IMMERSIVE LEARNING ACROSS DISCIPLINES WITH AUGMENTED & VIRTUAL REALITY

Mary Ann Stillerman, Ira Dawson, Cristi LeBron
The Walker School (GA)
NAIS 2020
AGENDA

Purpose • Play • Possibilities

- Why We Are Here
- Teaching & Learning with AR/VR
- Where We’re Headed
- Talk & Tinker: Q&A
Who We Are & What We Do

Ira Dawson, MS Division Head
Mary Ann Stillerman, Middle School Teacher
Cristi LeBron, Technology Department Chair
Why Augmented & Virtual Reality?

- Immersive experiences
- Content accessible and visible
- Enriches literacy experiences
- Students in control
- Canvas for student-generated content
- Supports Design-Thinking Processes
DESIGN THINKING

- Define
- Prototype
- Empathize
- Ideate
- Test
Multisensory Learning

Institute for Multisensory Structured Language Education
What’s the Difference?

Augmented Reality
Add digital elements to your actual environment. You look at the real world augmented with new additional items.

Virtual Reality
Immersed in another world, you do not see the real world. Experiences range from viewing to navigating and interacting within the digital world.
Tinkering with Tools

Google Cardboard
Merge VR Headset
Oculus Go
360 Cameras:
- Samsung Gear 360
- Insta 360 One
Tinkering with Apps

Consider downloading these apps if you would like to explore with us today.
Immersive Experiences to Activate Learning

The WOW Factor
Immersive Presentations with Nearpod VR Field Trips

- Presentation casting tool
- Interactive
- Teacher controlled “Live Lesson” or “Student Paced”
- VR Field Trips – 360 Cities
Oculus Go: Virtual Tour - Anne Frank House

- Option for VR or 360
- Includes audio
- Plays video & audio
Google Expeditions: Augmented Reality
American Revolution

The American Revolution, which lasted 7 years between 1776 and 1783, was a revolt of American colonists against the British government. After intense fighting and overcoming extreme disadvantage, the colonists succeeded in defeating the British at the Battle of Yorktown in 1781, winning the revolution. Although the Battle of Yorktown was the final battle in 1781, the revolution did not officially end until 1783 when the peace treaty with England was signed.
Immersive Experiences to Deepen Learning

This is cool! Now What?
Google Expeditions & Cardboard: European Street Art

- Google Expeditions App
- Expedition: European Street Art (VR)
- Free Write - Poetry - Digital Poem
- Shared experience with university English Ed students
APP Smashing - Art & Poetry AR Gallery with FlipGrid

- Narrated Digital Poems in Adobe Spark
- Uploaded to Flipgrid
- QR Codes allow viewers to see video in AR
Internal Organs & Augmented Reality with Virtuali-Tee

- Explore the human body on a human body with augmented reality.
- Interactive, videos, audio, different languages.
What can I make?

Immersive Experience to Inspire
Create a virtual tour

Tour Creator makes it easy to build immersive, 360° tours right from your computer

GET STARTED
Google Tour Creator

- Use templates OR
- Google Street View
- Incorporate Sound
- Add images and text
- Narrate
- View in 360 or share to Google Expeditions
Google Tour Creator & Google Expeditions

Teacher-Created Model for World Language
- Google Tour Creator (360 or Cardboard VR Expedition)
- After one-on-one 15-minute session on Tour Creator
- Model for students to create their own tours
Expeditions Gallery: Student-Created VR/360

Valley Forge

Take a virtual tour of Valley Forge and discover the Unsung Heroes of the American Revolution.

Category
Expeditions Gallery: Student-Created VR/360

“Beyond Us” Street Art (8th Grade English)
360 photos taken with Google Street View App
Uploaded to Google Tour Creator
Expeditions Gallery: Student-Created VR/360

Remind Me of Home
8th Grade English
These places may not be the first places you would go when visiting Belgium...but [they] mean something to me.
Expeditions Gallery: Student-Created VR/360

Space on Earth
8th Grade
FlipGrid AR

Students create and/or curate videos

Teacher generates AR QR code

Use with other media to layer the augmented video with reality
Other Ideas for FlipGrid AR

- Lab Safety Tour
- Interactive Student-Created Museum
- Book Talks (Media Center, Classroom Library)
- Orientation, Campus Tour
- Breakout Box Clues
FlipGrid Tool for AR

Protein Modeling

What’s My Robot?
Augmented Reality Possibilities

Create AR with web-based MetaVerse Studio

https://studio.gometa.io/
MetaVerse & Design Thinking

How MetaVerse Works and why it's a great tool for teaching design thinking.
Merge Cube & CoSpaces

- Lessons and content available (free and fee)
- Content Creation for CoSpaces and Merge Cube
- Coding (scaffolded)
Innovation Diffusion Theory (Everett Rogers)

We Are Here

- Innovators: 2.5%
- Early Adopters: 13.5%
- Early Majority: 34%
- Late Majority: 34%
- Laggards: 16%
What’s Next?

- **Developer Culture:**
  - Teachers & Students
  - CoSpaces & Merge Cube Add On
  - Unity (Upper School)

- **Devices:**
  - Sustainability
  - Equity
  - Access
Take Time to Tinker

- Define
- Prototype
- Empathize
- Ideate
- Test
Talk & Tinker: Q&A and Play

Mary Ann Stillerman
@stillermanteach
maryann.stillerman@thewalkerschool.org

Ira Dawson
@IraDDawson
ira.dawson@thewalkerschool.org

Cristi LeBron
@techielebron
cristi.lebron@thewalkerschool.org