Editorial: Volume 30 Issue 6

In this editorial we discuss the challenges in identifying suitable literature to include in the literature review for an article describing an educational technology innovation involving leading edge technology. Authors new to publishing in the educational technology field have sometimes found this difficult because their searches for articles relating specifically to the particular innovation they are focussing on locate very few examples. We suggest some ways of thinking about what kinds of literature might be relevant and, consequently, some useful literature searching strategies.

A focus on the pedagogy or wider theory behind the implementation of the technology will almost always yield large volumes of relevant literature. In studies about the learning benefits of a new technology, an explicit identification of the kinds of learning activities afforded by the technology and a discussion of the theoretical support for these kinds of learning activities is critical for understanding the potential learning benefits of the implementation. For example, a study of the learning benefits from the introduction of a twitter feed in lectures could be grounded in pedagogical literature about the value of students articulating their own knowledge representation or about the value of peer feedback. In a similar way, studies about implementation issues associated with new technologies should draw upon theoretical literature about educational change or about teaching or learning practice. For example, a study of the issues associated with implementing an institution wide policy on the use of Learning Analytics software by teachers to identify and support students at risk could be grounded in organisational theories of educational change, psychological theories about teacher motivation, or sociological theories relating to teaching practice or student transition to university.

Another way to broaden a literature search is to consider the parallels between a technology and similar scenarios not involving technology. In studies about the learning benefits of a new technology an understanding of how a particular pedagogical approach would previously have been carried out without technology is important. For example, a study of student learning using personal blogs could be grounded in literature about the use of reflective journals. The article could show how the design of the activity built upon best practice in reflective journal activities, while capitalising on the unique additional capabilities of the blog software. Similarly, the issues associated with adoption of a particular new technology by teachers are never entirely distinct from the issues associated with the adoption of other non-technology based teaching approaches. Consequently, studies about implementation issues associated with new technologies should draw upon empirical literature about adoption of new teaching approaches in general, or about the broader issues associated with other kinds of non technologically-based educational change initiatives. For example, a study investigating teachers' adoption of a new technology, such as a Learning Management System (LMS), could be grounded in literature reporting on studies of other large-scale educational change initiatives, such as the introduction of a new criterion referenced and standards based assessment policy. Similarly, a study of the issues associated with teachers' adoption of flipped classroom models could be grounded in studies about the adoption by teachers of non-technologically focused pedagogical approaches such as, for example, the introduction of problem-based learning.

It is very rare that a new technology emerges that has entirely unique affordances for learning. Consequently, an important way to broaden the searches for relevant literature is to think about the learning activities afforded by the new technology of focus and how these learning activities have been undertaken previously using other technologies. For example, a study of the benefits of the adaptive release of learning materials within an LMS could be grounded in studies of intelligent tutoring systems, which date back as far as the 1980s. Similarly, a study about new design principles for the delivery of content within a Massive Online Open Course (MOOC) could build on design principles for educational multimedia, which have a similarly long history.

This issue affirms the diversity of AJET's contributors and their research. Authors hail from Australia, China, Canada, Spain, Taiwan Turkey, and the United States of America. The contexts of the studies include insights relating to social media, games, cognitive load, teacher education, language acquisition, higher education transformation, as well as student engagement, motivation, self-efficacy and learning. Methodologies span qualitative, quantitative and mixed method designs with results, in all cases, offering

valuable insights, while at the same time reminding us of the messy reality of when we try to understand the relationship of digital technology and education.

This issue begins with a mixed method study by von Konsky, Martin, Bolt and Broadley, who investigated a 'bottom-up' collaborative review model in higher education. Despite mixed results, the study offers insights into a potentially valuable approach to influencing the design of courses and improving student engagement. The next two papers are loosely connected by their focus on games. Cela-Ranilla, Esteve-Mon, Esteve-González, and Gisbert-Cervera implemented a serious game designed in a 3D virtual word to investigate the transferability of self-management and teamwork skills in a higher education context. In contrast, Hsiao, Chang, Lin, Chang, and Chen explored the use of a multi-touch tabletop collaborative game in an elementary school with results indicating improved learning performance. The next three papers have a similar context of language acquisition courses, however, each has a different focus and are applicable beyond L2 studies. Zhang, Song, Shen and Huang employed a mixed method approach to explore the effect of peer feedback via a blog in a second language writing course. The results indicated a positive impact on learners' motivation, collaboration, and course satisfaction. Pham, Thalathoti and Dakich evaluated the interpersonal interactions between students and educators in online discussion forums in an English language course. The findings of a reduced frequency of interaction over time may not be surprising, but their insights into the patterns of interaction offer an opportunity for future designs. Yang provides the third paper within the context of language acquisition, investigating the impact of single (e.g., audio only) and dual (e.g., audio and video) coding on the cognitive load of EFL students. Yang concludes that all learners benefitted from the dual-code display model implemented in the study. The final two papers are set in the context of teacher education. Çevik, Çelik and Haşlaman asked pre-service teachers to use Facebook for designing and implementing online teaching activities. While students reported positive outcomes from the experience, the authors noted difficulties in sustaining learner involvement and working in groups. The final paper, by Banas and York, adopts the increasingly familiar TPACK model to investigate the influence of authentic learning exercises on pre-service teachers' self-efficacy and intention to integrate technology in their teaching.

In closing this final editorial for 2014, we would like to extend a big thank you to our AJET reviewers for this year, who have devoted substantial time to reviewing and providing feedback to authors on new submissions. Our considerable thanks also go to the AJET Associate Editors - Dr Shirley Agostinho, Dr Helen Farley, Associate Professor Eva Heinrich, Dr Lina Markauskaite, and Professor Timothy Teo - who have committed even more of their own time to overseeing the review process for articles. Without the voluntary work of our editors and reviewers we would not have a journal. And, finally, we would like to thank Professor Gregor Kennedy, who will be stepping down as a Lead Editor at the end of 2014. Professor Kennedy has led the production editing and overseen the copy and layout editing of the journal since 2012, but is unable to continue due to the demands of his PVC role at the University of Melbourne. The AJET community is indebted to his considerable efforts, which have been instrumental in the continuing success of our journal. Looking forwards, we welcome a new Lead Editor to the AJET editorial team, Dr Michael Henderson. Dr Henderson has been an AJET Associate Editor since 2012 and has taken on leadership of the AJET production editing processes.

Barney Dalgarno, Sue Bennett, Michael Henderson and Gregor Kennedy,
Lead Editors Australasian Journal of Education Technology