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Physics Teacher Education, Computers and Collaboration: A Most Significant Change Story

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Abstract

A nationally funded project, Teaching Teachers for the Future, provided opportunities for academics to receive focused support in the ways in which they used ICT to support their practice, with the view to changing pre-service teachers' practice (University of Melbourne pre-service teaching students are referred to as Teacher Candidates (TCs)). An analysis of ICT support in the Physics method class indicated that lecturer attempts to use collaborative processes in Google Docs for group assignments provided students with insights into the benefits of collaborative work in their own practice. This result was unexpected for all concerned. The use of Google Docs was less than satisfactory in many aspects but the collaborative and communal nature of learning facilitated through that environment proved to of significant pedagogical value.

This paper presents a small component of an on-going investigation into perceived and actual changes, and what makes a difference, in pre-service teacher education and in enacted teacher practice. Using the Most Significant Change (MSC) method (Davies & Dart, 2005; Reynolds, Chandler & Duncan, 2012), it presents the developing (rather than the developed) stories of a group of secondary science (Physics) method TCs and their perceptions of the use of ICT in the learning area.

REFERENCES

- Davies, R.J., & Dart, J. (2005). *The 'Most Significant Change' (MSC) Technique: A Guide to Its Use*. <http://www.mande.co.uk/docs/MSCGuide.htm>
- Reynolds, N. J., Chandler, P & Duncan, J. (2012). *Building teacher ICT capacity in science education: a most significant change story*. Paper presented at the IFIP International working conference, Addressing Educational Challenges: the role of ICT: Manchester, July 2012.

Keywords

collaboration, pre-service teacher education, identity

Biographies



Nicholas Reynolds is a lecturer in ICT in Education at the University of Melbourne. He has served as Chair of TC3, WG 3.5 and Vice-Chair of WG 3.3



Paul Chandler is a Senior Lecturer at the Australian Catholic University. He has previously been a teacher and administrator in Victorian government and independent schools, specialising in Information Technology, Science and teacher's professional development. Paul has been active in pondering issues of technology and teacher change for over 20 years.

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