Learning through Action Research and Technology

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In the context of changing or improving social practice, in education in particular, it emerges that teachers' values and concerns need to be addressed and that this can be done through involving teachers in critical reflective dialogue and developing a more open attitude to educational practice.

The focus of this article is on the action research approach to learning of the MSc in Education and Training Management programme (eLearning strand) and in particular, how participants of the programme engage in action research. It integrates improving practice with knowledge creation.

Context

Participants in the programme are drawn from the widely varying fields of education (primary, secondary, third level) corporate training, industry, nursing personnel, non-government organisations, government departments, and other state agencies. In addition to the text-based accounts of learning produced by the participants in their research, they may also produce digital visual accounts that emphasise the production of evidence-based explanations of the processes of improving practice.

The approach to teaching reflects emergent thinking within education about the need for educators to research their own teaching. Farren's (2006) doctoral research enquiry 'How can I create a pedagogy of the unique through a web of betweenness?' was integral to the development of her own Higher Education teaching practice as she clarified the meaning of her embodied values in the course of their emergence in practice. 'Pedagogy of the unique' is a standard of judgment that recognises the importance of singularity; that is, each individual has a particular and different constellation of values that motivates their enquiries and each operates in a different context from within which their enquiries develop. The 'web of betweeness', suggested by Farren, is a standard that recognises the social interactive process of learning and the potential of each individual to develop their own sense of being as they learn in relation with others. Complementing this approach, Crotty's (2005, 2009a, 2009b) focus on the production of digital narratives of learning to stimulate creative enquiry, reflection and innovation in practice is also a distinguishing feature of the Masters programme.

Mode of enquiry: action research

A widely accepted definition of action research is that it is a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of (a) their own social or educational practices, (b) their understanding of these practices, and (c) the situations in which the practices are carried out (Carr and Kemmis 1986). Jack Whitehead (1989:4) refers to education as a value-laden practical activity and defines "values" as those qualities that give meaning and purpose to our personal and professional lives. He believes that by asking questions of the kind, 'How do I improve what I am doing?' practitioners can create their own living theories by embodying their educational values in explanations

of their educational practice (Whitehead 2004).

In the action research enquiry participants on the programme express their concerns when they recognise that their values are not being lived as fully as they desire. They then imagine a possible way forward, gather data in the action and make evaluations of the effectiveness of the action in living their values more fully. They proceed by modifying concerns, plans and actions in the light of those evaluations. This is based on an action plan set out by Whitehead and McNiff (2006), shown in Figure 1.

What are my concerns?
What experiences can I describe to show why I am concerned?
What can I do about it?
What will I do about it?
What kind of data will I gather to show the situation as it unfolds?
How will I explain my educational influences in learning?
How will I ensure that any conclusions I reach are reasonably fair and accurate?
How will I evaluate the validity of the evidence-based account of my learning?
How will I modify my concerns, ideas and practice in the light of my evaluations?

(Whitehead and McNiff, 2006)

Figure I: Whitehead and McNiff's action plan, 2006

During the dissertation supervision period group validation meetings are organised to encourage individuals to present their ongoing research.
The validation group of peers (4-8 per group) are asked to offer advice on enhancing the comprehensibility of the account. Advice is also given on the quality of the evidence used to justify the assertions made, the awareness of the normative background from which their report was written and the authenticity of their account in the sense that through interaction over time the writer shows that they are committed to living their values as fully as they espouse. At the validation meeting, each individual presents their research within the framework of the following questions adapted from Habermas' (1976) framework of social validity and applied within the action research validation meetings (Farren 2006:102):

1. Are the descriptions and explanations of the practitioner-researcher's learning comprehensible?
2. Is there sufficient evidence to justify the claims being made?
3. Are the values that constitute the enquiry as 'educational' clearly revealed and justified?
4. Is there evidence of the practitioner-researcher's educational influence on the learning of others?

Vignettes of educational practice

We encourage programme participants to provide evidence-based accounts of how they are improving work practices within their organisations and generating new knowledge through the use of ICT. The three action research enquiries overleaf (Figure II) from programme participants were published in the Educational Journal of Living Theories (EJOLTS) (http://www.ejolts.net) – a Peer Reviewed International Web-based journal. One of the distinguishing features of EJOLTS is that we operate an open review process and this means that communication between the reviewers and the authors takes place through the open discussion forum at http://ejolts.net/moodle/mod/forum/view.php?id=5.

Another distinguishing feature of the journal is the use of multimedia forms of representations to express educational influence in learning. The action research enquiries discussed in this paper show how practitioner-researchers are developing their multimedia skills on the Masters programme in order to submit their multimedia explanations for public criticism (Crotty 2009a, 2009b). The original contributions to knowledge of this research at DCU have been presented in a 2009 keynote symposium of the British Educational Research Association on Explicating A New Epistemology For Educational Knowledge With Educational Responsibility (Chaired by Margaret Farren, BERA 2009).

Martina Clerkin *How can I use Irish language e-portfolios in the assessment for learning approach in my primary classroom?*
Martina is a primary school teacher. She was concerned about the neglected use of assessment in her Irish language classroom. She saw the potential of electronic portfolios (e-portfolios) as a tool in assessment for learning. The full paper can be accessed at
http://ejolts.net/files/journal/2/1/Clerkin2(1).pdf.

Mary Hooker *How can I encourage multi-stakeholder narrative and reflection on the use of ICT in Teacher Professional Development programmes in Rwanda?*
Mary is an Educational Specialist with the Global e-Schools and Communities Initiative (GeSCI). The focus of her research is to enable discourse among teachers, teacher educators, curriculum developers, partners and policy makers in order to stimulate deep reflection on the various possibilities for ICT integration in professional learning in Rwanda. The full paper can be accessed at
http://ejolts.net/files/journal/2/3/Hooker2%283%29.pdf.

Ronan Mulhern *How can I design a recovery-oriented e-learning website for people with mental health difficulties?*
Ronan is an assistant manager of EVE (Eastern Vocational Enterprises) Limited, a large occupational service centre for people with mental health difficulties. Ronan's main focus is the use of internet-based e-learning to enhance and support learning and personal development among people with mental health difficulties. The full paper can be accessed at http://ejolts.net/files/journal/2/3/Mulhern2%283%29.pdf.

Figure II: Vignettes of practice from programme participants

The authors engage in a self-study of their practice. They clearly express their concerns when they recognise that their values are not being lived as fully as they desire, they imagine a possible way forward, gather data in the action and make evaluations of the effectiveness of the action in living their values more fully and then modifying concerns, plans and actions in the light of the evaluation. Through a disciplined form of educational enquiry the educational knowledge of professional educators has been made public and legitimated in the academy.

Conclusion

This paper supports Snow's conclusion that the knowledge resources of excellent teachers constitute a rich resource, but one that is largely untapped because we have no procedures for systematizing it. Systematizing would require procedures for accumulating such knowledge and making it public, for connecting it to bodies of knowledge established through other methods, and for vetting it for correctness and consistency" (Snow 2001: 9). The use of multimedia technology opens up new creative possibilities for practitioner-researchers provided that they see learning as a collaborative process not only involving teacher/student dialogue but with a wider dimension of student/student dialogue moving toward a web of betweenness that ICT can facilitate (Farren 2006, 2008).

References and further reading

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