RISE

Catalysing Global Research Excellence

ARTIFICIAL INTELLIGENCE (AI):
Embracing the Future

ADMINISTRATION

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ABOUT THE MAGAZINE

RISE Magazine is published by Office of the Deputy Vice-Chancellor (Research and Innovation) with aims to highlight a research and innovation on multidisciplinary expert of fields in UiTM. It serves as a platform for researcher to showcase their high quality and impactful findings, activities and innovative solution through publication. Contribution of these ideas come from academicians, researchers, graduates and universities professionals who will enhance the visibility of research and stride to elevate Universiti Teknologi MARA to global standards. This is an effort to promote research as a culture that is accepted by all expertise.

ABOUT UiTM

Universiti Teknologi MARA (UiTM) is a public university based primarily in Shah Alam, Malaysia. It has grown into the largest institution of higher education in Malaysia as measured by physical infrastructure, faculty and staff, and student enrollment. UiTM is the largest public university in Malaysia with numerous campuses throughout all 13 states in Malaysia. There is a mixture of research, coursework and programmes offered to the students. The Office of the Deputy Vice-Chancellor (Research and Innovation) also known as PTNCPI *(Pejabat Timbalan Naib Canselor (Penyelidikan dan Inovasi))* serves as a *Pusat Tanggungjawab* (PTJ) for navigating the research and innovation agenda of the university to achieve UiTM's goals.The PTNCPI office strives to mobilize faculty and campuses, fostering collaboration among researchers, with the aim of transforming the University into a Globally Renowned University by 2025

Beyond the Hype:

How the Metaverse Can Revolutionize Higher Learning in an Authentic Way

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Many of us have heard of the Metaverse, but only a handful have genuinely experienced it. Coined by the famous science fiction author Neal Stephenson, the Metaverse refers to a virtual space where people can interact with each other through their avatars in a 3D environment. This technology has gained popularity in recent years, thanks to augmented reality (AR), virtual reality (VR), and extended reality (XR) platforms' development.

The Metaverse and its Relevance in Education

In the education sector, Metaverse-based applications can be incorporated with face-toface learning, creating a truly authentic English learning environment for learners. English as a second language (ESL) learners can use the Metaverse to practice their language skills in a fun and interactive way.

Blended Learning with the Metaverse

One of the benefits of the Metaverse is that it brings about the new possibility of blended learning, which can be particularly helpful for ESL learners in higher learning institutions in Malaysia. Blended learning combines traditional face-to-face teaching with online learning, giving students the best of both worlds.

The Education-based Metaverse: Enhancing Learning in an Authentic Atmosphere

The education based Metaverse uses platforms to enhance learning activities in an immersive environment, fostering crucial skills such as collaboration, effective communication, and creative problem-solving.

Sufficient provision of English learning opportunities:
The education based Metaverse offers a wide range of English learning opportunities not available in traditional classrooms.

The improvement of self-efficacies:
Using the education based Metaverse, learners gain confidence in their ability to learn English and communicate effectively.

Enhancing User Engagement with the Education-based Metaverse

User engagement plays a significant role in enhancing the learning experience. The education based Metaverse offers an engaging visual environment that is particularly useful for young English learners. Learners can study at their own pace, actively engage in action plans, and receive instant feedback, leading to greater engagement and learning goal achievement.

Five Primary Affordances of the Education-based Metaverse in English Learning and Teaching:

The acquisition of English knowledge:
The education based Metaverse enables learners to acquire English knowledge in an engaging and interactive way, more effective than traditional teaching methods.

The promotion of deep English learning activities:
By immersing learners in a 3D environment, the education based Metaverse encourages critical thinking and problemsolving skills.

The enhancement of intrinsic motivation:
The engaging nature of the education based Metaverse motivates learners to explore the English language.

Real-Life Application of Metaverse Technology in Malaysian Higher Education

Some institutions in Malaysia have already begun leveraging Metaverse technology to enhance English language teaching programs. For example, the Malaysian Institute of Art uses virtual reality (VR) technology to simulate English language classes, enabling interactive learning and instructor feedback. The Malaysian University of Science and Technology has also embraced VR technology to create an immersive English learning environment, allowing students to learn independently and correct mistakes in real-time.
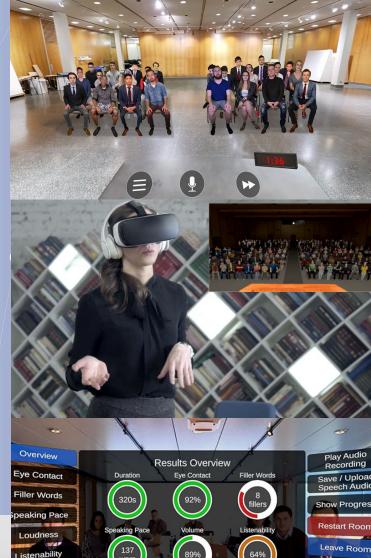
Limitations and Challenges of Metaverse Technology in Higher Learning

Metaverse technology has some limitations and constraints, primarily related to the cost of implementation and the need for specialized training for teachers and students. Lack of standardization in metaverse-based applications development can also make it challenging for institutions to evaluate their effectiveness compared to traditional teaching methods.

A Promising Future for Metaverse Technology in Higher Education

Despite limitations, metaverse technology holds immense promise in revolutionizing higher education, especially for ESL learners. By creating an immersive and interactive learning environment, education-based metaverse technology fosters a deeper understanding of the English language, enhances motivation, and provides ample opportunities for language practice.

Investing in the necessary infrastructure, providing specialized training, and developing standardized metaverse-based applications are crucial steps for fully leveraging the potential of this technology in higher learning.

Final Thoughts

Metaverse technology offers a promising path for higher education, particularly in enhancing English language learning experiences. By creating an authentic and interactive learning environment, the education-based metaverse can empower ESL learners and promote deeper language understanding. As technology continues to evolve, institutions must invest in infrastructure and training, ensuring its successful integration into the curriculum and realizing its transformative benefits for students.