HoloLens2 A&P Lab

Taylor Kahny - 2022-07-14 - Instructional Design & Learning Technology

The anatomy & physiology lab has gained new mixed reality technology in the form of Microsoft HoloLens and Pearson's HoloHuman anatomy app. We are excited to see how these tools will be employed at Nursing to transform student education over the coming semesters.

What is mixed reality, and how does this differ from virtual and augmented realities?

The terms virtual reality (VR), augmented realty (AR), and mixed reality (MR) are often confused. Virtual reality is a completely virtual space that does not integrate the real world. For virtual reality headsets, the users are completely immersed in the application and cannot see their surroundings.

Augmented reality, on the other hand, includes both the physical world and computer-generated graphics, or a hologram, overlaying your surroundings. Thus, the reality is augmented.

The technology behind the HoloLens produces a form of mixed reality. In mixed reality, users can observe and interact with objects that are projected into their view. This concept is being used to revolutionize the way we teach our students, assess our patients, and formulate surgical approaches to complex cases (Medium, 2019).

What is HoloLens 2?

HoloLens 2, the mixed reality headset that will be used in the A&P lab, offers the most comfortable and immersive mixed reality experience available, combining an untethered device with applications and solutions that help people learn, communicate, and collaborate more effectively (Microsoft, 2019).

Much like your mobile phone, the HoloLens runs various applications. At Nursing, we will be using the HoloHuman app. HoloHuman allows students and teachers to work in groups using collaborative sessions where all participants can see and interact with unique 3D holographic models of the human body. This provides a life-like alternative to cadaveric dissection and allows users to explore and learn about more than 13,000 separate anatomical structures (Pearson, 2018).

Adapted from:

https://medium.com/doctors-in-tech/the-augmented-doctor-what-microsoft-hololens-can-do-for-healthcare-55f291ecdf21

https://www.microsoft.com/en-us/hololens

https://www.pearson.com/news-and-research/announcements/2018/11/pearson-and-3d4medical-announce-the-launch-of-worlds-first-anato.html?hootPostID=6749b55aa78e7c2c62fc75c6df99b51a