

# VR, AR, MR and Their Possible Application for Academic Libraries

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"VR won't supplant all traditional education methods but it will augment them, just like the internet did." Will Mason, Co-Founder & Editor-in-Chief, UploadVR



## Abstract

VR (virtual reality), AR (augmented reality), and MR (mixed reality) can create unique experiences that expand learning opportunities and engagement for end users. The academic libraries can be well positioned to provide VR and AR resources, spaces, strategies, and connections to support the creative endeavors of their patrons. Through a Professional Learning Community, the librarians worked with faculty and students to explore the pedagogical use of VR and AR aligned with a campus student learning experiences program. The purchase of virtual and augmented reality equipment was facilitated through the library and the campus STEM center.

## Definition



VR- The creation and experience of environments. The central objective is to place the participant in an environment that is not normally or easily experienced.

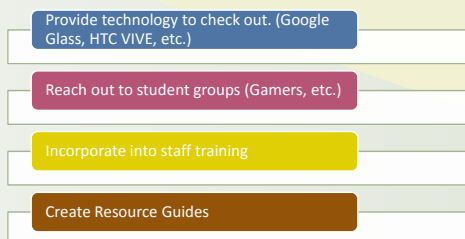


AR- Augmented reality is similar to virtual reality but the virtual image is superimposed on a real-world image often using see-through head-mounted displays.

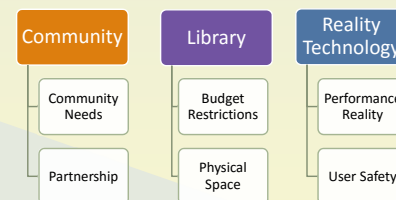


VR+AR=MR When used to classify the larger scope of reality technologies, it refers to the coverage of all possible variations and compositions of real and virtual objects.

## Library Support



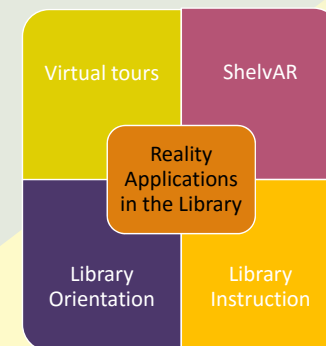
## Planning Considerations



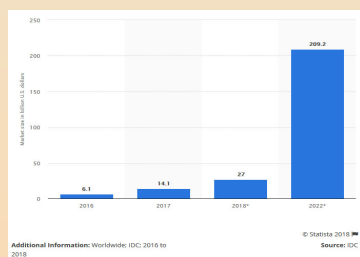
## VR, AR, MR in Education

Reality in Education: explain abstract and difficult concepts; engagement and interaction; discover and learn; training (augmented tutorials, digital modeling, and simulations); objects modeling (manual training, hand exercises, quiz solving etc.)

## VR, AR, MR Used in the Library



Growth in AR and VR markets worldwide is projected to be over 209 billion U.S. dollars by 2022



## Otterbein Professional Learning Community (PLC)

Join the Immersive Technologies Learning Community participants who will be sharing their hands-on experiences with Virtual and Augmented Realities.

HOLOLENS HTC VIVE FREE POPCORN! MICROSOFT Mixed Reality GOOGLE Cardboard

Connecting the VR | AR possibilities to the 5 Cards Experiences

Otterbein Point

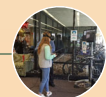
Center for Teaching and Learning

Scoring Matrix

## Otterbein Immersive Technologies Pop-Up



Mixed Reality

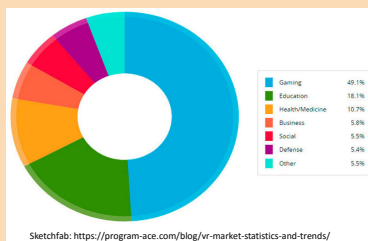


HoloLens



HTC Vive, Google Cardboard

Which industry do you think will be most impacted by Virtual Reality in the next 5 years?



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