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Communities of practice as mediators of change in higher education

Melanie Brown

RMIT Vietnam, Ho Chi Minh City, Vietnam
melanie.brown@rmit.edu.vn

Catherine Peck

RMIT Vietnam, Ho Chi Minh City, Vietnam
catherine.peck@rmit.edu.vn

Improving and differentiating the student experience is an imperative in contemporary Higher Education as institutions strive to maintain and increase their market advantage. This often results in directives from leadership to offer a technology-enhanced delivery of curriculum. Teaching staff tasked with implementing these changes often require not only technical training, but also development support that enables them to engage with unfamiliar teaching practices. In the researchers' context of practice, an institutionally supported community of practice was established with the intention of supporting changes to curriculum delivery entailed by a blended learning approach. Communities of practice (CoPs) have emerged as fertile soil for initiating innovation, professional learning and supporting change, and are often positioned as emerging organically from the needs and interests of participants. Interviews with members of an institutionally facilitated CoP were used to investigate the extent to which a CoP approach supported academic staff in meeting the outcomes of a mandated project. Analysis indicates that participation within the CoP had a positive impact on both the participants and the changes they implemented in their practices. This finding is congruent with other studies demonstrating the use of CoPs in higher education has positive impacts on teachers' levels of innovation in the face of learning & teaching challenges and further suggests that institutionally created CoPs can emulate the characteristics of those that form organically.

Keywords: communities of practice, academic development, higher education

Changing dynamics and expectations

Globally, increased competition in the higher education sector has resulted in fundamental changes in the ways in which learning and teaching is delivered to students who are often now classed as 'customers' (Nagy & Burch, 2009). Universities must increasingly accommodate expectations they will deliver transformative and flexible learning experiences enabled by technology. Contemporary students also engage with knowledge and information differently. Even before they enter university or the workplace, the internet and resulting access to communication and information has had an impact on the literacy students require (Schleicher, 2012) and the ways in which they expect to learn. The pace of technological, social and economic change and development demands that higher education institutions, not traditionally places of rapid change, move faster and respond more nimbly to their environment. As a result, 'top-down' edicts for sweeping changes in teaching delivery that challenge both academic teaching staff and those responsible for leading and providing academic development are increasingly common.

In order to assure quality learning and teaching in contemporary tertiary institutions, effective strategies must be identified to support academic staff in delivering learning experiences in modes and formats they may never have experienced themselves. As an alternative to generic teacher development and training activities, more collaborative and contextualised forms of support such as communities of practice have been successful internationally. This paper presents the outcomes of a small-scale study into the impact and effectiveness of a community of practice (CoP) facilitated by academic developers for academic staff engaged in an institutionally mandated curriculum project at an international campus of an Australian university. The CoP was received positively by participants who chose to be interviewed and analysis of the responses of these participants indicates that the CoP enabled the development of practice leading to the achievement of project outcomes.

Communities of practice in academic development

Directives from management for rapid and extensive changes in teaching approaches necessitate adjustments in the way academic development is provided within universities. Cognizant of such changing needs, academic development is evolving. As Gibbs (2013) suggests through his review of educational development, the focus is now more on working with groups of teachers, for example those in course teams or departments, as part of ensuring “the health and vigour of the *community* of teaching practice” (Gibbs, 2013, p. 7) (emphasis added). He further notes the trend for the singular, unconnected workshop style of development to be replaced with more strategic support integrated with wider institutional priorities. This trend had also been noted in a review of research into the impact of various forms of academic development. This found that in situ forms such as CoPs were reported as effective (Southwell & Morgan, 2009). In the Australian higher education context, a study of the learning and teaching centres responsible for teacher development identifies communities of practice as one leverage point that can affect positive change (Holt, Palmer, & Challis, 2011).

Due to the seminal work of Lave and Wenger (1991), expanded by Wenger (1998) and Wenger et al. (2002), organizations, including universities, have adopted communities of practice (CoPs) in order to facilitate professional learning. The concept of CoPs is based on Lave and Wenger’s findings regarding the situational nature of learning which position it as “an integral and inseparable aspect of social practice.” (1991, p. 31). CoPs are seen to harness our preference for learning with others (Wenger et al., 2002). CoPs are

groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis. (Wenger et al., 2002)

CoPs can take various forms and go by varying names, such as professional or faculty learning communities. They can involve people from similar or different backgrounds, physical or organisational locations; can vary in size and longevity; can be intentionally created or spontaneous; and can range from the unrecognised to those institutionally sanctioned (Wenger et al., 2002).

According to Wenger et al. (2002), a healthy CoP is a balanced interplay of three structural elements: domain, community and practice which can be summarised as follows. Domain is the area of knowledge that the community engage in learning about. Community is the relationship of mutual trust and respect among the group members that enables the sharing

and creating of knowledge. The specific knowledge that the group shares, maintains and/or creates is termed practice (Wenger et al., 2002).

CoPs have been shown to be well received by higher education teachers and to impact positively on their ability to find innovative solutions to learning and teaching challenges (Buckley, 2012; Buckley & Du Toit, 2010; Cox, 2013; Green et al., 2013; Warhurst, 2006). Within this context, CoPs have been categorised to reflect the various forms they may take and the organisational relationships they reflect (McDonald et al., 2012). These categories range from those CoPs that are closer to Lave and Wenger's original conceptualisation as organic and grass root constructs to those that are institutionally created and supported.

However, the limits in the transferability of CoPs from their well-established use in the corporate sector to higher education have also been asserted (Holt et al., 2011; Nagy & Burch, 2009). Despite the corporatization of universities, academia still has features that do not sit well with the original nature of CoPs. These include the still existent differences in organisational structures between corporate organisations and universities, as well as the lack of alignment between the individualised foci of academic staff and institutional objectives (Nagy & Burch, 2009). This provides a starting point to investigate how academic developers can utilise CoPs to provide learning opportunities for staff through adaptation of the original CoP concept.

Particular context and approach to academic development

For anyone within higher education and particularly those engaged in supporting learning and teaching, the scenario experienced by the authors will not be unfamiliar. With tension between the day to day operational priorities of academic managers and the strategic focus of a centrally located academic development or learning and teaching unit, there may be very limited buy-in from academic staff in non-mandated development activities. Although pockets of innovations by individual staff are always evident, learning and teaching initiatives can be very much on the periphery of practice.

In the context where this study was situated, past efforts to engage academic teaching staff in CoPs had been met with initial enthusiasm, but participation had petered out due to competing demands on staff attention and energy. However, in situations where there is an alignment between the priorities of academic management and those held by the units responsible for supporting learning and teaching development there is increased potential for academic developers to play a role in supporting academic staff with the demands placed on them by institutional directives for change. In this case, the advent of an institutionally mandated strategic project that had support from academic managers provided the opportunity for the authors to establish a CoP to promote teacher-led inquiry and knowledge sharing in the process of achieving a set of specific objectives.

The project reported in this paper was a collaboration with one faculty and reflected the institutional push for change in the student experience through the blending of the online and face to face environments, and a move to less or no lecturing through the displacement of content to the online space. This all constituted a substantial change in the teaching approach of the academic staff and in course delivery. The project involved eight different course teams across seven disciplines and there was little or no history of collaboration between the project members. While for some skill-building needs the delivery of training was warranted, within the execution of the project there was a concerted effort to build space for collaborative

development in which practices suited to the local dynamics of their classrooms could be shared.

The academic teaching staff involved were invited to interdisciplinary meetings once a month across the year long project. The meetings were facilitated by academic developers supporting and coordinating the project and provided opportunities for the staff to present the work they had completed or were planning in their courses, ask questions and share challenges. The CoP established was, as suggested in the literature (McDonald et al., 2012), a modification of the original conceptualisation by Lave and Wenger (1991) and further developed by Wenger (1998). Although still based on the foundational concept of situated learning, the CoP was an example of a formal, intentionally created, institutionally supported group.

This study investigates whether the experiences of the participants reflected the principles and characteristics of CoPs and whether that afforded a form of developmental support that enabled the academic staff to meet project outcomes. The remainder of this paper will outline methodology, report on the findings from interviews conducted with the CoP participants, and discuss the implications of these for academic development work given the changing dynamics of the higher education sector.

Methodology

This exploratory research project aimed to investigate the perceptions and experiences of academic staff of the support provided by an institutionally created CoP, formed to assist them in meeting the objectives of an institutional project. Investigations into the effectiveness of CoPs have not previously focused on participants' perceptions of them as a form of support during an institutionally led change. For this research project the perception of the subject is central (Morrison, 2012). A phenomenological approach was therefore used as a means to understand what commonalities, if any, existed among the experiences of the individual CoP participants (Creswell, 2007).

The participants of the CoP provided a purposive sample for this research project (Denscombe, 2007). Thirteen participants were invited to participate in semi-structured interviews following one semester of regular participation in the Learning Design Community. Seven participants agreed to participate and were interviewed via email. Once participants had responded to the first set of questions, follow up questions were sent, resulting in email chains created over a two week period. As well as being conducive to the collection of detailed and in-depth responses, semi-structured interviews allow participants to contribute in some degree to the direction interviews take in relating their experience (Morrison, 2012), reflecting the constructivist ontology and interpretive epistemology underlying this research. Interviews are thus understood here as a socially situated practice, drawing upon work across the social sciences in recent decades that has rejected the presentation of research interviews as a neutral mode of data collection. Holstein and Gubrium (2003) are frequently cited for their rejection of the transmission based views of interviewing. Their critique of methods that position the interview as a process of eliciting knowledge treated as objective truth from participants challenges the ascription of a passive vessel stance to the interviewees as subjects, as “repositories of facts and the related details of experience” (Holstein & Gubrium, 2003, p. 70). Within this study, the emphasis on the participants' perceptions, rather than reported facts, and recognition of researcher-participant subjectivity has reflected this understanding.

Conducting the interviews via email provided a number of benefits. Firstly, participants could answer in their own time, thereby having the opportunity to consider, review and critically reflect on their responses. This allows for the collection of rich data (James, 2015) and has been shown to result in no significant reduction in data quality compared to face-to-face interviews (Ratislavová & Ratislav, 2014). Moreover, email interviews provide a level of internal validity as respondents can see and validate their responses in the email chain as the interview progresses over time, thereby mitigating bias (Bush, 2012). The investigator is also able to formulate well-considered follow-up questions to capture dense data due to the asynchronous nature of this form of interview (James, 2015; Ratislavová & Ratislav, 2014). Email also provided a distancing effect for the collegiate relationship between researchers and participants, appropriate when investigating the potentially sensitive area of reflection on practice (Ratislavová & Ratislav, 2014). In the context of this research project, email interviews with academic staff also had the potential to position participants as co-producers with the researcher (James, 2015) as the opportunity existed for both participants and investigators to reflect on their experiences in the CoP. Ellis and Berger, building upon a movement in the literature toward acknowledging the relational aspects of interviews, consider that the social and personal identity of both interviewer and interviewee are significant, and also dynamic. As they respond to each other the relationship between them can be continually repositioned, or emerging. This disclosure on the part of the interviewer is seen to reduce the hierarchical gap between researcher and participant, and prompt richer dialogue (Ellis & Berger, 2003).

As a small scale and exploratory study a limitation in external validity owing to the use of a single collection method (Bush, 2012) is acknowledged. However, the research objective was to conduct a situated study, concerned with experiences embedded in particularized and individual perspectives. Consequently, a concern with the issues of validity & reliability that are entailed in much quantitative, experimental or post positivist inquiry is of reduced relevance here. As both authors observed the CoP meetings as participants, opportunity for the investigators to reflect on the issue of inter-subjectivity was also present (Bush, 2012).

Emphasis was given to rigour as opposed to reliability due to the inherently interpretive nature of qualitative analysis (Saldana, 2011). This was ensured by a process of cross checking areas of data coding, wherein the researchers approached coding of the interview data separately and iteratively. The interview transcripts were coded by both investigators through two layers of analysis. An emergent thematic analysis guided by a phenomenological approach (Creswell, 2007) was used to identify prominent and similar themes in the experiences and perceptions of the participants. This first coding was broad, focusing on the themes of the benefits, enablers and blockers that could be identified in the interviewees' responses. A structured thematic analysis followed which identified specific references to themes within the framework of the Wenger et al. (2002) definition of community and practice respectively. This second layer of analysis focused on the participants' reports of the positive impact a sense of community and the sharing of practice had on their work within the project. The first aim of this approach was to establish whether the participants' perceptions of their experience reflected the aspects of CoPs. The second was to determine to what extent the characteristics of this form of academic development enabled the development of practice leading to the achievement of project outcomes.

Findings and discussion

Firstly, the question of whether the meetings facilitated for the academic staff constituted a CoP rather than being project team meetings needs to be addressed. Wenger et al. (2002) make this distinction clear; in contrast to project teams, CoPs focus on the sharing and development of knowledge rather than the allocation and completion of interdependent tasks. Within this institutional project, project team meetings were held with separate course teaching teams out of scope for this research, and these focused on the tasks to be completed to meet the project outcomes. The whole of project meetings (called the Learning Design Community or LDC) involved project members from different course teams that worked, for the most part, independently of each other. These meetings were set up to create space for the academic staff to share the approaches they were taking to course redesign. The aim was for the staff to learn from each other, and to ensure the structural elements of a CoP were present. The participants' responses to the interview questions indicate that the LDC was successful in emerging as a form of CoP, as their discourses oriented heavily to the development of knowledge through exchange and sharing around areas of practice, and did not include references to task management or coordination.

As members of the project team, but primarily as teachers, the participants shared a domain. They shared the desire to achieve the best outcomes in the student learning experience and the challenge of developing their own knowledge and skills to undertake a course redesign that departed from their own personal learning experience and from their prior teaching practice. As one participant described the experience, they were “on the same boat”. Such comments from participants indicated that they had tasks, challenges and motivations in common.

A sense of community was reflected in the comments made by participants in the interviews. They described the meetings in terms that indicated a feeling of respect for others and the trust that are integral to a CoP (Wenger et al., 2002). The participants used adjectives such as “open and honest”, “non-threatening” and “friendly”. One participant described their perception of the group's motivation and the resulting atmosphere thus.

I was quite comfortable as all of us were there to help out one another. If there were critiques, these were delivered in a very collegial, professional, and constructive manner as there's always room for improvement.

The third aspect, that of practice, could also be seen in the participants' focus on the benefits of the community in relation to the knowledge shared and developed. They referred to the understanding of the project dimensions gained as well as the learning in regards to course design that was enabled through sharing approaches. This was not abstracted knowledge; it was very clearly knowledge that they were using to meet the outcomes of the project. This emerged in the analysis of the interviews as a theme illustrated by the following quotes from three different participants.

[I]t helped substantially in a way that I was able to observe what was being done with other courses and I was able to tweak some of the components for it to be used in my course or I was able to explore other options that can be used in my project. It was good to have a community as it helped people who are in the same task or will be in the same task to learn from others' experiences and challenges.

Being a member of the Learning Design Community has given me some guidelines as to what is required of me in this project. I have seen the work produced by others and these samples will be very crucial in guiding our team when we start working on our project.

I have learnt a lot from the ways other teaching teams have done to improve their courses. The design of my own topics on the Blackboard is strongly influenced by the lessons that I have learnt during the meetings held by the LDC.

This finding echoes the assertion by McDonald and Star (2008) regarding the importance of meeting staff needs and ensuring sufficient practical outcomes to warrant the investment of time when using the CoP approach.

A set of themes that emerged in the analysis were around the ways in which learning occurred in the CoP. Again, demonstrating the outcomes focused nature of the group interaction, the comments by the participants centred on what they could learn from others through observation. Rather than through debate or theoretical discussion, the participants described their learning as occurring through seeing, hearing and listening as illustrated in the following quotes from three respondents.

It's interesting to see the different tools, strategies, learning methodologies that have been suggested by different teaching teams. I have been able to adopt some of these strategies to implement in my course.

The biggest learning for me was the opportunity to listen to and see what other courses have done. We modelled our approach based on the strategies we considered to be good and affective [sic] which were implemented by other teams.

Having a chance to be a part of the community and to listen to other teachers' experience with the project, helped me organise my work while implementing project.

As one participant indicated, this way of learning from others was relatively new in a context where staff were often disconnected from colleagues not directly in their discipline.

Conclusions and implications

This paper has outlined an inquiry surrounding an approach to academic development that aimed to address the challenge of providing relevant and effective support in a context in which academic teaching staff are increasingly expected to enhance the student experience through the use of teaching approaches and technologies that are often unfamiliar to them. As suggested by Gibbs (2013), this support focused on working with a group of teachers on a project that aligned with strategic priorities. A CoP was created in order to afford the cross-discipline, cross-team sharing of experiences, challenges and learning that could lead to positive project outcomes. The responses of the academic staff involved who elected to participate in this study indicate that this group could be categorised as a CoP as their perceptions reflected the structural CoP elements of domain, community and practice. Further this form of academic development was perceived by the academic staff to have a positive impact on their achievement of project outcomes. The comments focused on how seeing and hearing about the work of others contributed to their own practice and achievement of project

outcomes. These outcomes may be relevant to others planning a similar initiative in a comparable context.

This study has some important limitations that must be acknowledged. The situated nature of the research and small scale precludes generalization to other contexts. It may be desirable to observe the application of the CoP approach to mediating change in higher education institutions across a broader range of discipline areas. Similarly, the approach could be applied to the mediation of a change or directive of a different nature (one not involving the integration of technology or blended learning pathways to course delivery). It is important to also acknowledge the issue of subjectivity in the context of this study. As with others investigating their own practice, how can we as researchers determine the extent to which our interpretations are coloured by our roles in the project, our close knowledge of the participants and our own professional identity? We take the position that these characteristics afford insights into the experiences of the participants. That is, knowing them as colleagues allows us to see them within the context they work in and how this impacts on their experiences. Nonetheless, the potential for bias could be precluded in further studies by inviting a cross-check of data from an external collaborator.

Despite these limitations, the outcomes of this inquiry have been encouraging in that they suggest an effective strategy for supporting academic staff in dealing with change. The results gained from this small-scale, but rich investigation indicate that a modified version of a CoP that accompanies an institutional project, and therefore is embedded in the work of the participants rather than abstracted from it, is a viable form of academic development and warrants further investigation.

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