Johannes Britz, Michael Zimmer:

The Digital Future of Education: An Introduction

Our contemporary information society is reinventing how knowledge is created, organized, accessed, and shared, with far reaching implications for institutions of learning – schools, libraries, museums, and more. Digital technologies facilitate new ways of thinking about learning that acknowledge and nurture individual talents, skills, and interests, as well as fostering connectedness and collaboration.

The rapid development and ubiquity of digital technologies and platforms have pushed the future of education in innovative and unexpected directions. Computers, tablets and smart boards are integrated into classrooms from kindergarten through university; Web-based resources are increasingly relied on for instruction, collaboration, and research; entire courses, classrooms, and universities have moved online; social media platforms are being leveraged to improve student services and communication; big data analytics are used to enhance enrolment and advising services; MOOCs and related online environments provide alluring new learning opportunities.

This special issue of the *International Review of Information Ethics* explores the ethical dimensions, implications, and challenges of the evolving "digital future of education," and approaches these issues from necessarily diverse and multifaceted perspectives.

In his contribution, "The Ethics of Big Data in Higher Education," Jeffrey Alan Johnson contemplates the ethical challenges of the increased use of data mining and predictive analytics in educational contexts, arguing that we must "must ensure both the scientific and the normative validity of the data mining process" in order to mitigate the ethical issues that surround big data. Mark MacCarthy continues this ethical analysis in his article "Student Privacy: Harm and Context," suggesting the need to embrace a contextual approach to ensure that "intuitive context-relative norms governing information flows" in the educational context are respected. In their essay, "The Ethics of Student Privacy: Building Trust for Ed Tech," Jules Polonetsky and Omer Tene complete this discussion of student privacy by arguing for more concrete ethical guidelines and toolkits to ensure transparency and trust in the use of big data.

Maria Murumaa-Mengel and Andra Siibak push our discussion from ethical concerns related to student privacy broadly, to those focused on the impact on student-teacher interactions when social media platforms are introduced in educational contexts. In "Teachers as nightmare readers: Estonian high-school teachers' experiences and opinions about student-teacher interaction on Facebook," the authors note the risks inherent in the use of social media in teaching contexts which might require enforceable guidelines, but they also highlight how social media use by instructors "can have positive influence on students' motivation and participation" and instructors should enjoy free speech rights when using these digital tools for communication. These concerns over speech and intellectual freedom are central to Taryn Lough and Toni Samek's contribution, "Canadian University Social Software Guidelines and Academic Freedom: An Alarming Labour Trend," which analysed the social media policies from nine Canadian universities. Their results are pointedly negative, revealing how "authoritarian management of university branding and marketing" is trumping the "protection of academic freedom in the shift into 21st century academic labour."

This concern over the potential negative impacts of the digital shift in academic labor is brought into sharp focus Wilhelm Peekhaus' reflection, "Digital Content Delivery in Higher Education: Expanded Mechanisms for Subordinating the Professoriate and Academic Precariat." Upon considering the emergence of unique digital education platforms – such as MOOCs and so-called "flexible" learning models – Peekhaus exposes several ethical dilemmas faced by students, faculty, and universities confronted with this "contemporary neo-liberal academic ecosystem." The final contribution, "Digital Education and Oppression: Rethinking the Ethical Paradigm of the Digital Future," by Trent Kays identifies similar concerns with digital education paradigms. While Kays warns that "education done digitally must account [for] the technology used to distribute the oppressive power structures inherent in traditional education," he provides an optimistic new paradigm to promote liberation through digital education.