing Discoveries in this virtual reality Frog Dissection. Learn the fundamentals of the female frog anatomy in a fully immersive virtual reality experience. This true to life experience covers each step that a student would take if they were dissecting a real frog in their classroom. Along the way, Wendy Martin - will pop up to provide instruction and information to users. An Authentic Science Experience Aligned to National Learning Standards.

#### **Virtual Arctic Expedition**

Virtual Arctic Expedition is a virtual reality experience involving up to 8 people simultaneously. The users are immersed together in the same virtual environment. They find themselves in the Arctic seabed where everyone embodies a scuba diver. This 15-minutes journey makes the users travel in time through 4 different scenes: The base, a tutorial which explain how to interact with the virtual world. The sector 1 in 1950, a specific spot in the Arctic, 20 meters below the sea level. The time capsule which teleports the users 150 years later. The sector 1 in 2100, a projection of what the Arctic sea could look like in the near future. Meet whales, belugas, orcas and giant jellyfish in Virtual Arctic Expedition. Discover the Arctic seabed and learn what is at stake today in this environment. This content was elaborated and validated with marine biology scientists. It is accurate, ethical and intended for all audiences.

#### **Nature Treks VR**

Explore tropical beaches, underwater oceans and even take to the stars. Discover over 60 different animals. Command the weather, take control of the night or create and shape your own world. Relax and immerse yourself into the Nature Treks VR experience.

#### **Adventure Learning Inside Humans - VictoryXR**

You will be transported to our underwater aquatic research facility. Been to the jungles of Mexico before? Well, the virtual field trip visits both the jungles of Mexico and the magical Singapore Gardens as you learn about the hierarchy of multicellular organisms. Wendy the Science Teacher explores the phenomenon of Chiropractic and the science behind its impact on your body. And that which is too small for the human eye to see suddenly gets very large as viruses are explored in an amazing interactive experience. If you've ever wondered what influenza (the flu) really looks like, now you will go toe to toe with it in your own battle. The stories examine the systems of the body including circulatory, reproductive, respiratory along with others. How each of these systems operates in our body is a fascinating look at the organic functions that make humans go. Buckle yourself in and get ready for your adventure inside the human body!

#### **Ancient Adventures - VictoryXR**

Strap on the headset and open your eyes in our lunar research facility. Not only will you take off on some amazing adventures, but you can also play with the hologram fish aquarium while hanging out on the moon. Step into the time machine and travel back in time millions and billions of years ago to experience the earth as it looked during

its earliest years. Don't be afraid of the dinosaurs...they're mostly friendly. Wendy the science teacher takes us - in full 360 virtual reality - to Craters of the Moon in Idaho, to understand how craters impacted the world around us. Take a dune buggy ride with Steve, your VictoryVR host, through Silver Lake Sand Dunes. It's a wild ride as you fly over the sand dunes and see how sand on the East coast of Lake Michigan is overtaking homes. You can also check out a story that takes you back to the beginning of the universe as it explodes into life and follow earth's formation from the age of volcanoes to the modern era.

## EARTH AND SPACE SCIENCE

### Google Earth

Google Earth VR lets you explore the world from totally new perspectives in virtual reality. Stroll the streets of Tokyo, soar over the Grand Canyon, or walk around the Eiffel Tower. This virtual reality app lets you see the world's cities, landmarks, and natural wonders. You can fly over a city, stand at the top of the highest peaks, and even soar into space. Earth VR comes with cinematic tours and hand-picked destinations that send you to the Amazon River, the Manhattan skyline, the Grand Canyon, the Swiss Alps, and more.

### Universe Sandbox

Universe Sandbox is a physics-based space simulator that allows you to create, destroy, and interact on an unimaginable scale. It merges real-time gravity, climate, collision, and material interactions to reveal the beauty of our universe and the fragility of our planet. Universe Sandbox is the long awaited sequel to the original Universe Sandbox. Simulate Gravity - N-body simulation at almost any speed using Newtonian mechanics. Real science, real physics. Collide Planets & Stars - Epic, mind blowing collisions of massive planetary bodies

### Cataclysmic Earth - VictoryXR

Brave the biting cold of Iceland as you take in the splendid sights of the Blue Lagoon, geysers, and a waterfall. See how geography and its environmental impacts affect one another over time. Control your speed as you race around the track of Neon Pulse, choosing lanes based on your knowledge of weather and climate facts. Answering questions correctly earns speed boosts for a faster time! Ever wonder why tornadoes are ranked on a scale of 1-5? Satisfy your curiosity and more as you learn about the causes and effects of this tremendous weather phenomenon with Tornado Ted. Everything is connected somehow--find out how as it relates to our environment. How do CO2 emissions, global warming, and the greenhouse effect affect biodiversity--everyone should understand how it's all interrelated. Visit Glacier National Park in Montana to discover the differences between advancing and retreating glaciers, and how that reflects changes in our planet's composition.

### Adventures in Space: Black Holes and Beyond - VictoryXR

The learning adventures in this science curriculum unit include the opportunity to pilot a spaceship, as well as a Mars Rover while learning some of the most important lessons about the Universe. Along the way, you will meet Wendy, the Science Teacher, who presents lessons at a high school level in a fun and impactful way. You will also meet Steve, the virtual field trip host, who teaches about the solar eclipse in real time as it occurs above you. While traveling to distant galaxies, enjoy watching an animated short about the birth of a star. Following these VR experiences are three optional assessments for students (or parents) to measure mastery of the content.

## PHYSICAL SCIENCE

### Newton's House of Forces - VictoryXR

Sure you're in our space-based research facility, but even in space you need a recreation room. So, in this unit, enter the rec room and dance with holograms, play a little billiards or just relax and watch some television. Oh, and you might just learn a few things along the way. Wendy, the Science Teacher, gets to play with a Tesla Coil

and you go along for the ride. If you don't know what a Tesla Coil is, we can tell you that it is a shocking experience. The Physics Force Field is like no place you've ever traveled. It's a playground where Coulomb's Law and Newton's first three laws come alive with giant circus balls, force fields, traction beams and the laws of gravity completely suspended. You will experience the laws of nature in a way that would never be possible in the real world. Football and concussions are a big topic of conversation and for our virtual field trip, we travel to Purdue University and discuss the latest science with American football helmets, the forces involved with the sport and actions being taken to better protect athletes using the laws of physics. Finally, in our story, we learn about the physics in the game of pool as well as how Newton's laws of motion are an integral part of this game. It's a fascinating story of action and reaction.

## **Getting Cheesy in VR: Exploring Biochemistry - VictoryXR**

Take your race car through the Neon Pulse Jaguar Alley if you think you know enough about biochemistry to fuel your car. Wait? You don't. Easy, just travel with Steve to the Wisconsin Cheese Factory and learn how HUGE blocks of cheese are created through biochemistry. And Wendy the Science Teacher...well, you've never seen her like this as she teaches about laughing gas. When you put on the headset, you enter our virtual chemistry lab. You can spend time playing with test tubes, watching animations or exit through one of two doors and head out on a field trip or with Wendy the Science Teacher. When was the last time you sat down and read a virtual reality comic book? Never? Well, two of the pioneers in biochemistry, Pasteur and Roux, have an amazing story of discovery

that is told through the pages of a virtual comic book (by the way, when you're in the comic book room, be sure to adjust the radio to the station you want to listen to). Did you know the sun throws off massive solar flares that come screaming at earth? It's true. Enter our liquid surround display to immerse yourself in a room of sun flares, chemistry, animations and so much more. If there is a more immersive way to learn, we can't imagine what it would be.

## **ENGINEERING AND TECHNOLOGY**

### **Skytropolis**

You have secured a contract to build the world's first vertical megacity – the Skytropolis. Start with a plot of land and build your dream tower up into the sky! From the architectural design to every part of the interior, you are in full control of creating your skyscraper. Do you rush growth and use resources from surrounding cities, or do you invest in sustainability with eco-friendly infrastructure? Be warned - the more you build, the more you need to balance your Skytropolis' needs. You are the architect. Design your dream skyscraper the way you want it. Balance is everything. Make your Skytropolis sustainable by going green, improving the lives of your citizens, and managing your economy. Tower mogul or inspired architect? Grow your empire in career mode or explore your creativity in sandbox mode. Unlock more than 50 modules to enhance your megacity.

## **HISTORY**

### **Rome Reborn: The Basilica of Maxentius**

In this fully immersive application that supports free roaming, the Rome Reborn team is proud to host Beth Harris and Steven Zucker of Smarthistory, who present the Basilica of Maxentius and Constantine (also known as the

Basilica Nova). This was the last monumental civic building built in pre-Christian Rome. With a main entrance off the Via Sacra, it was constructed during the reign of Maxentius as part of a project that included rebuilding the nearby Temple of Venus and Rome. The vast hall (96 meters long and 65 meters wide) is covered by three cross vaults 35 meters high. The walls and floors were covered with marble. Off the nave are two side aisles covered by

barrel vaults. The central aisle on the north has an apse, as does the west end of the nave. Here the remains of the colossal statue of Constantine (estimated to have reached a height of ca. 15 meters) were found in the fifteenth century. The head, hands and feet can be seen today in the courtyard of the Conservators Palace (part of the Capitoline Museums). It is thought that Maxentius planned to use the building as an imperial audience hall, but the plan came to naught with his defeat and death in AD 312 at the hands of Constantine, who finished the building. The Senate dedicated it to the new emperor and honored him with the colossal statue in the west apse. Today, the building, like the colossal portrait of Constantine, survives only in a very damaged condition. The Rome Reborn team's digital restoration allows you to re-experience the splendor of the monument as it appeared when new in the fourth century AD.

### **Rome Reborn: The Roman Forum**

The Forum was the center of the ancient city. Here were located the major law courts, government buildings, temples of the state religion, and historic monuments. Today this heart of the ancient city is a jumble of ruins, making it hard to understand even by the millions of people fortunate enough to visit the archaeological park each year. Rome Reborn® offers you the chance to re-experience the Forum. This VR app puts you in the driver's seat, making it possible to teleport on your own from site to site around Rome Reborn®'s reconstruction of the Forum, which took over twenty years of collaboration between archaeologists and graphics technicians to re-create. As you explore the Forum, you can read brief descriptions on the virtual tablet that always accompanies you and, if you wish, you may also listen to experts' explanations of the people, monuments, and buildings you are encountering along the way. You can use the app's Time Warp feature to toggle between the ruins today and their original appearance. Take a full visit for about 3 hours, or see just the sites of interest to you. You can select any of the following languages: Chinese, English, Italian.

### **Rome Reborn: Flight over Ancient Rome**

Go on a flight in a hot air balloon over the entire now-vanished ancient city. See how the Rome Reborn team of archaeologists and 3D technicians has, over the last 22 years, painstakingly brought the city's thousands of buildings back to life, learn about the famous seven hills and other natural features, and find out how the ancient Romans lived, governed and provisioned themselves, took time off for recreation, and worshiped their gods. See the Forum, Colosseum, aqueducts, theater district, the imperial fora, the Circus Maximus, the imperial palace, the tombs of Augustus and Hadrian, the Pyramid of Cestius, and much, much more. The app has more than 30 points of interest and over two hours of content. You can organize your tour with complete freedom. As you move from point to point, you can listen to expert commentary about what you are seeing. You will see the city in a way that not even the ancient Romans could do--the hot air balloon was only invented in 1950 (we did use the word "magic," didn't we?). In no time, you will have a degree of familiarity with this greatest of ancient cities that only a handful of experts could claim to have after a lifetime of study.

## **PSYCHOLOGY/SOCIOLOGY**

### **Becoming Homeless**

In this immersive virtual reality experience from Stanford University's Virtual Human Interaction Lab, spend days in the life of someone who can no longer afford a home. Interact with your environment to attempt to save your home and to protect yourself and your belongings as you walk in another's shoes

## **ART & MUSIC EDUCATION**

### **Tiltbrush**

Tilt Brush lets you paint in 3D space with virtual reality. Unleash your creativity with three-dimensional brush

strokes, stars, light, and even fire. Your room is your canvas. Your palette is your imagination. The possibilities are endless.

## **Dream Of Dali**

Enjoy the remarkable marriage of art and technology in Dreams of Dali, a virtual reality experience from The Dali Museum (St. Petersburg, FL), as you explore Salvador Dali's painting "Archaeological Reminiscence of Millet's 'Angelus.'" Immerse yourself in the world of the surrealist master like never before in this encounter, venturing into the towers, peering from them to distant lands and discovering surprises around every corner.

## **The Night Cafe: A VR Tribute to Vincent Van Gogh**

The Night Cafe is an environment that allows you to explore the world of Vincent van Gogh first hand. Take a moment to enjoy his iconic sunflowers in 3 dimensions or walk around the chair he painted in his bedroom to see it from another angle. Step into the vivid colors straight from his palette.

## **Electronauts**

Immerse yourself in an interactive sonic environment where you build, drop, remix, and jam with your friends and top artists. Create songs, crush sets, and express yourself like never before. Electronauts sets the stage for you to DJ, perform, and make music magic in virtual reality.

## **Michelangelo's Sistine Ceiling in VR**

Step onto Michelangelo's scaffold to learn about how he painted the ceiling, or enter a Vatican conservator's mobile aerial platform to see the ceiling up close and learn about the controversial cleaning. Over 100 clickable elements about Michelangelo's work.

## **SPORTS**

### **Final Goalie (Hockey Goalie is also available)**

Final Goalie VR is a soccer simulator specially designed for Virtual Reality. It offers an incredible experience playing as a goalkeeper.

### **Kings VR**

Experience the feelings of different sports. Kings VR has developed a variety of VR-sport games which you can experience in virtual reality. Featuring: Baseball, PingPong, Archery, Tennis, Badminton, & Squash.