VIRTUAL REALITY LAB & VIRTUAL REALITY DEVELOPMENT

KEVIN ABBOTT
Co-Director, WMU VR Lab
Director, WMU VR Development Studio
Office of Information Technology
TWO YEARS AGO
PART 1: WMU VIRTUAL REALITY LAB

BECOMES A REALITY
VR LAB GOALS: LEARN. CREATE. PLAY.

- Introduce faculty and provide a resource
- Allow all to learn how to create VR content
- Fun and social activity for students in the library
VR LAB SUCCESSES

• Over 2,500 Visitors
• Dozens of Workshops
• Publicity
  • Filmmaker Magazine Article
  • American Library Association Feature
  • Two features on WWMT
• Outreach
  • Girls in Tech event at Kalamazoo Public Library
  • Portage Public Schools S.T.E.A.M. event at Air Zoo
  • Refugee Family gaming fundraiser
• Leadership Position
  Have provided guidance to approx. 10 institutions, including Kalamazoo College, Northern Michigan Univ., UNLV, Kansas State Univ. and the Univ. of Mississippi
• Partnership
  • Scott Russell
    • University Libraries Director of IT Services & VR Lab Co-Director
VR LAB CLASS USAGE

- Honors Technology and the Arts
  - Unity 3D
- Multimedia Arts Technology – VR Interactive Music
  - Unity 3D
- Sculpture – Habitat Design (Patrick Wilson)
  - Oculus Medium
- Theatre Design - Period Styles (Kathryn Wagner)
  - Google Earth VR
- Multimedia Journalism (Sue Ellen Christian)
  - Custom Software
- History – Roman and Greek VR (Anise Strong)
  - Roman Forum and Greek Acropolis
PART 2: VIRTUAL REALITY DEVELOPMENT STUDIO

• Developed for the President’s transformational Initiative

• Provide the University with the capability to new content for use at WMU and beyond.
• Provide the capability for testing and experimenting with VR technology
• Provide students with a studio-based experience working on real project

• Began work in Fall 2018 (officially)

• Currently have seven student employees from Music Technology, Theatre Design, Product Design and Computer Science and Business.
CURRENT PROJECTS

• **W Care VR nursing Simulation**
• **Cinderella VR/AR Pop-Up Book**
• **Beowulf VR**
• **Honors Thesis Project**
• **Blindness and Low Vision Studies Map Project**
• **Theatre Lab Design Application**
• **Support for Classes using the VR Lab**
W CARE VR NURSING SIMULATION

DEVELOPED WITH THE BRONSON SCHOOL OF NURSING

SUBJECT MATTER EXPERT:

SUSAN HOUTROUW

PEDIATRIC CLINICAL NURSE SPECIALIST
RN, MNSC, CNS, AHA-BC 2019

GOALS:

• ADDRESS ACCESS ISSUE TO CURRENT SIMULATION LABORATORY
• PROVIDE UNLIMITED OPPORTUNITY FOR STUDENTS TO PRACTICE AND PERFECT THE PROCEDURES
• PROVIDE IMMEDIATE LEARNING FEEDBACK AND TRACKING DATA
• GAIN MORE EXPERIENCE WITH CREATING COMPLEX VR CONTENT
WMU Nursing Simulation provides an efficient learning environment to correctly practice the required skills?

- Yes 41
- No 4

How accurate was the simulation in replicating real-world nursing care?

- Not accurate 5
- Accurate 30
- Very accurate 10

How effective was the simulation in challenging your knowledge of a specific procedure?

- Not effective 4
- Effective 28
- Very effective 13
NURSING SIM EXPOSURE

- MiCareer Fair at Kalamazoo County Fairgrounds
- xrMidwest Conference Presentation
VIRTUAL REALITY OPPORTUNITIES

• **Try VR for yourself (it’s ok, everyone looks dorky in a VR headset)**

• **Visit the VR Lab (and bring you students and colleagues)**
  • To Learn, Play or Create
  • Have a team-building session or a meeting

• **Discuss VR Project Ideas (even if they are crazy)**
THANK YOU

Lab Location: 0135 Waldo Library
Studio Location: 1108 Dunbar Hall

www.wmich.edu/vr

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