

## Editorial: Volume 32 Issue 5

### **A question of ethics**

Educational technology research is fundamentally about understanding the relationship between technology and education which includes learning and teaching. The field is often breaking new ground in terms of exploring the possibilities of technology mediated practices. In doing so new ways to recruit, observe, and interact with participants are being trialled. In addition, digitally mediated contexts, such as virtual learning environments, afford opportunities to gather large volumes of data that were not previously available. We are also finding new ways to analyse, visualise and interrogate across datasets. This is a trend that seems likely to continue. However, in our enthusiasms of trailblazing new ways to recruit, observe, interact, gather and analyse data, we need to consider if our research ethics practices are meeting these new contexts. This is particularly true in education where it is common for researchers to also have roles within the educational institutions, and even be involved in the education of the students under study.

In most cases, well established principles of ethical research can guide us in our work. Yet, as our technologies have arguably changed the instrumentation of human action, renewed discussion is certainly required. Indeed, there is a sizeable body of literature dealing with the methodology of conducting online and technology mediated research and its associated ethics issues (e.g., Beaulieu & Estalella, 2012; Hammersley & Traianou, 2012; Nind, Wiles, Bengry-Howell, & Crow, 2012; Whiteman, 2010; Zimmer, 2010), however a much smaller body of work deals with the peculiar concerns of ethical research practices, decisions and dilemmas involved in using digital technologies in education.

AJET expects its authors to comply with their institution's research management procedures, such as ethics requirements as set by their institutional ethics committees or review boards. Authors are required to include a brief description of key aspects of the ethics approach. However, the rapid change of technologies and the social and pedagogical practices that surround them mean that institutional procedures and the published field are often lagging behind. Those of us who work in the field of educational technology need to recognise that satisfying the requirements of institutional ethics compliance may not satisfy a broader ethical responsibility to our research participants (for a discussion see Henderson, Johnson & Auld, 2013). As a result, we do not feel that it is sufficient for researchers to limit their considerations of ethical research practices by the scope of institutional procedures.

Henderson, Johnson and Auld (2013) describe a number of ethical challenges of researching with digital technologies, particularly social media, including consent, traceability, recognising and responding to illicit activity, anonymity, ethical obliviousness, obscurity and concern about future privacy-invasive technologies. The issues are complex, multifaceted and resist simple solutions. This is in part due to changing technological landscape including 'big data', and increasingly powerful semantic search tools that span data sources and media (for example, see Dawson, 2014).

Teaching and learning activities now leave behind a trail of data. Student work is composed and submitted electronically, access to material is logged, students are asked for feedback in online surveys. It is not uncommon for ethics applications to refer to students as 'research participants'. Yet, in the context of the analysis of teaching and learning the question arises if students are actually research participants in a traditional sense, when research focuses on the data that have accumulated as by-products of teaching.

A further question centres on the need for seeking explicit student consent in accessing teaching and learning data. For example, in the New Zealand context students sign a student declaration as part of their enrolment. This declaration in turn refers to the New Zealand Privacy Act, which buried deep down, under Principle ten sub points (e) and (f) allows for the use of personal data for a purpose directly related to the use for which the information was obtained and for research purposes that will be published in a form that should under reasonable expectations not identify the individual concerned (Privacy Commissioner, 2013). This suggests that researchers can access personal student information without explicit student consent, for example to correlate with data on learning outcomes. While such

use of data seems lawful, it might be questionable if it is also ethical. A pragmatic solution might lie in changing the wording in the student declaration to highlight the potential use of data for research and publication purposes.

We face opportunities and threats based on the ever-increasing recording of data and the correlation of those data in a variety of areas in our lives. Teaching and learning is no different, with its opportunities to connect data across institutional repositories, reporting on micro, meso and macro levels. The field of learning analytics is grappling with the issues of ethics on a variety of dimensions, ranging from privacy and consent to the responsibilities around reporting. If we can drill down to individual student behaviour and contrast the individual with the cohort, should the individual student gain access? Are we facilitating the development of healthy study skills, such as mastery goal setting, by encouraging comparison to others? Do we understand enough about the complexities in which the mostly behavioural indicators of learning in our data combine to measure actual learning to responsibly draw conclusions?

Internet enabled applications or suites of applications, often referred to as virtual learning environments, are increasingly being used as core or ancillary components of educational research, from recruitment to observation and interaction with students. The accessibility and sheer volume of data being logged can be seen as a valuable resource for researchers. Similarly, researchers are understandably excited by the affordances of social media to facilitate recruitment, observation and interaction of students within and across social groups. With every educational technology comes an opportunity to understand the people involved, learning, teaching and education more broadly. How we engage with these opportunities needs to be informed by an active inquiry into the ethics considerations which are not limited to those featured in institutional ethics research approval procedures.

In AJET we deal with research on the impact of educational technologies on teaching and learning, making the points raised a central concern of AJET. For this reason we encourage researchers to consider and report on the ethics issues and implications in their own work. In addition, we call on researchers to prepare manuscripts that specifically engage with the critical issues surrounding the ethical conduct of educational technology research in higher education.

## Articles in this issue

In this issue we are pleased to publish the ASCILITE 2015 best paper by **West, Huijser, Heath, Lizzio, Toohey, Miles, Searle, and Bronnimann**. In this paper the authors explore the complexity of higher education teachers' engagement with, and experiences of, learning analytics, particularly in relation to addressing student retention.

This issue also includes an interesting paper by **McDonald and Loke** who critically investigate the discursive construction of "teacher" in more than 800 articles published in AJET. Adopting such critical lens is important for us to understand and shape how our field celebrates, silences, reframes and otherwise positions agents, whether it is technology, systems or people. This paper is also noteworthy in reminding our community that educational technology research encompasses more than the research of technology implementation. AJET welcomes substantial literature reviews, critical studies of the field, as well as other papers that may not include empirical data such as well-formed theoretical or methodological papers.

This issue also includes two articles that focus on ePortfolios. **Holt, McGuigan, Kavanagh, Leitch, Ngo, Salzman, Watty, and McKay** explore academic leaders' perspectives on the adoption of ePortfolios in relation to professional capabilities. They found that despite the potential of ePortfolios, they do not have significant traction in business education for a number of reasons, including technology, training and support. The second paper to focus on ePortfolios is in the context of teacher education. **Ching, Yang, Baek and Baldwin** adopt the technology, pedagogy, and content knowledge (TPACK) framework to inform graduate students' reflection. They conclude with an argument that providing a discipline-specific framework to guide students' reflection of learning is important for the success of a portfolio strategy.

The remaining articles are varied in focus and methodology. **Tan and Hew** applied an experimental design to investigate learning, engagement and affect in the use of meaningful gamification in a blended learning class. They conclude that the experimental group indicated increased motivation, quality outcomes and in-course participation. **Beckmann and Mahanty** report on a 5 year design-based research case study of an online role play in a graduate class. The authors offer valuable insights including the question of anonymity and the need to apply an iterative mindset to the design of complex learning designs such as role plays. **Doleck, Jarrell, Poitras, Chaouachi, and Lajoie** investigate the implications of varying levels of difficulty in computer based cases of patient diagnoses to explore the impact on accuracy, efficacy and process in clinical reasoning. **Toyoda** contributes to our understanding and evaluation of computerised learning-assistance tools, with a particular focus in this article on second language reading. However, the findings offer broader implications for evaluation and for future research.

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Lead Editors

Eva Heinrich, Michael Henderson and Chwee Beng Lee

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