



Chapter 10


Generative Artificial Intelligence (AI) on Sustainable Development Goal 4 for Tertiary Education: Conversational AI With User-Centric ChatGPT-4

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ABSTRACT

Emerging themes of Society 5.0 are the coexistence of humans and robots in a collaborative work environments, particularly in education. With digital transformation and newfound collaborations between people and technology, Society 5.0 seeks to create a sustainable people-centered community. Advancements in robotics and AI research have been used in several areas of life in the modern digital society to address a wide range of problems. In spite of the large body of research on human-robot cooperation on low- and high-level tasks related to robot educational advancement, the current study concentrated on the cooperation between humans and robots in the fields of education bringing up the Research and Education Network (REN) for universities as a way to capitalize on human development. The study identified significant issues with the current REN and made an effort to resolve them through human-robot collaboration by tackling them from an organizational and pedagogical AI-robotic instructional application in light of the technological prospects highlighted in the study.

1. INTRODUCTION

Society 5.0 is a civilization that prioritizes the needs of its citizens, strikes a balance between social and economic progresses, and does it through a system that is tightly integrated with both the real and technologies or digital worlds(Audrey & Paksi, 2022). The idea behind Society 5.0 is to use cutting-edge technology to enhance digital natives quality of life and build a brighter future for everybody(Matthew et al., 2024). The Sustainable Development Goals (SDGs) of the United Nations, however, serve as a roadmap for an inclusive and sustainable future for all-inclusive education. The realization of the SDGs and the provision of a blueprint for a brighter future could be greatly aided by Society 5.0. The concept of a human-centric society, where technology is created to promote people's well-being, is the foundation of Society 5.0(Yitmen, Almusaed, & Alizadehsalehi, 2023). The SDGs seek to guarantee that everyone has access to improved quality of life in a sustainable and inclusive manner, bringing Society 5.0 into its central discussion to address and resolve a number of pressing global needs. Society 5.0 may help the SDGs primarily through the use of cutting edge technologies to sustainable urban development and educational investment through enabling infrastructures(Matthew, Kazaure, & Okafor, 2021). Through the advancement of sustainable education and a reduction in the global incidence of illiteracy, Society 5.0 will enable SDG 4 to strive. By utilizing cutting-edge technologies to enhance healthcare results, Society

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