Schoenborn Priska Programme number: M7

Campbell-Barr Verity, Collett Tracey, Dalton Fiona, Huggins Valerie, Tidy Rebecca

University of Plymouth, UK

Pedagogy 2.0: friend or foe? (0181)

Abstract

Use of a participatory approach in online environments has been termed Pedagogy 2.0 which forms the basis for a new research project entitled "Students as producers of multimedia curriculum content: an investigation of pedagogical merit". Three studies using Pedagogy 2.0 are undertaken in the disciplines of Accounting, Early Childhood Studies and Medicine. These aim to establish the ways and extent to which the process of involving students as producers of multimedia curriculum content enhances their understanding of subject knowledge and broader life skills.

The first phase of the project is presented as a summative evaluation of existing practices leading to a proposed evaluation framework for Pedagogy 2.0. This framework aims to address the perceived weaknesses of Pedagogy 2.0. Context and preliminary findings are outlined; opinions will be sought on Pedagogy 2.0 and on the evaluation framework. The second phase is presented as three concurrent action research projects.

Introduction

Social constructivism and more recently communal constructivism, are recognised as having a positive effect on students' learning experience (Vygotsky, 1978; Holmes et al, 2001). Research in 'students as (co)producers of knowledge' has revealed that the participatory nature of such approaches can cause dissonance and challenge learners but also lead to enjoyment; and that students greatly benefit from the experience (Kotzé and duPlessis, 2003; Lee et al, 2006).

The ubiquity of technology provides ideal opportunities to engage students in this process. In some studies, students gained a better understanding of the subject and developed related skills such as team working or peer assessment (Lee et al, 2006). The use of a participatory approach in the online environment has been termed Pedagogy 2.0 (McLoughlin and Lee, 2008). McLoughlin and Lee (2008:17) argue that Web 2.0 tools make students "capable of creating and generating ideas, concepts, and knowledge". However, there are authors who advise caution regarding Prensky's premise of 'digital natives' (2001) and that students may

not be as familiar with contemporary technology as is commonly believed (Crook et al, 2008; Kennedy et al, 2007; Vaidhyanathan, 2008). Some writers go as far as to reject Pedagogy 2.0, questioning the ideology of Web 2.0 which they claim has not been seriously evaluated and has affected Pedagogy 2.0 resulting in its failure (Williamson, 2009).

Project Description

Previous research in Computing, Accounting and Early Childhood Studies at Plymouth University involved students using Web 2.0 technology to produce wikis, videos and audio content to be shared as module material with their peers and subsequent student cohorts (Schoenborn, 2008; Dalton, 2009; Campbell-Barr et al, 2011). Some findings suggest that although students worked hard, they enjoyed the collaborative nature of the work and recognised the value of a less structured approach to learning. The curriculum content was not taught but instead students had to research the material, produce a wiki and present the knowledge gained in a seminar to their peers (Schoenborn, 2008). Nevertheless, findings also suggest that too much freedom in relation to what is to be captured through the use of technologies by students does not yield adequate results, suggesting the need for some direction (Campbell-Barr et al, 2011). In one study, this was found to be particularly pertinent in relation to [the quality of] student-led seminars and several students expressed preference for traditional teaching. Students doubted each other's standards of knowledge and ability to produce good quality information (Schoenborn, 2008). Students also questioned whether fellow students would be interested in the content that they had produced (Campbell-Barr et al, 2011). This questioning of quality of content resonates with less favourable views found in the literature (Williamson, 2009).

A new research project at Plymouth University entitled "Students as producers of multimedia curriculum content: an investigation of pedagogical merit" is based on insights gained so far. Three concurrent studies using Pedagogy 2.0 will be undertaken in the disciplines of Accounting, Early Childhood Studies and Medicine. These studies will establish the ways by which and extent to which the process of involving students as producers of multimedia curriculum content enhances their understanding of subject knowledge and broader life skills.

At the time of writing this paper, the project is at its initial stages. At the conference, this paper will report on the progress of this research project and present preliminary findings. In particular, it will present a framework of investigation and evaluation which is to be developed during the initial stages. This framework aims to address the perceived

weaknesses of Pedagogy 2.0. Delegates will be invited to contribute to a discussion on Pedagogy 2.0 and opinions will be sought on the evaluation framework.

Research Methods and Objectives

The study is comprised of two phases: The first phase of the project is presented as a summative evaluation of existing practices and the second phase is presented as three concurrent action research projects. Throughout the project uses a mixed method approach (Creswell, 1999). During the first stages a comprehensive literature review is undertaken to elicit recommendations on implementing Pedagogy 2.0 and 'students as producers' (McLoughlin and Lee, 2008; Lambert, 2009) and in the context of using multimedia to produce such content. The three existing studies of the use of Web 2.0 technology to create shared module material (Schoenborn, 2008; Dalton, 2009; Campbell-Barr et al, 2011) form part of this literature review. In order to ascertain students' views and experiences of producing Web 2.0 curriculum content, the three studies are evaluated during the first phase using existing student feedback and undertaking follow-up semi structured [group] interviews. These first stages of the project are interpretative and based on Grounded Theory (Strauss and Corbin, 1990). Through adopting the principles of grounded theory it is possible to allow the data from the previous studies to be analysed and emergent themes identified. However, it has to be acknowledged that there are limits to the grounded approach in that the research focus, questions and biases will inevitably influence the themes that emerge.

A comparison of the findings identifies any common themes and determines the 'action' and subsequent framework for future investigation of this 'pedagogy of participation'. The subsequent developments to pedagogic practice will be investigated as a part of an action research cycle (Carr and Kemmis, 1986). At this time it is envisaged that the action research framework will contain a combination of both quantitative and qualitative methods. The data will be collected from the contemporary student cohorts. The precise nature and composition of these methods will be determined during the first stages.

References

Campbell-Barr, V., Huggins, V., Wheeler, S. (2011). Connecting Across Borders: Exploring the potential of handheld technologies to connect student teachers overseas, *The Vice Chancellor's Teaching and Learning Conference*, Plymouth University, Plymouth, UK, 2011.

Carr, W. and Kemmis, S. (1986) *Becoming Critical: education, knowledge and action research.* Lewes, Falmer.

Creswell, J. W. (1999). Mixed-method research: Introduction and application. *In G. J. Cizek* (*Ed.*), *Handbook of educational policy* (pp.455-472). San Diego: Academic Press.

Crook, C., Cummings, J., Fisher, T., Graber, R., Harrison, C., & Lewin, C. (2008). Web 2.0 technologies for learning: The current landscape – opportunities, challenges and tensions. Available online from:

http://dera.ioe.ac.uk/1474/1/becta 2008 web2 currentlandscape litrev.pdf (accessed 23 June 2011).

Dalton, F. (2009). Problem based learning and wikis: A student perspective, *Annual Conference of the BAA Accounting Education SIG*, Essex University, Wivenhoe Park, Colchester, UK, 2009.

Holmes, B., Tangney, B., FitzGibbon, A., Savage, T., and Meehan, S. (2001). Communal constructivism: students constructing learning for as well as with others, *Proceedings of SITE*, Florida 2001.

Kennedy, G., Dalgarno, B., Gray, K., Judd, T., Waycott, J., Bennett, S., Maton, K., Krause, K.L., Bishop, A., Chang, R. & Churchward, A. (2007). The net generation are not big users of Web 2.0 technologies: Preliminary findings. *Proceedings of ascilite*, Singapore, 2007. Available online from: http://www.ascilite.org.au/conferences/singapore07/procs/kennedy.pdf (accessed 24 June 2011).

Kotzé, T.G. and du Plessis, P.J. (2003). Students as "co-producers" of education: a proposed model of student socialisation and participation at tertiary institutions, *Quality Assurance in Education*, 11 (4), 186–201.

Lambert, C (2009). Pedagogies of participation in higher education: a case for research-based learning, *Pedagogy, Culture & Society*, 17, p. 295.

Lee, M.J.W., Chan, A. and McLoughlin, C. (2006). Students as producers: second year students' experiences as podcasters of content for first year undergraduates, *Proceedings of the 7th IEEE Conference on Information Technology Based Higher Education and Training (ITHET 2006)*, Ultimo, Australia, July 10–13, pp. 832-841.

McLoughlin, C. and Lee, M.J.W. (2008). The 3 P's of pedagogy for the networked society: personalization, participation, and productivity, *International Journal of Teaching and Learning in Higher Education*, *20*(1), 10–27.

Prensky, M. (2001). 'Digital natives, digital immigrants', *On the Horizon, 9*(5), 1–2. Available online from: www.marcprensky.com/writing/Prensky%20-%20Part1.pdf (accessed 22 June 2011).

Schoenborn, P. (2008). Mediating Learning in Object-Oriented Systems Analysis & Design using an eXtended Blending Learning Approach with Elements of Chaotic Learning, *9th Annual Conference of the Subject Centre for Information and Computer Sciences*. Liverpool Hope University, Liverpool, UK, 2008.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Thousand Oaks, CA: Sage.

Vaidhyanathan, S. (2008). Generational myth. *Chronicle of Higher Education*, 55 (4).

Vygotsky, L.S. (1978). Mind in society. Cambridge: Harvard University Press.

Williamson, O. (Date unknown). Work, Write and Fight: Why Pedagogy 2.0 has failed and how to fix it. Available online from http://utminers.utep.edu/omwilliamson/outline.doc (accessed 27 June 2011).