THE PEOPLE IN THE ROOM: CONVENING INTERDISCIPLINARY COMMUNITIES OF PRACTICE IN AN INSTITUTION OF HIGHER EDUCATION

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Communities of practice (CoP) are rich learning spaces that support knowledge creation, social engagement and practice improvement. In some university settings, there is a buoyant interest in creating and supporting interdisciplinary knowledge and practice. The purpose of the study was to apply an action research approach to explore the emergence of interdisciplinary communities of practice in a university context and to reflect on the practice of convening a CoP. How do communities of practice emerge and what approaches and practices nourish these groups? The authors of this study share a reflection on their role as convenors of CoP and on their work facilitating the emergence of these interdisciplinary groups.

Keywords: communities of practice, social learning, interdisciplinary

Interdisciplinary thinking in courses and programs is now emerging in many higher education institutions, in some cases, accelerated by an increasing recognition for interdisciplinary problem solving and the need to develop the capability to work with a wide range of knowledge sources (Klein, 2006). Organizations are challenged to support and facilitate knowledge creation (Wenger & Snyder, 2000). The aim of this study was to engage with leading two different communities of practice in order to consider how to establish CoP leadership/convenor practices. Ethical approvals and informed consent to participate were completed at the researchers' institution.

Human experience in communities is a balance of individual experience and competency within a community; each aspect shapes the other (Wenger, 2009). In higher education, a catalyst for our capacity to facilitate interdisciplinary relationships and knowledge creation may reside in our collective understanding of how social learning can connect individual experience and competence in multiple communities of practice and thereby contribute to institutional learning. This study was grounded in the theory and practice of social learning – and in particular the work of Etienne Wenger, an educational theorist who has published widely on social learning systems and who, with Jean Lave, developed the concept 'community of practice' (Lave & Wenger 1991). The term has stuck – resonating with organizations inside and outside higher education.

COMMUNITIES OF PRACTICE

Communities of practice are all around us. Some communities of practice function more successfully than others and have more longevity (Wenger, 2011). Communities of practice (CoP) are rich spaces that support knowledge creation, social engagement and practice improvement (Wenger, 2010). Etienne Wenger's conceptual underpinning of communities of practice (CoP) defined with Lave (Lave & Wenger, 1991) is examined and elaborated by Wenger (2010) in his analysis of 'the career of a concept'. The CoP concept is embedded in

social learning theory with an alignment with systems traditions; a CoP is a social learning unit at the simplest level. The alignment with systems traditions appears to offer a broader scope of practice for CoP – widening possibilities for CoP to be understood and practiced in traditional learning settings and also social and organizational contexts (Wenger, 2011). A CoP is a node in a social system just as a seedpod is a node in an ecological system. Wenger's analysis suggests a CoP is a seedpod alive in situ, a place to establish identity, meaning and practice, yet brimming with the possibility for further connectivity if the necessary conditions are generated.

Wenger's work connects theory with practice – the pathway to practice is bold. CoP are places to examine identity, learn in community and connect through networks (Wenger, 1998). Knowing is not necessarily separate from human interests, perceptions and values. Knowing does not necessarily have to be objective and replicable, but rather heterogeneous, context specific, nuanced and changing (Vickers, 1972). Communities of practice, by their nature, are emergent, interdependent, and purpose oriented; they are driven by the competence and commitment of the group members.

ORGANIZATIONAL LEARNING

Brown and Duguid (1991) compared how people work, with how organizations structure or describe how people work, in different work artifacts such as manuals, standards and policies. The authors' analysis of ethnographic studies of learning and work suggested that we learn through informal communities of practice in our workplaces. Furthermore, Brown and Duguid (1991) argued that our opportunities to connect 1) working, 2) learning, and 3) innovating, rest in our understanding of actual practices in all three areas and in the re-design of our organizations. In aiming to understand learning through the lens of work practices, Brown and Duguid (1991) state their perception that societies in the USA value abstract knowledge more than knowledge in practice, and provide a commentary on CoP and the potential transformation in learning and innovation that the concept could engender in organizations.

At a simple level, policy in a manual is naturally ineffective if it is not shared, discussed and followed. If we take this one example, and extend it to other organizational artifacts, it is possible to conceive an organization that espouses a formal system for the way work is done that is significantly detached from actual work practices. It is this lack of connection and "knowledge-practice separation" that Brown and Duguid (1991, p. 41) examined. The authors proposed that communities of practice facilitate learning that connects working and innovating providing the space for learning that draws on contextual knowledge and practice "…like a magpie with a nest learning is built out of the materials to hand and in relation to the structuring of resources of local conditions" (Brown & Duguid, 1991, p. 47). In particular, Brown and Duguid (1991) emphasised that: CoP create the conditions of learning and not pedagogy; the community narrative is created as an insider in a CoP; learning is of particular significance to group members; and, the possibility of change to personal identities arises in CoP. The challenge is how to convene and sustain non-traditional communities of practice within traditional, hierarchical organizations. CoP organization can be different and thus difficult. Members must be mindful of the continual pressure to default to traditional practices, roles and expectations. With an emphasis on the organic characteristic of emergence in CoP, Brown and Duguid (1991) made a clear distinction between what they term 'noncanonical' and 'canonical' groups (p.50). Thus the authors emphasised a significant distinction between CoP and task forces or work groups. A CoP is egalitarian and does not reflect "dominant assumptions at the organizational core" (p.49). Rather than mandating a CoP, Brown and Duguid (1991) advised that efforts

should be focused on supporting and legitimizing community and periphery practice.

Organizational Learning in Higher Education

White and Weathersby (2005) examined the institutional impediments in higher education along the pathway to becoming a learning organization and name some of the obstacles to learning. These obstacles included governance structures that are traditional and hierarchical, and artifacts of culture that reinforce aspects of culture, strategy and structure that are not conducive to supporting learning that benefits the institution as an organization; "Faculty consider themselves knowledge creators for their professions and groups… but are not usually willing or empowered to learn to create knowledge on behalf of their institutions" (p.293). What alternatives are there to improve learning and collegiality in higher education? White and Weathersby (2005) propose that communities of practice (CoP) are a key component of a learning organization and an opportunity to leverage community for positive cultural change. White and Weathersby (2005) recognized a role for traditional managerial processes, while also proposing the need for organizational members to use two additional processes at all levels in the organization. The first is deliberate communities of practice and the second is intentional focus on learning how to learn.

Application of Communities of Practice in Higher Education

A case study on a theme-focused faculty learning community (FLC) at Oakland University in the USA (Michel, 2014) suggested that impediments to an interdisciplinary approach to research and pedagogy included governance structures, politics and competing interests. The FLC in the case study was a community of practice, and had an interest area in surveillance, privacy, and security. Adopting agreed operating principles, the group focused on inclusivity, the open flow of ideas and the development of new knowledge as individuals and as a community (Michel 2014). The case study provides useful empirical insight into the functioning of a community of practice in a university organization. Churchman and Stehlik (2007) articulated the tension between an increasingly powerful and prevalent management discourse in universities, and academic discourse, with the former invariably overpowering alternative expressions of institutional priorities. The authors' suggested that a community of practice model is an opportunity to transform the way academic work is organized in Australian universities while offering an alternative to pressing university reforms, with learning that recognized multiplicity and community.

Further Directions

Churchman and Stehlik (2007) directly address power and CoP structures in organizational hierarchies noting CoP are challenging because power resides with the CoP members and thus within the community. Churchman and Stehlik (2007) cited Lave and Wenger (1991) to explain accountability in a CoP and noted a basis of power is part of a horizontal and informal hierarchy. This way of relating and working is not necessarily acceptable in a vertical hierarchy and corporate organizational structure. Wenger (2010) discusses power and identity concluding that power is linked to identity and identification – if we do not identify with an issue, practice or experience, it does not have power to affect us. Power, identity and identification are rich theoretical areas to examine if a CoP is considered from the perspective of organizational design and hierarchy. As CoP is a learning theory, not an organizational theory or

a theory that seeks to understand politics (Wenger, 2010), it is appropriate to consider examining other concepts in addition to CoP. Learning organization theory appears to be a fruitful theoretical basis for examining the potential for CoP to change or transform organizational behaviour and norms that limit change and adaptability (White & Weathersby, 2005). In conclusion, further research is necessary to examine CoP concepts, learning organization theory and organizational culture and practice in higher education institutional settings. This study is an examination of leadership/convenor practices in two new and different CoP in a higher education setting, where the CoP approach as an interdisciplinary gathering, is relatively new, and 'untested'. While the research suggests that CoP hold possibility for organizational learning, practice development, community enrichment and adaptability; the focus of this study was how to get a CoP started and how to set it up successfully.

RESEARCH DESIGN

The purpose of the study was to apply an action research approach to explore the emergence of interdisciplinary communities of practice in a university context and to reflect on the practice of convening a CoP. Specifically, 1) how do communities of practice emerge and what approaches and practices nourish these groups, and 2) what did the convenors, in practical terms, notice about the application of the developmental elements that support a community of practice, namely: domain of interest, community, and practice (Wenger, 2011).

In order to identify how communities of practice emerge and what approaches and practices nourish these groups the study followed a participatory action research (PAR) design. Action research in the workplace took its initial inspiration from Lewin's work on organizational development as well as Dewey's emphasis on experiential learning (1938). Lewin's principles include a flexible, scientific approach to planned change that proceeds through a spiral of steps, each of which is composed of 'a circle of planning, action, and fact-finding about the result of the action' in alignment with democratic leadership and responsible participation that promotes critical self-inquiry and collaborative work (Lewin, 1946). PAR involves a collaborative approach wherein partnerships are formed between individuals with first-hand knowledge of the issue under investigation, and those who possess technical skills and formal knowledge with the issue (Coghlan,& Brannick, 2014; Lykes & Coquillon, 2006; Reason & Bradbury, 2006). With an emphasis on education, collaborative learning and transformative action, PAR is as much about the processes as it is about the outcomes of research (Ristock & Pennell, 1996). At its most participatory, researchers and project participants collaborate to inform project design, select methods, facilitate the project activities and review and evaluate the process as a whole (Reason & Bradbury, 2006). The action-reflection research cycle is a practice and inquiry data collection method (Coghlan & Shani, 2014) that practitioners use to interrogate their own practice. Action research participants discuss issues, problems or opportunities with other practitioners (McNiff & Whitehead, 2006) and make their own decisions on how to act to make adjustments to their practice. The action research cycle proposed for this inquiry draws from the work of Kemmis (2009) and McNiff and Whitehead (2006).

The rationale for an action research approach rests in the following understandings about practitioner research and social learning. Practitioner research contributes to knowledge generation in organizations and society; "know-how" or "knowledge about" is discovered in action (Schön, 1995, p.29). Action research is collaborative and acknowledges that perception and meaning making is made by individuals as they explore their social context and relationships with others (McNiff & Whitehead, 2006). PAR therefore aligns well with the collaborative and

emergent principles of CoP.

Data and Sample

The authors' convened and participated collaboratively in two communities of practice that emerged over time in the authors' university, notably: women in leadership and higher education trends. Participants were members of the university's administrative leadership, faculty, and associate faculty or sessional communities. Participants typically attended CoP meetings over a period of 6 to 9 months. Data included participant observations and documented notes in a variety of forms: padlets, typed notes, visuals, comments in online discussion forums, publications and other artifacts.

Method of Data Collection and Analysis

The action research cycle was adapted from Grundy and Kemmis (1982) as follows:

1. Start with the experience of the participants. Develop a plan of action to improve what is already happening.
   Example questions for groups and individuals: What brought you here? What keeps you awake at night? If you could shift or adjust one aspect of your practice, what would it be? These questions were posed in the first and second meeting of the CoP.
2. Look for patterns and share information and impressions. Discuss skills, strategize and plan for action. Act to implement the plan.
   Example questions for groups and individuals: What is your context – consider the organizational context and your department and disciplinary context – what surfaces? What is particularly meaningful to you in your role? In one month what do you hope to have achieved? What practice adjustment can you commit to make? Questions emerged typically once the CoP was settling in.
3. Make notes on the action – what do you notice? Observe the effects of action in the context in which it occurs.
   Example questions for groups and individuals: How do you plan to notice the effects of your practice adjustment or change? How will you capture your experience, for example, your impressions, improvements and obstacles? How will you understand how the practice change affects others? Who will you involve?
4. Reflect on these effects as a basis for modification, further planning, subsequent action and on, through a succession of cycles.
   Example questions for groups and individuals: What happened? What changed? Did you notice a shift or a leap? Has the adjustment to practice affected you? If so, in what way? What do you want to do next?

PAR is cyclical and recursive, beginning with a planning phase, followed by an action phase and an evaluation phase, which then serves to inform a reiteration of the process. Therefore, the PAR design was most suited to our purpose of framing our paths of inquiry within our own institution and discovering effective practice(s), while seeking to enhance process and structure and share our learnings with others. Data was gathered by capturing responses to questions that were posed at different stages of the action research cycle noted. Data was captured on flipcharts, cue cards and also online in a forum set up for reflective participation. The data was coded and categorized according to theoretical principles of communities of practice and social learning theory and themed for emergent patterns of meaning relating to

principles of engagement and establishment of leadership and convenor practices. The analysis relied on the interrater reliability of the two researchers to confirm or challenge the themes identified.

FINDINGS AND DISCUSSION

How we choose to shape our practice is embedded in our sense of identity, meaning making, and community (Wenger, 1998). CoP are a mode of learning and problem solving based on increasing participation in communal activity, and built on a shared understanding of what it means in their lives. As such, as Akkerman, Petter and de Laat (2008) suggested 'communities of practice develop around the things that matter' (p.384). Each CoP mirrored Wenger's three developmental elements: *domain, community, practice* as well as three dimensions of community activity: *meaningful, shared, coordinative* (Akkerman et al., 2008). Developmental elements that arose in the two CoP; *women in leadership* and *academic trends* included: the practice of convening, curating, and emerging and these developmental elements supported membership, communication and process.

WOMEN IN LEADERSHIP COMMUNITY OF PRACTICE

The women in leadership CoP mirrored Wenger's (2011) three developmental elements quite naturally, emerging from a social problem to be solved – that of barriers to women in leadership within higher education generally and our institution more specifically – and a desire to resolve or find creative strategies for addressing these challenges at the local level. The domain emerged as 'higher education', the community as 'women in leadership roles within a university setting' and the practice as 'inclusive leadership, organizational learning, and organizational cultural development'. To establish our priorities this CoP used Wenger's four disciplines: the discipline of domain, the discipline of community, the discipline of practice and the discipline of convening (2010, p.194). One priority for the group was to identify how we can live our values at the university, in particular, our value of care. The CoP considered dimensions of community activity (Akkerman et al., 2008):

1. Meaningful activity – striving to answer the question, how can we express, spread, and embed feminine values in our institutional communications and practice in order to develop a more balanced and inclusive organizational culture?
2. Shared activity – meeting regularly to share challenges, problem solve, reflect upon our leadership practice and context, and design strategies for influencing and building more inclusive cultural values across the institution.
3. Coordinative activity - documenting our ideas with a website and online learning management system. Generating multiple research projects to support and extend our individual and also collective interests.

Key Principles to Support a Community of Practice

Convening – each group needs someone to convene the group, arrange a space, suggest a time and provide support (i.e. nutrition, materials, technology). It is helpful to decide at the onset of a CoP how the convening will occur, the frequency and also who will take ownership of the task.

Curating – a knowledge management structure, tool, and platform ensures that data as well as ideas and solutions are captured in a manner that is practical, sustainable, organized and

shareable. In each CoP the group discussed curating artifacts and individual reflection in order to capture learning, the development of ideas and the sharing of resources.

Emerging – while the overarching elements and activities are essential (domain, community, practice focused), it is important that the group and its activities remain emergent. The CoP members agreed that a comfort level with emergence was supported by intentionally discussing the processes used to facilitate the CoP. In the CoP a range of collaborative activities were practiced to ensure the group was able to support the active involvement of participants. While this self organizing and fluid nature can feel uncertain and ambiguous, and even uncomfortable for some, the nature and purpose of a community of practice can only function as a responsive learning community if the issues and ideas emerge from the group with little constraint or control. The prospect of emergence requires patience and a certain tolerance for ambiguity.

Key Issues

Orienting new – when new members joined or requested to join the women in leadership CoP, there was a sense of uncertainty and confusion 'who belongs?' 'who decides?' which also offered an opportunity to reflect on our communal purpose and galvanizing practice as well as an opportunity to revisit the 'elements' of domain, community and practice ensuring at the same time that we were indeed learning, evolving and emerging.

Process – there were times when the group was unclear about how to proceed. What were the next steps? What are we really doing? This experience highlighted the need for curation and to abide by the action research iterative process of 'reflecting on effects as a basis for modification, further planning, subsequent action'.

Leadership – again because of the emergent nature of the group, leadership takes on a different form. As this group is about leadership, the concept of leadership of the group was a particularly relevant point of reflection. We are accustomed to a 'leader or chair' directing the agenda but in this CoP we found the role of leader was more as a convenor, facilitator, curator, and documenter.

Focus/purpose – at times we would lose our focus or purpose. It is helpful to enact Wenger's (2011) principles that consider the focus or purpose to centre more around the community, the domain, and the shared practice that bring us together.

Communications – the role of communications is central to a community of practice and it is felt that a communications plan of sorts is a valuable approach – identifying the channels and content to be shared or sustained, the process for accessing the information, the best platform through which to arrange meetings and document materials or information generated. In many ways, the process of the group needs to emerge in much the same way as the content or ideas related to practice that the group generates.

HIGHER EDUCATION TRENDS COMMUNITY OF PRACTICE

The higher education trends CoP mirrored Wenger's three developmental elements quite naturally, emerging from a social problem to be solved – that of a gap in our institutional process for supplying research on labour market, political, social and educational trends to inform program and research development. There was also a desire to resolve or find creative strategies for addressing this gap at the local level based on our own inherent knowledge, research, and experience as faculty while taking advantage of a collaborative space in which to share

knowledge and insight across disciplines. The domain emerged as 'higher education', the community as 'academic leaders/faculty' and the practice as 'relevant and responsive academic and research program development'. Likewise, the CoP followed Akkerman et al's (2008) dimensions of community activity:

1. Meaningful activity – striving to answer the question, how can we summon, share, inspire and build upon our existing knowledge about current trends in order to develop our academic and research programs in a relevant, responsive, meaningful and high quality manner?
2. Shared activity – meeting regularly to share challenges, problem solve, reflect upon our teaching and research practice and context and design strategies for influencing and building a more responsive university.
3. Coordinative activity - documenting our ideas with a website and online learning management system. Generating multiple research projects and new or revised program ideas to support and extend the work.

Key Principles to Support a Community of Practice

Convening – each group needs someone to convene the group, arrange a space, suggest a time and provide support (i.e. nutrition, materials, technology). In this case, the faculty also lack a pub or lounge in which to regularly convene and socialize so a pub like atmosphere was created to bridge both needs and encourage attendance. The social 'lounge' atmosphere had the added benefit of adding a level of informality and relationship building to the discussion, further enhancing the collaborative and interdisciplinary 'spirit' of the CoP.

Curating – a knowledge management structure, tool, and platform ensures that data as well as ideas and solutions are captured in a manner that is practical, sustainable, organized and shareable. In this case, the platform is an outlook meeting request or invitation in which the list or trends and related links can be captured, built upon, and shared electronically for ease of access on the day of the CoP.

Emergence – for this group, emergence is natural to the practice central to the discussion and the community. The set-up of the room seems to encourage and or inhibit the emergent quality of the discussion. When we sit in a circle around the refreshments, the group tends to focus on a topic and organically riff on the topic or spin off on natural tangents building on the conversation yet bringing in unique perspectives and applications.

Key Issues

Ensuring the invitee list is up to date – when new faculty members join the university, there must be a way to ensure they are added to the distribution list.

Sustaining the interest and commitment – to ensure that this group does not evolve into a pub night or venting session about the institution, it is crucial to raise the topic of 'trends' at the beginning to kick off the meeting in a focused manner. People tend to jump on the topic and the conversation continues from there. If we are allowed to socialize, the group will easily shift into that mode but feels less satisfying afterward as it does not fill the need to learn, discuss, and reflect on the trends and events in our society that we wish to acknowledge and incorporate as academics.

Communications – for this CoP, communications was fairly simple and members of the CoP offered to share their reflections, lists of trends or key points from each session, to the

convenor for tracking and sharing.

Membership – it was difficult to define who should be at this CoP – while faculty are concerned about current trends in society, the vice presidents and president also have a significant interest and stake. After consideration and discussion the group decided that this CoP provides a bridging opportunity between senior leaders and academics. This bridge provided an opportunity to acknowledge and discuss the distinct roles the CoP members play in responding to faculty trends and change in higher education.

RECOMMENDATIONS

Based on our experiences, observations, and theoretical analysis we have several recommendations for those wishing to convene a CoP in their institution:

1. Explore the institutional values and ways of doing that might provide the focus or content of such a community of practice in the institution.
2. Develop a process to shape the CoP developmental elements of domain, community, and practice (Wenger, 1998).
3. Develop a framework to guide the convening, for example, schedule and communication platform; consider using a knowledge management system.
4. Design a communications plan to initiate, foster and support a community of practice in the institution.

While organizational support for CoP is not formalized, our potential to enact change through horizontal participation could be transformative (Wenger, 2010; White & Weathersby, 2005). In designing a CoP, it is important to review the theory of communities of practice and social learning as a way to navigate the essential elements of communities of practice. CoP are truly an expression of social learning theory – "communities of practice develop around the things that matter" (Akkerman et al., 2008, p.384). The key principles of *convening*, *curating* and *emerging* were found to support the early stage development of two interdisciplinary communities of practice in a higher education setting. These principles formed the impetus to link knowledge and practice around issues that matter to the people in the room thus spurring on new possibilities, practice and understanding.

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