Note: The paper was presented originally at the EARLI Conference SIG Invited symposium Teaching and Teacher Education: "Demonstrating accountability through our self-study practices as teacher educators" (Nicosia 2005).
Paper can be accessed on the eLearning Europa website at
http://www.elearningeuropa.info/directory/index.php?page=doc&doc_id=7020&doclng=6

How can I support a web of betweenness through Information and communications technology?

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Abstract

In 1990, Boyer, the past President of the Carnegie Foundation of Teaching and Learning, based at Stanford University, urged academics to move beyond the teaching versus research debate. He identified forms of scholarship that moved beyond the scholarship of discovery (research). These included the scholarship of integration, scholarship of application and scholarship of teaching. Boyer pointed to a more inclusive view of what it means to be a scholar: "a recognition that knowledge is acquired through research, through synthesis, through practice, and through teaching" (Boyer, 1990, p.24). The recognition of practice-based research as a valid form of research in higher education is evident in the UK Government's Research Assessment Award (RAE 2008) which states that researchers should be able to submit applied and practice-based research that they consider to have achieved 'due standard of excellence' ((RAE 2008, para. 47). Furlong & Oancea suggest action research can contribute to more theoretical knowledge production while at the same time achieving changed practice. They believe that it "challenges any simplistic distinction between 'pure', applied' and 'strategic' research" (Furlong & Oancea, 2005, p.8).

Introduction

In my practice-based research, I demonstrate how I am contributing to a knowledge base of practice by creating my 'living educational theory' (Whitehead, 1989, 2004). This involves me in systematically researching my practice in order to bring about improvement. The context of my research is in collaboration with participants on the MSc in Computer Applications for Education and MSc in ICT in Education and Training Management at Dublin City University. Coulter and Wiens (2002, p.23) point out that it is crucial that teachers and researchers become better educational judges of practice. I explain how the educational values that emerge in the course of my practice based research become living standards of judgement. These standards and values include a 'web of betweenness' (O'Donohue 2003) and a 'pedagogy of the unique'. 'Pedagogy of

the unique' is characterized in the recognition that each individual has a particular and different constellation of values that motivate the enquiry and a different context from within which the enquiry is developing. The 'web of betweenness' refers to my belief that we learn in relation to each other and how ICT can bring us closer to the meanings of our embodied values.

Objectives of the session

The objectives of my presentation are as follows:

1. To communicate the meanings of my embodied values of a web of betweenness and pedagogy of the unique.
2. To demonstrate how Information and Communications Technology (ICT) can make our teaching public through 'artefacts that capture its richness and complexity' (Shulman, 2004, p.142).
3. To provide evidence of how I am supporting practitioner-researchers to develop their own living standards of judgement from their practice-based research.

Educational and scientific importance

In their review of the literature on pedagogies in higher education, Zukas and Malcolm (2002, p.1) suggest that the new specialism of teaching and learning in higher education has developed without reference to adult education. Neglecting the strongly self-motivated learner has tended to impoverish many current approaches to teaching and learning in higher education. They found little evidence of critical practice in writings on higher education pedagogy. As diverse and more mature types of students enter higher education, it is vital that the traditional role of the educator as one who offers content knowledge is broadened so that teaching is aimed at developing students' capacity to create their own understandings and insights through participation, negotiation and dialogue. Barnett's understanding of a 'higher education' is one where students are provided with the space to develop their own voice (Barnett, 2000, p.160).

As the full potentiality of human computer interaction is developed there is likely to be a further explosion of the use of multimedia and the ability for people to communicate in more dynamic ways through use of technology. Myers (1996, p.3) points to the emerging technologies that are a result of research in human-computer interaction. These extend from the mouse pointing device, windows, computer applications such as drawing, text editing and spreadsheets and hypertext, and to the new technologies of the future, such as multimedia and 3D, gesture recognition, natural language and collaborative learning technologies. Myers believes that user interfaces will most likely be one of the main 'value-added competitive advantages' of the future, as both hardware and basic software become commodities. We are still witnessing the pursuit of a developmental paradigm whose eventual outcomes can only be guessed at.

By contrast with the evident potentiality and dynamism of the new technology, studies of its impact upon teaching practices in higher education indicate that, as yet, teachers in general are making use of email and web resources but more advanced technologies, such as online learning environments and wireless solutions are only being used to a limited extent. Few in higher education are dealing in a practical manner with the new technology's central ideas about the handling of knowledge.

An international comparative study on Models of Technology and Change in Higher Education was carried out by the Centre for Higher Education Policy Studies and the Faculty of Educational Science and Technology of the University of Twente in the Netherlands (Collis & van der Wende, 2002). The study found that Institution wide technological structures are now in place. However, rich pedagogical use of the technological infrastructure is still in development. Van Merriënboer et al. (2004, p. 13) point out that the central concept in handling of e-learning currently tends to center upon 'content'. They regret that forms of e-learning that emphasise the active engagement of learners in rich learning tasks and the active, social construction of knowledge and acquisition of skills are rare. In other words, the potential of the technology to transform the teaching/learning environment is still far from being realised in the institutions of higher education.

It is worthwhile, at this stage, outlining the contribution ICT has offered to the development of my educational knowledge, and in particular, to the development of new standards of educational judgement in educational practice. ICT has been used to complement and support my pedagogy as it unfolds. Some examples in the context of this presentation include: digital video to record my teaching and supervision, online learning environments that have sustained ongoing dialogue among practitioners and myself, desktop videoconferencing that has opened up the classroom environment and provided opportunities to share our knowledge with others. Multimedia and web based artefacts with supporting text provide evidence of how practitioners are developing living standards of judgement through asking, researching and answering the question, 'How do I improve my practice?'

Methods

In creating my 'pedagogy of the unique' through a living educational theory approach to research, I provide evidence to show my educational influence in my learning, in the learning of others, and in the education of social formations. The methods I use to validate my claims include:

- Living eeducational theory action research cycles;
- Winter's (1989) six criteria of rigour;
- Social validation meetings.

Living Educational theory accounts of learning methodology involve expressing concerns when educational values are not lived in practice, imagining a way forward, gathering data, evaluating practice on effectiveness of actions, modifying plans in light of

the evaluation.

Winter's (1989) Six Criteria of Rigour include dialectics, reflexivity, collaborative resource, risk, plurality, theory, practice and transformation.

Habermas's (1987) Criteria of Validity include four criteria of social validity, i.e. comprehensibility, truth, rightness and authenticity.

In assessing the quality of my practice based research I focus on my embodied values and living standards of judgement.

Data Sources

The following data sources will be used to provide evidence of the standards of judgements used to show learning in the public interest.

1. Accounts of my learning as a higher education educator.
2. Accounts of the learning of Practitioner-Researcher accounts on the MSc in Computer Applications for Education and MSc in Education and Training Management (ICT) at Dublin City University.

Conclusion

In the context of my 'pedagogy of the unique' the dialogic processes reflect my growing openness to learning and relearning with others, and reveal that I believe that education should be a democratic process that gives adequate "space to each participant to contribute to the development of new knowledge, to develop their own voice, to make their own offerings, insights, to engage in their own actions, as well as to create their own products" (Barnett, 2000, p. 161). I believe that I have directed my teaching towards learning by gradually providing opportunities for participants to take responsibility for their own learning and develop their capacity as learners.

My practice based research enquiry has indeed been a collaborative endeavour that could not have taken place were it not for the participation of students in the creation of knowledge in collaboration with me. I have articulated the educational values that have emerged in my practice and I believe that I have endeavoured faithfully to live these values in my practice. My values can now be seen to be communicable standards of judgement. I hope that my enquiry will contribute to new understandings of the link between teaching and research and how teachers can contribute to a knowledge base of practice through use of ICT.

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