

Editorial: Volume 29 Issue 5

We are pleased to present a new issue of AJET and in the editorial we would like to reflect on an ascilite-sponsored workshop in Singapore that Sue recently presented, on the topic of ‘Researching Educational Technology in Higher Education’. The purpose of the workshop was to provide an introduction for those new to educational technology research, but it also served as a refresher for those already familiar with the area. As part of the editorial for this issue we’ve decided to share some of the advice Sue gave to workshop participants on ‘8 Things You Need to Know About Doing Educational Technology Research’.

Educational technology is an exciting field in which to research. New technologies are continuously emerging, inspiring new discussions about pedagogy and educational design. These constant developments also pose some significant challenges for the field. The following eight points are true of all good research, but perhaps particularly so of educational technology, which has been criticised at times as atheoretical, ahistorical and superficial. Offered in the same vein as Selwyn (2012), the following advice tries to distil the challenges for educational technology researchers.

1. Start with a significant question

Asking significant questions is the foundation of all good research, so understanding the ‘big questions’ of interest to the field and its important current problems is the best starting point. Ask yourself how your research will advance understanding in the field. Be wary, though, of hot topics and fads. Look for the underlying educational problem, and don’t be taken in by hyperbole. Positioning your work in relation to a significant question will help you show the relevance of your findings.

2. Have a sense of history

Know what has been done before in the field and link your problem to that research. Understand and explain how your work is similar or different to past ideas and debates. Don’t limit yourself to educational technology literature. The wider educational literature and work in other disciplines can also be relevant.

3. Use theory

Identify theories that help to conceptualise your problem and help you go beyond the specifics of your context. This can provide an underlying theme in your work that can link multiple studies. Use theory as more than just a rationale for your research. It should inform data collection and data analysis, as well as points for discussion of your results.

4. Know the field

Be aware of what else is going on in the field now. Educational technology journals and conferences are an obvious starting point, but take some time to read widely and explore outside your immediate context. This knowledge of the field will help position your work in relation to other people’s, help you stay up-to-date and increase the likelihood that your work will be read.

5. Be a critical thinker

Develop your capacity for critical thinking. Question assumptions and examine the evidence provided for claims made. Look for vested interests and ask yourself about the motivations of proponents. Develop your skills of self-critique too. Taking a critical perspective on your own work will help you explain it to others.

6. Collect good data

Collect the highest quality data you can and invest time in this, rather than simply relying on the most convenient or easiest path to data collection. While self-report data is easy to collect and can shed light on the big questions of educational technology field, it is often useful to go beyond self report when researching complex educational problems. Consider which research designs and data collection options are most appropriate to your question and think of ways in which technology can be appropriately used for data collection and analysis.

7. Be a writer

Write often, rather than waiting for large blocks of time. Learn techniques for writing and decode the publication genres you're aiming for. Get feedback from a range of sources, informal and formal, and use the critique to improve your work. Understand the process of getting published via whatever outlet you choose.

8. Be strategic about your research focus

Try to build a sustained research profile so that you are recognised for something, and focus on doing one or two things well. Look for options to collaborate, network with other researchers, and cultivate mentors. Decide to play the long game and plan where you are going to focus your energies. Set aside time to think, reflect and plan.

The research papers presented in this issue once again reflect the rich diversity of our field. The issue begins with Roberts and Rajah-Kanagasabai outlining an empirical investigation of the impact of anonymity on students' online posting behaviour. Lowrie, Jorgensen and Logan follow with another empirical investigation, this one more qualitative, which explores the relationship between game-playing preferences, gender and mathematical thinking. In their paper, Yang, Catterall and Davis, highlight the diversity of students' experiences online – an important reminder that we should never make assumptions about our students and their relationship with technology. Atkinson and Lim present the results of an action research study, in which they trailed a rubric for formative feedback, designed and delivered through a learning management system. Wang and Chen consider the issue of social presence in their paper, reporting on how it differs across online tasks. Barnett, McPherson and Sandieson present a paper that explores the experiences of a teacher and students in a connectivism-based class. The final three papers in the issue are schools-related. Crawford provides a comprehensive evaluation of an online music education project, which made extensive use of web 2.0 technologies with students in regional and remote areas, while O'Rourke, Main and Ellis explore teachers' perceptions of games to develop primary students' mathematics skills. The issue concludes with a paper from Shieh and Chang, which explores the important issue of designing appropriate questions when using interactive response systems or 'clickers'.

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References

Selwyn, N. (2012). Ten suggestions for improving academic research in education and technology. *Learning, Media and Technology, 37(3)* 213-219.