

Dec 6, 2021

Virtual Reality at Monmouth College: A Space Proposal directed to President Wyatt, Dean Willhardt, and facilities director Sarah Young. (BE Sturgeon, Dec 6 2021)

Over the past 5 years, Monmouth College (MC) has invested financially (~\$14k) into virtual reality hardware and software. At the present time, 8 VR systems (MSI gaming laptops and Oculus Rift S headsets/controllers) are in use in multiple courses (Art, Biology, Chemistry, and Exercise Science) instructed by multiple faculty (Braun, Baldwin, Sturgeon, and Wunderlich). The VR systems do not have a permanent location. They are currently on a mobile cart for transport within CSB; the cart can be moved to other campus locations with advanced planning.

Having a permanent location for these systems will allow additional course/faculty/student use as well as expanding into areas of augmented reality (AR), eSports and social gaming. VR system will still remain portable if needed for special situations. The area under consideration is HT 109 (Finley Hall).

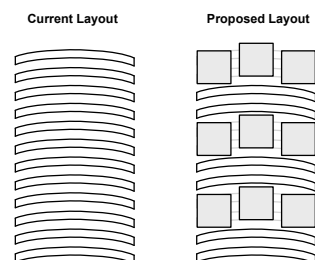
HT 109 is a teared-lecture hall with 12 rows of 10 seats (~21' across) with a large projection screen, room speakers, and adequate lighting. Access to HT 109 is through the first floor on the southside of the building. This space has been slightly vandalized over the years but structurally sound. HVAC is questionable although this issue has not been explored.

It would be desirable to begin using the room in late Jan 2022. In order to begin using the room it would require the following:

- 1) Renovation to accommodate specialized use (see below under **Renovation Details**),
- 2) Electrical power; outlets are available on side walls that would allow for the temporary use of extension cords (8 systems x ~2 amps each = 16 amps). More permanent outlets may be desirable.
- 3) Networking; VR systems run well using campus WIFI but permanent network cabling may be desirable.

Renovation Details

As noted, the room currently has 12 rows of 10 chairs (see figure to right). Nine VR "play" areas (~8' x 6') could be constructed by removing 6 of the rows/chairs and constructing a platform out of plywood. Each play area needs electrical and networking/wifi. Some social gaming activities involve multiple players, so making 6 – 8'x6' and 2 – 8'x10' play spaces should be considered.



Materials needed (estimated):

- 18 – ¾' 4'x8' sheets of plywood
- ~40'x 8 = 320 linear feet of 2'x4's for support/railing
- fasteners

Timeline

Approval would be best done by Monday Dec 19th. It is my intention to engage with students to assist in renovation of the space. Local students/faculty could begin renovation in consultation with the Physical Plant staff (of course) over the holiday.

Stage 1: Begin with cleaning the space to make it presentable to the campus community.

Stage 2: Begin removing some of the seating and constructing the platforms in the first two rows. This “test area” would allow us to design/redesign to play areas before committing to a single design.

Stage 3: Complete the play area construction.

Stage 4: Setup VR equipment and bring test classes over.

Stage 5: Open the space to the campus community with student help to manage the facility.

I appreciate you taking the time to read this proposal. I know the timeline is short, but I believe that the value of this space is enough to justify the quick timeline.

Sincerely,

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