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SHORT COMMUNICATION

10 Best practices in Immersive Learning Design and 10 points of connection with the Metaverse: a point of view

10 Buenas prácticas en el diseño del aprendizaje inmersivo y 10 puntos de conexión con el Metaverso: un punto de vista

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ABSTRACT

Immersive learning design is the process of creating immersive learning experiences using technologies such as augmented reality virtual reality, and mixed reality. The goal of immersive learning design is to create engaging and interactive learning experiences that immerse learners in a virtual environment where they can explore and interact with the subject matter in meaningful ways. Today, immersive learning design is used in a wide range of settings, including education and corporate training. It is increasingly being recognized as an effective way to engage learners and enhance the learning experience. In this article, we systematize 10 best practices for immersive learning design. These technologies allow learners to experience and interact with the virtual environment in a way that is more realistic and immersive than traditional methods, such as lectures or reading materials. On the other hand, 10 points of connection between immersive learning design and the metaverse. The metaverse is transforming education by promoting communication and supporting immersive learning. The metaverse is also projected to dramatically boost e-learning by making virtual learning environments more lifelike and learning more engaging and experiential. Based on this reflection, it could be stated that metaverse could be a promising tool to provide an immersive learning experience for today's users.

Keywords: Immersive Learning Design; Metaverse; Education; Best Practices.

RESUMEN

El diseño de aprendizaje inmersivo es el proceso de creación de experiencias de aprendizaje inmersivo mediante tecnologías como la realidad aumentada, la realidad virtual y la realidad mixta. El objetivo del diseño de aprendizaje inmersivo es crear experiencias de aprendizaje atractivas e interactivas que sumerjan a los alumnos en un entorno virtual en el que puedan explorar e interactuar con la materia de forma significativa. En la actualidad, el diseño de aprendizaje inmersivo se utiliza en una amplia gama de entornos, como la educación y la formación corporativa. Cada vez se reconoce más su eficacia para atraer a los alumnos y mejorar la experiencia de aprendizaje. En este artículo, sistematizamos 10 mejores prácticas para el diseño de aprendizaje inmersivo. Estas tecnologías permiten a los alumnos experimentar e interactuar con el entorno virtual de un modo más realista e inmersivo que los métodos tradicionales, como las conferencias o los materiales de lectura. Por otro lado, 10 puntos de conexión entre el diseño de aprendizaje inmersivo y el metaverso. El metaverso está transformando la educación al fomentar la comunicación y apoyar el aprendizaje inmersivo. También se prevé que el metaverso impulse drásticamente

el e-learning al hacer que los entornos virtuales de aprendizaje sean más realistas y que el aprendizaje sea más atractivo y experiencial. A partir de esta reflexión, podría afirmarse que el metaverso podría ser una herramienta prometedora para proporcionar una experiencia de aprendizaje inmersiva en la actualidad.

Palabras clave: Diseño de Aprendizaje Inmersivo; Metaverso; Educación; Buenas Prácticas.

Immersive learning design is the process of creating immersive learning experiences using technologies such as augmented reality virtual reality, and mixed reality. The goal of immersive learning design is to create engaging and interactive learning experiences that immerse learners in a virtual environment where they can explore and interact with the subject matter in meaningful ways.[1]

Immersive learning design involves considering a variety of factors, such as the learning objectives, the target audience, the appropriate technology to use, and the most effective way to present the content. It also involves incorporating interactive elements and assessment mechanisms to ensure that learners are learning effectively and to track their progress.[2]

Today, immersive learning design is used in a wide range of settings, including education and corporate training. It is increasingly being recognized as an effective way to engage learners and enhance the learning experience. As technology continues to advance, the use of immersive learning design is expected to become more widespread in the coming years.[3,4,5]

These technologies allow learners to experience and interact with the virtual environment in a way that is more realistic and immersive than traditional methods, such as lectures or reading materials.[6]

In this sense, we can systematize ten best practices for immersive learning design:

1. Define the learning objectives: clearly define the learning objectives for the immersive experience and ensure that they align with the overall learning goals.
2. Use appropriate technology: choose the appropriate technology for the immersive experience based on the learning objectives and the target audience. For example, VR may be more suitable for simulations and hands-on training, while AR may be better for augmenting real-world experiences.
3. Design for interactivity: design the immersive experience to be interactive and engaging, allowing learners to explore and interact with the virtual environment in meaningful ways.
4. Use appropriate content: use high-quality, relevant, and accurate content in the immersive experience to ensure that learners can learn effectively.
5. Provide clear instructions: provide clear and concise instructions for learners on how to navigate the immersive experience and interact with the content.
6. Incorporate feedback and assessment: include feedback and assessment mechanisms in the immersive experience to ensure that learners are learning effectively and to track their progress.
7. Evaluate and improve: regularly evaluate the effectiveness of the immersive experience and make adjustments as needed to improve the learning experience.
8. Facilitate collaboration: design the immersive experience to facilitate collaboration among learners, allowing them to work together and share knowledge and resources.
9. Create social connections: use the immersive experience to create social connections and build communities of learners.
10. Use realistic simulations: use realistic simulations in the immersive experience to allow learners to practice and learn in a virtual environment that closely resembles the real world.

But how do we integrate these best practices into the new reality of the metaverse? It should be noted that immersive learning can be particularly effective for subjects that require hands-on training or simulations, as it allows learners to practice and learn in a virtual environment that closely resembles the real world. It can also be useful for subjects that are difficult to teach or learn through traditional methods, such as abstract concepts or complex processes.

Education is a critical field for learning and growing people in society as well as for economic development both nationally and globally, where the main method of operation remains unchanged; it is related to content development in classroom and textbook despite the vast innovations in educational technology.[7]

Here are ten points of connection between immersive learning design and the metaverse:

1. Interactive environments: both immersive learning design and the metaverse involve creating interactive environments that allow users to explore and interact with virtual content in meaningful ways.
2. Engaging experiences: both immersive learning design and the metaverse aim to create engaging and immersive experiences that capture the attention and interest of users.
3. Virtual reality: both immersive learning design and the metaverse often utilize virtual reality (VR) technology to create immersive experiences.

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4. Personalized learning: both immersive learning design and the metaverse can be used to create personalized learning experiences that are tailored to the needs and preferences of individual users.
5. Continuous learning: both immersive learning design and the metaverse can be used to facilitate continuous learning, allowing users to learn at their own pace and revisit content as needed.
6. Collaboration: both immersive learning design and the metaverse can facilitate collaboration among users, allowing them to work together and share knowledge and resources.
7. Social connections: both immersive learning design and the metaverse can be used to create social connections and build communities of learners.
8. Realistic simulations: both immersive learning design and the metaverse can be used to create realistic simulations that allow users to practice and learn in a virtual environment that closely resembles the real world.
9. Access to a wide range of content: both immersive learning design and the metaverse provide access to a wide range of content, including text, images, video, and audio.
10. Enhanced learning: both immersive learning design and the metaverse have the potential to enhance learning by providing more engaging and interactive learning experiences.

The metaverse is transforming education by promoting communication and supporting immersive learning. The metaverse is also projected to dramatically boost e-learning by making virtual learning environments more lifelike and learning more engaging and experiential.[8]

Based on this reflection, it could be stated that metaverse could be a promising tool to provide an immersive learning experience for today's users. However, it will be appropriate to carry out further studies to analyze the results of the implementation of these educational strategies in this new educational context.

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No conflict of interest.

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