



## EDITORIAL

# The Role of Avatars in Language Learning in the Metaverse

## El rol de los avatares para aprender idiomas en el metaverso

Rubén González Vallejo<sup>1</sup>  

<sup>1</sup>Universidad de Zaragoza, Facultad de Filosofía y Letras. Zaragoza, España.

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### ABSTRACT

In the field of education, new technologies have given rise to innovative teaching methodologies to cater to digital natives. Among them, the metaverse and its emphasis on multimodality allow students to embody avatars to explore replicas of the physical world. This phenomenon democratizes access to cultural and social experiences through teleportation, challenging the limitations of the physical world. For all this to be possible, the avatar, central to this dynamic, acts as an intermediary between the metaverse and the real world, fostering three-dimensional cooperation and global interaction through automatic translation and accessibility features. Specifically, in the realm of language teaching, the avatar represents an alter ego that promotes the ideal and polysemic self, reducing social pressure and providing security to the student. On the other hand, in the learning process, the avatar promotes student autonomy, allowing for a constructivist and communicative approach. The recreation of diverse linguistic and extralinguistic contexts in the metaverse enables students to develop language and cultural competencies in an immersive manner. Furthermore, the sharing and sensory aspects of scenarios and teaching materials contribute to richer feedback, strengthening the sense of learning and student security in this three-dimensional, barrier-free environment.

**Keywords:** Metaverse; Avatar; Multimodality.

### RESUMEN

En el ámbito de la educación, las nuevas tecnologías han dado lugar a innovadoras metodologías de enseñanza para atender a los nativos digitales. Entre ellas, el metaverso y su énfasis en la multimodalidad permiten a los estudiantes encarnar avatares para explorar réplicas del mundo físico. Este fenómeno democratiza el acceso a experiencias culturales y sociales a través del teletransporte, desafiando las limitaciones del mundo físico. Para que todo esto sea posible, el avatar, elemento central de esta dinámica, actúa como intermediario entre el metaverso y el mundo real, fomentando la cooperación tridimensional y la interacción global mediante funciones de traducción automática y accesibilidad. Concretamente, en el ámbito de la enseñanza de idiomas, el avatar representa un alter ego que promueve el yo ideal y polisémico, reduciendo la presión social y proporcionando seguridad al estudiante. Por otro lado, en el proceso de aprendizaje, el avatar promueve la autonomía del alumno, permitiendo un enfoque constructivista y comunicativo. La recreación de diversos contextos lingüísticos y extralingüísticos en el metaverso permite a los estudiantes desarrollar competencias lingüísticas y culturales de forma inmersiva. Además, los aspectos sensoriales y de intercambio de escenarios y materiales didácticos contribuyen a enriquecer la retroalimentación, reforzando la sensación de aprendizaje y la seguridad del estudiante en este entorno tridimensional y sin barreras.

**Palabras clave:** Metaverso; Avatar; Multimodalidad.

## **DEAR READERS:**

Due to the force with which new technologies have burst into the field of education, new teaching methodologies have been introduced to promote both an adaptation of the learning styles of the new digital natives and an awareness of training among all educational actors. This is where realities like the metaverse take center stage, and specifically, the multimodality they offer through the user's embodiment in the avatar, which allows the student to access replicas of the physical world. Therefore, this figure emerges as the symbol of the democratization of the metaverse, enabling, through teleportation, the visualization of worlds and content that allows contact with individuals and cultures that would not be accessible in the physical world.

However, its difference from video games lies in the fact that the metaverse evolves in parallel with the real world, and augmented reality devices and users will serve as a bridge between the two realities,<sup>(1)</sup> and this is where the avatar will play the leading role in that representation between both worlds.

This inevitably highlights the principle of cooperation that arises from negotiation between avatars in three-dimensional interaction.<sup>(2)</sup> To this end, the metaverse offers the service of automatic translation available on the platform, to interact with users from other parts of the world, as well as accessibility functions, such as sign language, among others.

Applied to language teaching, the avatar serves as a representation of one's alter ego, allowing an ideal physical configuration and anonymity that provides security and self-protection, reducing social pressure. Its use promotes the ideal self<sup>(3)</sup> and the polysemic self<sup>(4)</sup>, with consequences on both the behaviors it activates in interaction with other avatars and the affinity it shows towards the learning context. This versatility is known as the Proteus effect and goes beyond the mere physical representation of the avatar, as non-verbal elements such as gestures and fluency in movements influence oral language interaction. This inevitably leads us to question the existence of the Hawthorne effect, a concept coined by Elton Mayo, which describes the modification of behavior in a subject when being observed.

All these characteristics increase the linguistic and social self-efficacy of the student by allowing the development of competencies in contact with specific learning environments or virtual communities that can evoke a sense of belonging in the user. Additionally, the avatar provides significant autonomy in the learning process, offering an active and constructivist experience. According to this approach, the learner constructs their own knowledge through the active construction of understanding, continuously modifying their previous knowledge. This method is based on the communicative approach, facilitating learning in specific contexts. To this end, the different recreated contexts allow language learners to encounter sector-specific languages, such as in the case of experiences based on tourism, industry, or video games, among others (linguistic knowledge), while using non-verbal elements such as gestures and speed (extralinguistic knowledge), which promotes their intercultural competence.

Finally, the avatar will be the protagonist of sharing and sensory experiences in scenarios and didactic materials that favor a more immersive feedback in the student, increasing their sense of learning and security. All this is achieved through the autonomy offered to the student, the constructivist principles of virtuality, and the absence of barriers in the three-dimensional world.

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## **CONFLICT OF INTEREST**

The author declares that there is no conflict of interest.

**AUTHORSHIP CONTRIBUTION**

*Conceptualization:* Rubén González Vallejo.

*Writing - original draft:* Rubén González Vallejo.

*Writing - revision and editing:* Rubén González Vallejo.