

Digital Education Futures in Bangladesh: Navigating the Intersection of Lifelong Learning, Labor Market Demands, and the Digital Divide

Khaled Mahmud, Ph.D.

Institution of Business Administration, University of Dhaka, Bangladesh

Abstract:

As Bangladesh advances toward the "Smart Bangladesh 2041" vision, the paradigm of lifelong learning has transitioned from establishing basic digital access to fostering productive digital fluency. This paper presents a mixed-methods investigation into the digital education ecosystem of Bangladesh in 2026, examining the intersection of EdTech infrastructure, pedagogical practices, and labor market outcomes. Phase I of the study utilized a national cross-sectional survey (N = 1,182 tertiary graduates and 375 educators), revealing a critical paradox: while 96.5% of graduates possess high "consumptive" digital skills, only 24.3% demonstrate the "productive" digital fluency required by the Fourth Industrial Revolution (4IR). Crucially, logistic regression analysis indicates that productive digital fluency increases the likelihood of immediate graduate employment by a factor of 3.4, effectively neutralizing traditional urban-rural geographic disadvantages. Phase II qualitative findings, derived from Focus Group Discussions and Key Informant Interviews, contextualize this quantitative gap by identifying systemic bottlenecks, notably "Hardware Dormancy" in rural schools, a "Translation Void" in English-centric AI tools, and the growing obsolescence of rigid four-year degree curricula. Ultimately, this paper argues that to resolve the 13.5% tertiary unemployment rate, educational policy must shift from mere hardware procurement to human capital development. It proposes a strategic framework centered on a national micro-credentialing ecosystem and localized, Bangla-proficient AI tutors, enabling a transition from "digitized rote learning" to "agentic learning."

Keywords:

Lifelong Learning, Graduate Unemployment, Digital Divide, AI in Education.