



Locating Technology Innovation within the Scholarship of Teaching

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We present a project that involves undergraduate nursing students working in small groups using a wiki to develop a collaborative glossary of health specific terminology. We locate our research – using a randomized control trial – within the scholarship of teaching and provide the rationale for adopting this approach to our research. We then provide two alternative evidenced-based approaches to innovating with technology – scholarly teaching and reflective teaching – and show how the three approaches can provide multiple pathways for technology innovators to take an evidence-based approach to their work so that we learn from the past and inform future teaching practice.

Keywords: Web 2.0, Wiki, scholarly, scholarship, reflective, evidence.

Research Project

Our research project involves undergraduate nursing students working in small groups using a wiki to develop a collaborative glossary of health specific terminology. Previously students were provided with a weekly list of relevant nursing and clinical terms that related to their lectures and case studies. Students were encouraged to be self-directed in becoming familiar with, and understanding the meaning of these discipline specific terms. The change of direction using wikis is aimed at providing students with a medium to gain a more in depth and contextual understanding of discipline specific knowledge and professional vocabulary. This is essential for their future communication in the healthcare environment. The project will also develop additional skills including learning to work cooperatively and collaboratively with each other.

We will be conducting a randomized control trial that will involve a control group (wiki group for an alternative group project) and an intervention group (wiki work for glossary terms). We will adopt a mixed method

qualitative and quantitative approach to evaluate the impact of collaborative online learning on dependent variables. The dependent variables include participants' experience of the learning exercise, gains in knowledge and ability to apply their new knowledge to clinical scenarios. Students in both groups will be given: a pre-course test with video scenarios to establish their initial levels of knowledge; a post-course test with video scenarios to measure knowledge gains; and a post-course evaluation to gather information on their learning experiences. Students will also be interviewed to gather qualitative data regarding their experience of learning collaboratively using the wiki. Finally, we will analyze the wiki postings using a marking rubric. In addition to carrying out the research we are also interested in critically evaluating our research goals and research methods to determine the evidential value of this sort of research as compared with, for example, the design research approach championed by Thomas Reeves amongst others (Reeves, 2000).

Evidence and Innovation

As academic developers and discipline academics with a strong interest in educational research we are engaging in the scholarship of teaching and learning to ensure that we learn from the past and contribute to the broader evidential base for technology innovation as we move into the future. This means that we are following a number of distinct steps as we conduct our research (Richlin, 2001) Step one involves identifying a teaching a learning challenge and making a research informed decision regarding the solution to the challenge. Step two involves implementing a change in teaching practice and recording what happened as a result of the change. Step three consists of evaluating the impact of the intervention. Step four consists of synthesizing the results and placing findings in the context of the knowledge base. Step five consists of preparing and submitting one or more manuscripts for publication. Step six consists of disseminating findings through publication and adding to the knowledge base.

The scholarship of teaching is time consuming and likely to be an approach, for the most part, undertaken by educational specialists with research careers that centre on educational research. For this reason it seems prudent to provide alternative approaches to educational research that might be used by discipline academics with less time / less inclination to engage in educational research. This will help to ensure that educational innovations are informed by what has gone before whilst also contributing to the stock of educational research knowledge. Richlin (2001) distinguishes the scholarship of teaching from scholarly teaching by removing the publication process. On one line of argument this means that the findings are not disseminated and, therefore, the stock of evidential knowledge is not increased as a result of the research. However, findings can be shared locally through, for example, research seminars. The model of scholarly teaching therefore provides for drawing on past literature whilst also informing future developments within a local context.

There are those for whom even scholarly teaching will be a step too far. These individuals can engage in reflective teaching enquiry. Reflective practice involves educators thinking about and learning from their own practice and from the practices of others in order to gain new perspectives on the challenges that they face in their teaching. Reflective practice can help to improve judgment and increase the likelihood of taking informed action in teaching situations that are, by definition, complex, unique and uncertain. (Center for Support of Teaching and Learning, 2008). The initial act of reflective enquiry can, therefore, help to ensure that teaching practice is informed by past practice. Reflection can also help to inform future practice. Furthermore, reflective enquiry can be shared with colleagues in a local setting. With ongoing reflection, teaching practice can develop into a systematic inquiry that begins with reflection on teaching and learning experiences but becomes collective when informed by interactions with colleagues, students, and theoretical literature.

Discussion

If we make a distinction between the scholarship of teaching, scholarly teaching and reflective teaching, we can provide multiple pathways for technology innovators – no matter how busy and no matter what their particular career aspirations – to take an evidence-based approach to teaching improvement / enhancement. However, the current educational climate is defined by greater expectations with respect to both teaching and research and in this kind of situation the need for evidence based teaching improvement will need to be championed within institutes of higher education. This is particularly the case in research-intensive universities. One way to encourage evidence based teaching innovation is to connect teaching improvement with university reward and recognition processes so that individual academics are motivated to take an evidenced based approach to improving their teaching.

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