

The Metaverse and Its Impacts on Sustainable Development Goals 4: Quality Education

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Abstract

In 2015, the United Nations adopted the SDGs, a set of 17 global goals to address some of the world's most pressing economic, social, and environmental challenges. The goals are part of the 2030 Agenda for Sustainable Development, which was created by the United Nations with the intention of making the world a better, more sustainable, and more equitable place. Because of the interconnected nature of the Sustainable Development Goals (SDGs), progress in one area can contribute to the achievement of other SDGs. The fourth goal is to make available to all people an education that is not only inclusive but also equitable, to foster opportunities for learning that continue throughout one's life, and to provide people with the information and skills they require to thrive. The quality of education has a significant impact on how education affects the environment, economy, and society. Digital technologies have the potential to revolutionize education by making it more accessible, interactive, and personalized. The metaverse has the potential to contribute to the achievement of quality education in SDG 4. The aim of this study is to investigate the role of digital technologies in education. In addition, the role of the metaverse in education is investigated. It is revealed by our investigation that the use of metaverse technology has the potential to significantly accelerate progress toward achieving quality education in SDG 4. By leveraging the capabilities of the metaverse, learning accessibility, personalization, and interactivity can be enhanced, making considerable strides in promoting inclusive education for all.

Keywords: UN Sustainable Development Goal, Education, Metaverse, Digital Technologies, Equitable Quality Education

1. Introduction

The quality of education is critical to the advancement and development of any society, particularly in the areas of the environment, the economy, and social development (Astakhova et al., 2016). Through access to quality education, individuals have the opportunity to acquire the knowledge and abilities necessary to drive economic growth and development, promote a more inclusive society, and address environmental challenges in a manner that is informed and responsible (Rieckmann, 2018).

The United Nations' Sustainable Development Goals (SDGs) are a set of 17 global goals aimed at ending poverty, protecting the planet, and promoting prosperity for all (Howard-Grenville et al., 2019; Nilashi, Abumalloh, Mohd, et al., 2023). These goals were adopted by all United Nations Member States in

2015 as part of the 2030 Agenda for Sustainable Development (Colglazier, 2015). The SDGs are crucial for solving environmental issues (Omisore, 2018). They aim to promote sustainable practices and lessen the negative impact of human activities on the environment through a number of targets. Through the promotion of environmentally friendly policies and procedures, the SDGs have the potential to contribute to the long-term health and well-being of our planet (Griggs et al., 2013). They are also important for fostering economic growth and development (Eisenmenger et al., 2020). In addition, the SDGs provide a road map for a better future and a vision of a rich and sustainable world for all people. They can assist in the establishment of a society that is more peaceful by promoting social inclusion and equality.