Blending real work experiences and virtual professional development

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Blended learning holds promise for re-thinking the various ways that learning theory, pedagogy, and technology might be brought together to engage learners. This paper draws on variation theory and social learning theory to describe how blended learning can facilitate learning experiences which occur across the boundaries, and at the intersections, of communities. The data is drawn from a preliminary analysis of a project investigating the connections between online learning and teachers' communities of practice. The emerging premise is that teachers (as learners) negotiate much of the 'blend' themselves as they work simultaneously in their school communities and engage in online learning communities. While the online learning community provides the experiences of variation necessary to provoke reflection and engagement with new ideas, teachers situate their learning within their daily practice. This authentic participation is an integral part of the workplace learning experience but this aspect is often overlooked in blended learning discussions. Higher education institutions offering virtual professional development programmes would benefit from leveraging learners' participation in everyday work as a valuable ingredient in the blended learning experience. Online professional development can adopt a thoughtfully designed blend of mode and environment incorporating virtual and real interaction, and study and real work to support teachers' learning.

Keywords: blended learning, teacher professional development

Introduction and literature

Defining blended learning is far from simple as there is a lack of consensus ranging from those who suggest the term is so broad that it embraces all learning and is therefore bereft of real meaning (Masie, 2006; Oliver & Trigwell, 2005), through to those who suggest it is a complex concept which offers transformational potential for learning (Cross, 2006; Singh, 2006). The most common definitions concur that blended learning involves a combination of online and face-to-face learning, although there is recognition that blended learning may also include different combinations of technologies, pedagogies and contexts (Graham, 2006; Stacey & Gerbic, 2007; Garrison & Vaughan, 2008). Blended learning has been described as the 'thoughtful fusion of face-to-face and online learning experiences' which optimises the strengths of oral face-to-face communication and online written communication (Garrison & Vaughan 2008, p.5). This study employs an adaption of this definition as follows: blended learning is the thoughtful fusion of face-to-face and online learning experiences which optimise the strengths of both modes and the various environments in which they occur.

There appears to be a natural affinity between blended learning and social learning theories, and common research themes relate to the affordances of blended learning in regard to interaction, collaborative pedagogies and development of community amongst learners (Motteram, 2006; Stacey & Gerbic, 2007). Garrison and Vaughan (2008, p. 26) argue that 'education is best experienced in a community of inquiry' and present the community of inquiry framework to inform the integration of real and virtual communities in the pursuit of effective blended learning. Graham (2006, p. 13) suggests that 'transforming blends' adopt social constructivist pedagogies allowing 'dynamic interactions' and 'intellectual activity not practically possible without the technology', while Wenger (2007, in Dyke, Conole, Ravenscroft & de Freitas, 2007, p. 93) suggests exploring new ways in which social learning theory and technologies might converge in authentic contexts to provide learning opportunities:

> Rather than focusing solely on the design of self-contained learning environments, …e-learning also explores the learning potential of emerging technologies, that is, the ways in which these technologies amplify (or curtail) the learning opportunities inherent in the world." (p. 93).

Responding to Wenger's challenge, and Oliver and Trigwell's (2005) argument that blended learning ought to centralise the role of the learner rather than the instruction mode or technology, this study investigates the ways that teachers connect their online learning and daily work. While the formal learning occurs in a fully-online mode requiring regular participation with a cohort of teachers from various locations, the practical assignments require teachers to apply new ideas in their own classroom or school contexts. In one sense the course design intentionally blends formal theoretical learning with practical, classroom-based experiences. However, what this study discovered was the extent to which teachers reinforced this blend of environments by interacting with, and sharing their learning with others in their school contexts, thus creating their own blend of mode. The research focuses on teachers' perceptions of their online relationships and interactions, and their face-to-face interactions which occur naturally as they situate their learning experiences in their school communities.

Oliver and Trigwell (2005) suggest that variation theory provides a sound basis for understanding and exploring learners' experiences of blended learning. The central tenet of variation theory is that learners must encounter difference through widening experiences in order to provoke discernment, and that critical discernment of new or different possibilities is the catalyst for learning (Bruce, Edwards & Lupton, 2006). Variation theory aligns well with Dewey's (1938) philosophy which suggests that learning is facilitated through reflective and social engagement in meaningful experiences, and that as these experiences become more sophisticated then learning is continuously being reconstructed. Central to these theories is the response of the learner as participant in the process, discerning, reflecting and responding to their widening experiences as they reconcile and negotiate new ideas or concepts (Hanson & Clem, 2006). In applying this theoretical perspective to teachers' learning, this study will illustrate how teachers experience variation through their dual membership of the school and online communities. This multi-membership of communities has been dubbed 'boundary spanning' in the professional development literature recognising that professional learning is often prompted by teachers' interactions with external parties (Fullan, 1999; Grossman, Wineburg & Woolworth, 2000). Wenger (1998, p. 218) also acknowledges that membership of different communities is an essential catalyst for learning because it requires the individual to align different perspectives in order to engage in both communities. Multi-membership, or boundary-spanning not only fosters individual learning but can impact whole communities as new practices and ideas are introduced between contexts. As teachers reflect on and reconcile the differences between two communities, and as they situate their experiences within their everyday work, they instinctively blend online and face-to-face interactions in ways which impact their membership, identity and participation in their work communities.

Methodology

A case study methodology was employed to investigate how formal online professional development can support teachers' learning and practice within their professional communities of practice. Case study enables researchers to investigate ordinary practices in their naturalistic settings (Stake, 2003) and to conduct in-depth analysis of the complexities and features (Cresswell, 1998). This study investigates the ordinary practices of teachers studying for a graduate qualification in information and communication technology in education. Courses in this programme were one-semester long, with the exception of a full-year research project which was usually undertaken as the last course in the qualification. Most of the participants were working full-time while studying part-time. Data for the wider study was collected in three phases: (1) an anonymous online questionnaire; (2) interviews with 14 teachers as well as analysis of their online contributions and interactions, coursework and assignments; and (3) interviews with colleagues of four of the case study teachers. This preliminary discussion will draw on interview data from Phases 2 and 3 of the project and will focus on interviews with 4 case study teachers and 11 of their colleagues (a total of 19 interviews in all). Data analysis in this phase of the study focused on examples and of variation and significant learning experiences encountered by the teachers. The analysis involved multiple readings and iterative notations to identify emerging themes using a grounded theory approach (Strauss & Corbin, 1998). Possible themes were then interpreted from a community of practice perspective using Wenger's (1998) four dimensions characterising learning as: practice, community, meaning and identity.

Discussion

The discussion in this brief paper will focus on two aspects, namely how teachers encountered and reconciled differences in meaning and practice between the two communities leading to changes in practice; and secondly, how teachers actively shared their online learning experiences with others in their school communities. (The data analysis also identified the reciprocal activities where teachers contributed

to the online learning community by sharing examples of school practice and their work experiences, however, this is not addressed in this brief paper.)

Teachers had no difficulties articulating examples of how they had encountered experiences of variation and how their understanding and practice had changed as a result of their online engagement in the course. Their stories indicated that the courses challenged their existing thinking and practices through course readings, required activities, and interactions with others in the online class. As Kate explained "you suddenly realise that you have actually read a lot of peoples' views and you have thought probably more deeply about what you are doing". One particularly interesting example came from Susan, a secondary teacher who had not encountered constructivist pedagogies before enrolling in the course. Susan described how this new concept challenged her, particularly when she read how some of the primary teachers described how the theory informed their teaching with young children. Susan realised that her adolescent students were capable of working in more constructivist ways and she actively planned ways that her teaching could adopt more engaging and learner-centred approaches. Others noted how the online course interactions and activities had prompted them to try new strategies (for example using blended learning, or concept mapping); to think differently about aspects of learning (for example, how young children can use ICT creatively, or using inquiry learning approaches); or to understand their practice from a theoretical and informed perspective (for example social constructivist pedagogies, or developing higher order thinking).

While teachers did not express a strong sense of belonging to the online course community they did acknowledge the value of online interactions. They were able to identify other course participants with whom they felt some connection, and there was a preference to seek out those whom they felt would have something pertinent to say. Kate described how others in the online environment contributed to her understanding saying "I think the comments I have had from people online have helped me have a better understanding of the issues or understand bits of theory behind things and because of that I have been able to talk to [school] colleagues who haven't had that experience of doing recent study".

As indicated in the last quote, there was also a clear indication that the teachers situated their learning in their schools and they easily volunteered how they had shared new understanding or a new strategy with their work colleagues. For example, Linda enthusiastically spoke of a fairy tales database she created linking maths and literacy, and how she shared this with her syndicate; while Beth spoke of how she used ICT to support spelling and how the literature and approaches she shared with colleagues sparked discussion. Kate had ample opportunities to link her online learning to her school community as she was an 'ICT lead teacher' meaning that she held some responsibility for supporting the use of ICT in the school. Kate identified a range of ways that she had shared her new understanding and emerging strategies with others. While Susan was officially on study leave she had remained in close contact with her work colleagues and had implemented a blended learning project in a colleague's class. She shared ways in which her new learning was filtering through to others in her department and expressed how she felt her study was relevant and meaningful to her school stating, "my study has made a difference – whereas a lot of people go away on study leave and come back and it just seems to have no impact…everything I did I can basically take back". These teachers commented on changing sense of self as well, and in particular a growing sense of authority and confidence in their understanding of learning processes; and a willingness to share or lead changes in their school.

All of the colleagues of these case study teachers were also able to talk about aspects of the teachers' online study and through their conversations verified the teachers' perspectives about linking their online work to their school communities. For example, one of Linda's colleagues observed "I just think her online learning has really kept her up-to-date with the latest teaching practices and ideas and theories and she is so motivated by it. She is really enthusiastic about it . . . and she is really good at sharing those sorts of things." One of Susan's colleagues commented that Susan was "more aware of ways of doing things, probably because of her interaction with others" and she went on to explain how this had translated through to changes in her own classroom as she was supported by Susan. While the case study teachers did not meet others face-to-face in the formal professional development context they chose to engage work colleagues in discussions and sharing of ideas. In this way the teachers undertaking professional development acted as 'boundary spanners' (Fullan, 1999; Grossman, Wineburg & Woolworth, 2000) introducing the theories, ideas and strategies from their online community into their workplace.

Conclusion and implications

This 'work in progress' found that while the online course design deliberately required teachers to plan, implement and evaluate strategies in their classrooms there was no expectation for them to share or

interact with colleagues. Interestingly however, interviews with both the case study teachers and their work colleagues provides evidence to suggest that the informal interactions with school colleagues forms an integral part of the learning process for teachers as they situate their learning in their school contexts. The 'blend' in this learning landscape is not the usual combination of formal face-to-face instruction with online activities, but rather the blend re-situates the face-to-face component within the workplace recognising the informal and incidental learning which arises from daily interactions with colleagues in communities of practice. The variation encountered in the online course community is amplified on a personal level for teachers as they engage in authentic activity connected to their work contributing to changes in their professional roles and practice, and the learning is amplified at the community level as teachers share these experiences with others in their communities of practice. While the blending of mode and environment was partly embedded in the course design, the experiences of these teachers suggests that greater leverage could be achieved through intentional design which promotes interaction offline, as well as in the virtual learning environment, and which encourages participants to reflect on and share these experiences in both environments and modes.

This brief paper proposes modifying the blended learning landscape to acknowledge the inter-community activities of learners, and to include those contextual learning interactions which occur beyond the virtual professional development course community.

Acknowledgements

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