

The Transformative Impact of Artificial Intelligence on Higher Education in Caribbean Universities: Implications for Faculty, Students, and Libraries

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Technology has become an indispensable force in global higher education systems, transforming institutions in both developed and developing countries. The recent proliferation of artificial intelligence (AI) has significantly accelerated this revolution, creating unprecedented opportunities while introducing complex challenges for academics, students, librarians, and administrators across Caribbean universities. This paper examines four critical dimensions of AI integration: (1) its transformative effects on academic libraries; (2) its disruptive influence on teaching methodologies; (3) its implications for scholarly research; and (4) its impact on student learning processes. Within academic libraries, AI technologies are transforming traditional operations by enabling enhanced information retrieval systems, automated cataloging processes, and personalized research assistance. While these advancements promise greater efficiency, improved user experiences, and student success, they also raise critical questions about evolving information literacy demands, information and reference services and the changing role of library professionals. In teaching and research domains, AI tools are fundamentally altering pedagogical approaches through automated feedback systems, intelligent tutoring platforms, and sophisticated research assistance capabilities that span from literature reviews to data analysis. The Caribbean higher education context presents unique considerations for more AI adoption (partial, full or phased) if they are to remain competitive. Regional universities must strategically adapt their infrastructure, staff competencies, and service models to harness AI's potential while addressing specific challenges such as limited resources, technological disparities, and diverse user needs. This presentation will propose a framework of strategic guidelines to help stakeholders balance AI's transformative potential with its associated risks. The guidelines aim to maintain rigorous academic standards while fostering innovation, with particular emphasis on preserving institutional reputation and enhancing global competitiveness in an increasingly AI-driven educational landscape.