


Chapter 10

Decolonizing Minds With Machines: AI as a Partner in Reimagining Critical Thinking Pedagogy for East Africa's Academic Renaissance

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ABSTRACT

Decolonial theory offers a framework for comprehending and contesting the impacts of colonialism on the creation and distribution of knowledge. The review focused on the critical thinking and AI integration in higher education, the study employed

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a quick systematic review of the previous publications, especially those that were published and accessible on google scholars and Scopus from 2019-2025. The reviews focus on decolonising scholarly writings, how ai can promote critical thinking, ai ethical usage in Higher education and action to be taken. After the searches on google scholar and Scopus and screening all the documents, 35 publications were finally used in the systematic review in line with the research questions. AI presents a unique and timely opportunity to decolonise scholarly writing and knowledge production by disrupting entrenched hierarchies, enhancing access to marginalised knowledge, and empowering scholars to write from culturally grounded positions. There are a lot of moral and practical problems with using AI in decolonial academics. Natural language processing (NLP) models tailored to local languages such as Swahili, Luo, Gikuyu, and Luganda can make content more accessible and Inclusive. Ai tools could be developed to assist in translating critical texts into indigenous languages or analysing works.

INTRODUCTION

In this chapter, we discuss ways AI can assist in reimagining critical thinking education for intellectual renewal in East Africa. AI can decolonise learning by providing platforms and tools for co-creating knowledge, essential competencies of thinking, and culture-centered learning and pedagogy. With AI in education, we can create learning environments where students can interrogate master narratives, engage with counter narratives, and develop the competencies necessary to succeed in a transforming world (Freire, 1970; Setegn, G. M., & Dejene, 2025; Tuhiwai Smith, 2012). Critical thinking is one of the foundational pillars of decolonial education since it allows students to question and deconstruct the master narrative. For instance, AI-backed simulations enable students to tackle complex environmental and social problems from multiple perspectives and develop a more compassionate understanding of global challenges as interconnected problems (Luckin, 2018; Mignolo, 2011) .

Education systems and every aspect of social life are undergoing drastic changes as a result of the quick development and spread of artificial intelligence (AI) technologies. Recent advancements in educational technologies have transformed artificial intelligence from a mere research subject into an integral element of educational training processes (Wayne et al., 2023);Holmes et al., 2023; Glais, 2023). This transition requires a re-evaluation of curricula, a basic component of education, from an artificial intelligence standpoint . This technological revolution, which influences the future of educational systems, introduces new dimensions to teaching and learning

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