Chapter 5 Ethical Navigations: Adaptable Frameworks for Responsible AI Use in Higher Education

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ABSTRACT

In an era driven by digital innovation, artificial intelligence (AI), or Generative AI, emerges as a transformative force reshaping the landscape of higher education. Its potential to personalize learning experiences, bolster research capacities, and streamline administrative operations is revolutionary. However, the integration of Open AI into academia raises complex ethical issues for faculty and learners. The need for comprehensive ethical guidelines is imperative to ensure that the integration and utilization of AI in higher education are aligned with the core values of academic integrity and social responsibility. This chapter examines the ethical frameworks essential for governing the use of generative AI technologies in academia and provides practical recommendations for stakeholders involved. Additionally, emerging AI technologies such as experimental NotebookLM and Gemini will be discussed as future directions for AI use in teaching, learning, and research.

INTRODUCTION

The meteoric rise of Artificial Intelligence (AI) technologies has fundamentally reshaped various sectors, most notably in business, industry, and in particular, higher education. The release of ChatGPT to the masses by Open AI on November 30, 2022 is the genesis for this new age of AI (Marr, 2023). Throughout 2023, the influence of AI has been pervasive, with its tools increasingly being integrated into academic institutions and personal lives alike. However, this advancement has also presented unique challenges and opportunities for Higher Education Institutions (HEIs). The advent of ChatGPT, along DOI: 10.4018/979-8-3693-1565-1.ch005 with the explosion of similar tools, has brought the potential of AI to be salient, prompting HEIs to explore its dual nature: its ability to enhance educational experiences and the ethical dilemmas surrounding its implementation. Central to these discussions are concerns about academic integrity, particularly cheating and plagiarism, along with broader ethical considerations regarding the appropriate use of AI. Additionally, safeguarding student privacy and fostering AI literacy remain top priorities. Such concerns are likely to continue in 2024 and beyond. In this rapidly evolving landscape, it becomes important for HEIs to establish comprehensive, ethical guidelines for AI use within their environments.

To effectively tackle the ethical challenges of Artificial Intelligence in HEIs, it is vital that these institutions adopt a proactive approach in policy making regarding AI usage. This process should involve all key stakeholders, including administrators, faculty, students, technology experts, and student advisors, to ensure comprehensive and inclusive strategies. This collaborative effort should focus on formulating a shared vision for the ethical application of AI in both physical and online educational settings. Policy development should be an iterative process, tailored to the specific needs of each HEI. Regularly revisiting and revising these policies will ensure their alignment with the evolving AI landscape and the unique needs of the college or university community.

As colleges and universities adjust policies due to the growing influence of Artificial Intelligence, it is also important to focus on the developing area of generative AI technology. New generative AI tools are constantly emerging. Google Lab's NotebookLM and Gemini are two newly launched products that while in the experimental stage hold the potential to streamline the research process and refine AI queries. NotebookLM is an experimental open AI tool introduced in July 2023 that is designed to use language models and an individual's content to synthesize information faster. In a general sense, NotebookLM is like a virtual research assistant that can summarize key points of curated content, identify themes and codes, generate guides, and serve as a virtual notebook. In December 2023, Google Lab's also introduced an experimental open AI tool known as Gemini. Gemini is Google's latest large language model (LLM). Gemini is a multimodal AI tool. In other words, it can deal with various forms of input and output, including text, code, audio, images, and videos.

As with any new technology, it is important for users to exercise critical thinking and ethics when using AI tools. Developing AI policy and practices grounded in an ethical framework for use is essential. Regardless of industry, or personal or professional use, AI is part of daily communication and interactions. The key is to harness the benefits of using open AI tools to enhance performance, synthesize information, or basically make our lives easier. However, individuals need to critically assess AI generated information and critically decide if the information is accurate and aligned to the needs of users.

BACKGROUND

This chapter aims to guide Higher Education Institutions through the complex ethical landscape of Artificial Intelligence. Combining a conceptual analysis of AI's evolving role in colleges and universities with an extensive literature review, this research explores the necessity for a proactive approach in HEIs regarding the ethical applications of AI, particularly focusing on issues like cheating, plagiarism, academic integrity, and student privacy. The literature review synthesizes key findings, leading to a proposed practical framework designed to assist HEIs in developing, revising, or finalizing their AI ethics policies. A wide array of resources dedicated to AI governance and ethics are also provided.

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