

How the education system is fundamentally reshaped by the metaverse

On average, American adults spend 10.5 hours in front of a screen every day. This explains why, according to CITI, 1 billion people by 2030 will wear virtual reality (VR) glasses daily. In fact, global consulting company McKinsey estimates that the transactional value in the metaverse will by 2030 be \$ 5 trillion – equivalent to the third-largest GDP in the world.

The education sector is one industry that will quickly experience a transformation as the metaverse takes hold. Vital to both society and the economy, the education sector currently is constrained by limited resources. It is a prominent case of the “Baumol’s Cost Disease,” which refers to “the rise of wages in jobs (e.g., teaching) that have experienced no or low increase of labour productivity, in response to rising wages in other jobs (e.g., accounting) that have experienced higher labour productivity growth.” It reflects the fact that many sectors have experienced rising salaries as a result of increased productivity owing to the adoption of new technologies (e.g., accountants have become far more efficient because of Microsoft Excel). The education system, by comparison, has experienced limited productivity gains—but to compete for qualified personnel and make scholarly jobs attractive, the salaries in the industry have naturally risen. That’s why this sector will be one of the first to be completely reshaped by the metaverse. In fact, the most future-oriented governments and universities are already retooling and transforming their institutions. Let’s explore how.

Soon students will no longer read about World War II in hard-copy books or learn about climate change through pre-recorded videos, as virtual learning experiences in the metaverse will enable learners to recall memories more easily. A large study recently showed significant cognitive advantages of immersive learning experiences in the virtual environment over traditional learning settings. A large sample of students studied climate changes in Greenland either through a virtual field trip via the metaverse or via 2D computer videos. The conclusions were clear. The students who participated in the virtual field trip were more present, had a higher enjoyment rate, were more interested, and experienced superior short- and long-term ability to recall memory.¹ Similarly, adjacent research found that students immersed in a virtual learning space had an 8.8% improvement in recall accuracy compared with desktop learning conditions.² Virtual settings can create more memorable experiences that enhance students’ abilities to recall of large amounts of data.

In fact, students and workers at Thammasat University in Thailand already study, attend events, and join start-up incubators in the new “Thammasat Metaverse Campus.” The university has taken the innovative step to establish a new campus focused on collaboration, novel teaching methodologies, and learning and access to education. For example, students studying medical sciences are able to virtually examine and dissect a body in an immersive anatomy class without physically being present. The reduced importance of geographical location also expands education as something being for the few to something for the many, which can open doors to access in thrilling new ways.

The benefits are clear – but the questions are many. This is why Martin Lindstrom launched the world’s largest metaverse experiment, the \$22 million “Engineering Our Dreams” project, in tandem with accredited experts from Harvard University, Stanford University, and MIT. By pioneering the development of the education system in the metaverse, Lindstrom will examine what is required for knowledge-heavy institutions to begin future-proofing themselves as well as explore how academic entities can approach this transformation step-by-step. The study also investigates practical examples of how other educationally oriented organizations have safeguarded themselves and how early investment in cutting-edge technologies like VR and augmented reality are shaping the direction of the industry.

¹ <https://link.springer.com/article/10.1007/s10648-022-09675-4>

² <https://link.springer.com/article/10.1007/s10055-018-0346-3>