

# Mastering the Metaverse: Virtual Reality in Your Classroom

Kendall Murphy and Kurt Tholking  
St. Mark's School of Texas

*“Virtual reality is the first step in a grand adventure into the landscape of the imagination.”*

**Frank Biocca**

Chair, Department of Informatics, Ying Wu  
College of Computing at New Jersey Institute  
of Technology

*“VR at its best shouldn’t replace real life, just modify it, giving us access to so much just out of reach physically. If you can dream it, VR can make it.”*

**Matthew Schnipper**

Senior Directors, Global Operations  
VICE Media

# For the Classroom

Immersive Environment

Experiential Learning

Student Collaboration

Knowledge Retention

Active Participation

# For the Boy

Global Awareness

Social Connection

Curiosity

Empathy

Imagination

*“Mrs. Murphy, I went all the way to the top of Mount Zion last period in Humanities!”*

*“Can I take the 360 camera on my vacation and use it to make my own VR and show the class?”*

*“I saw Earth from the International Space Station today!”*

*“This was the best class ever!”*

# What is the Metaverse?



- A network of 3D virtual worlds focused on social connection
- Interconnected digital spaces
- Virtual platform bringing together all aspects of human experience: social interaction, currency, trade, economy, and property ownership

Digital experience that is an alternative to or a replica of the real world

# Application Use in the Classroom



**Computer Science**

**History**

**Language Arts**

**Science**

**Life Skills**

**Physical Education**

# Educational Application Options

education

Apps (24)



National Geographic Explore VR  
\$9.99



ENGAGE  
Get



Retreat  
Get



Librarium  
\$9.99



Prisms Math  
Get



Noun Town Language Learning  
\$19.99



Titans of Space PLUS  
\$9.99



Anne Frank House VR  
Get



Cubism  
\$9.99

## Science

Mission:ISS  
Space Explorers

## Humanities

Wander  
National Geo: Explore  
Anne Frank VR

## Math

Prisms

## Computer Science

Multiverse  
Tested VR

## Art

Paint VR

## Physical Education

Beat Saber  
Golf+

## Mental Health

Guided Meditation VR

## Foreign Languages

Immerse

## All Subjects

YouTube VR

Relevant applications available for every subject

9:35 AM



YouTube



52%



Humanities-5  
St. Mark's VR



Humanities-6  
St. Mark's VR



Liked videos  
St. Mark's VR



Trainings  
St. Mark's VR

Create your own playlists and push out to headsets instantly



A person in a black t-shirt and shorts stands on a rocky mountain peak, looking out over a vast, green valley. The sky is blue with scattered white clouds. The word "WANDER" is overlaid in large, white, sans-serif capital letters across the middle of the image.

WANDER

# Creating Content Using 360 Camera



- Students are given the opportunity to create their own digital content
- Student to student: Allows for an extended global understanding
- Faculty to student: faculty are able to document their travels in an effort to share curricularly-relevant material

A tool to create your own unique VR content

# Implementation and Training



- Naming Devices and Controllers
- Home base for transporting devices
- Creating Meta Accounts and download basic applications
- Provide Training for Faculty
- Create a system for teachers to reserve devices
- Allow teachers the ability to search for VR Apps that may benefit their curriculum
- Optional: Assign iPads for casting and link to each headset

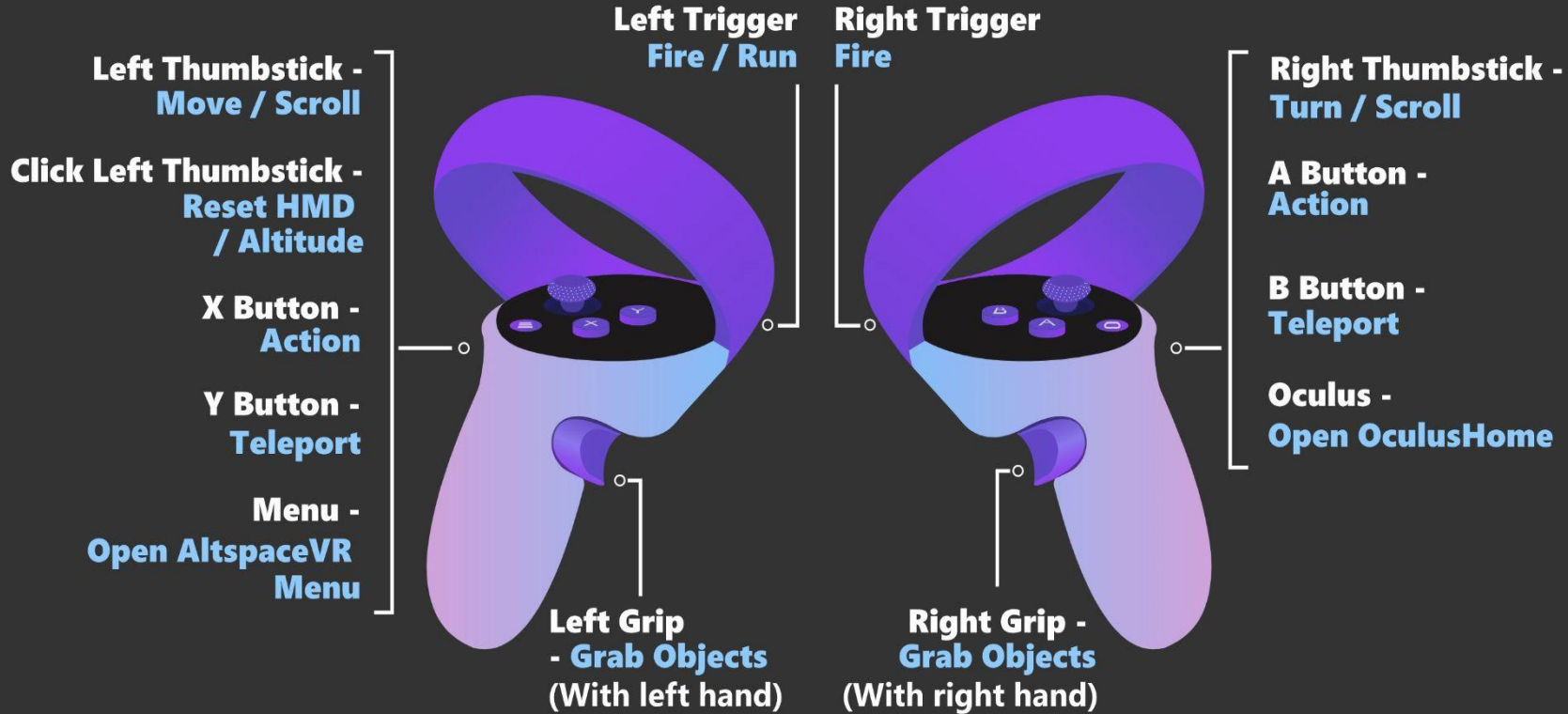
While this takes time and training, the result is very impactful.

# Instructions for Use



- Adjusting straps and eyes
- On/Off switch
- Find right and left handset
- Set up Stationary guardian/boundary
- Default Home Environment
- Navigating the Dock and Applications

Remember to be patient with yourself!





## Look around for boundary

Slowly look around to help your headset find the boundary you had created for this space.

If you don't have a boundary for this space, or if it can't be located, you can create a new one.

Create new boundary



## Confirm Floor Level

Look down at the virtual grid. If it appears to be at floor level, select **Confirm**.

If not, select **Reset**. Move the grid down by gently touching the floor with your controller before confirming.

Confirm



Reset



## Define Play Area

Point your controller at the floor, then press and hold the trigger to draw along the boundary of your cleared play area.

We recommend a play area size of 6.5ft x 6.5ft or greater for roomscale experiences.

Switch to stationary boundary ●





## Confirm Stationary Boundary

Look around to check that this boundary is clear of obstructions, including anything you could hit with your arms outstretched.

This stationary Guardian is for sitting or standing experiences only. When your headset gets close to the edge of your play area, Passthrough will fade in and you'll see a real-time view of your physical environment.

Confirm

Switch to roomscale boundary



# Contact Information



**Kendall Murphy**  
murphyk@smtexas.org



**Kurt Tholking**  
tholkingk@smtexas.org