

Metaverse Based Education

Imagine it's Monday morning, school starts in 30 minutes, and you finally decide to get out of bed and put on your virtual headset. Once the headset is on you log in to your first-period class, where you find yourself in a virtual classroom surrounded by classmates, chairs, a desk, and a whiteboard. As you wait for class to begin, you decide to customize your avatar and socialize with your classmates. The teacher then logs in and proceeds to teach class. This is only an example of what the future of education could look like with the metaverse.

The metaverse can be described as “[a] massively scaled and interoperable network of real-time rendered 3D virtual worlds that can be experienced synchronously and persistently by an effectively unlimited number of users with an individual sense of presence and with continuity of data, such as identity, history, entitlements, objects, communications and payments.”¹ Currently these 3D worlds can be accessed through virtual reality (VR) headsets and augmented reality (AR) glasses.² VR is a simulated 3D environment that enables users to interact with virtual surroundings in a way that approximates reality as perceived through our senses.³ AR adds digital overlays on top of the real world via a lens of some type.⁴ The previous example of education and the metaverse involved using a VR headset to enter a virtual classroom. Still, another example of education could also involve students wearing AR glasses in a classroom. Although both are only ideas for a potential metaverse-based education, real concerns need to be considered to implement a metaverse-based education effectively.

On the purely educational side, a metaverse-based education program or system would still need to follow key learning principles to be effective. These principles include enabling and encouraging collaboration, communication, mastery of content, creative thinking, creative innovation, and confidence.⁵ These principles are important because the use of these new technologies could also become a distraction to students if not created with these principles in mind.⁶ It is important to ensure that these interactive medias are attention-directing and not distracting.⁷

¹ Linda Tucci, *What is the metaverse? An explanation and in-depth guide*, TECHTARGET (Nov. 18, 2022), <https://www.techtargget.com/whatis/feature/The-metaverse-explained-Everything-you-need-to-know> [https://perma.cc/B43A-AJ3X].

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ Kathy Hirsh-Pasek, Jennifer M. Zosh, Helen Shwe Hadani, Roberta Michnick Golinkoff, Kevin Clark, Chip Donohue, & Ellen Wartella, *A whole new world: Education meets the metaverse*, BROOKINGS (Feb. 14, 2022), <https://www.brookings.edu/research/a-whole-new-world-education-meets-the-metaverse/> [https://perma.cc/M29K-UNC9].

⁶ *Id.*

⁷ *Id.*

There are also other concerns that should be considered when implementing a metaverse-based education system. Some of these concerns include the handling of data and data privacy, bullying or other unwanted altercations, and access. With data privacy, what personal information is being shared, who would have access to this information, and what security is in place to protect this information?⁸ With bullying or unwanted altercations, how would these situations be handled to avoid situations like this, and what laws in the real world would be broken from altercations in the metaverse? With access, who would be funding the use of this technology, how would this technology be distributed and implemented, and who would have access to this technology first and last? All though these are just questions for thought, they are still concerns that arise and should be considered when attempting to implement new technology like this.

Even though concerns are present, having a metaverse-based education program or system is not far from reality. As technology advances, I wouldn't be surprised to see a metaverse-based education program or system being implemented in schools across the United States in the near future.

⁸ Olga V. Mack, *The Technology and Legal Issues Behind Metaverse*, ABOVE THE LAW (Sept. 12, 2022) <https://abovethelaw.com/2022/09/the-technology-and-legal-issues-behind-metaverse/> [https://perma.cc/E4YT-NWS3].