

Work-based researchers and Communities of Practice: Conceptual and gestational dilemmas

Andrew Sense
University of Wollongong

Drawing on a presumption that a Community of Practice (COP) can add significant value to the situated learning development of adults in any context, this paper exposes and analyses the challenges faced in facilitating the development of a COP involving part-time work-based researchers. Using an empirical case example involving a collaborative research network of five industry organisations and a university, the specific purpose (and outcomes) of this paper are to (a) conceptualise a researcher COP involving part-time work-based PhD and Masters of Philosophy candidates (b) examine the pragmatic dilemmas these part-time researchers face in seeking to develop such a supportive social learning construct in respect to their research activities (c) tentatively indicate some challenges that higher education institutions and industry organisations confront in facilitating and nurturing such learning structures which span industry and academia contexts. Through its analysis, this paper draws attention towards the complex issues involved in developing a functioning rather than the often idealised COP in the part-time work-based researcher space.

Keywords: *Work-based researchers; Communities of Practice; Social learning.*

Introduction

This paper seeks to make a contribution to scholarly discussions concerning work-based research degree students and how their social learning may be facilitated through the development of a Community of practice (COP) (Lave and Wenger, 1991; Wenger, 1998; Wenger et al., 2002). In delving into this topic this paper specifically intends to (a) conceptualise a Researcher COP involving part-time work-based PhD and Masters of Philosophy candidates (b) explore the pragmatic dilemmas these researchers face in seeking to develop such a supportive social learning construct in respect to their research activities and (c) indicate some challenges that higher education institutions and organisations face in assisting or facilitating such learning structures which span industry and academia contexts.

The construct of a COP can be defined as “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., 2002:4-5). It normally involves three interacting elements consisting of a domain of knowledge, a community of people and some sort of shared practice (Wenger et al., 2002). In its analysis, the paper utilises an innovative revelatory research network case. This case involved five local government authorities (councils) and a university in Australia participating in a research network wherein the councils’ full-time employees are the part-time Doctoral and Masters of Philosophy work-based research degree students. In this paper, the pseudonym for this network is ‘the syndicate’.

Work-based research degrees represent a third generation of research degree (Costley and Lester, 2012) wherein candidates seek to extend their professional development, their capabilities and critical thinking skills to be able to address complex work relevant issues (Costley and Lester, 2012; Doncaster and Lester, 2002; Lester, 2004; Wellington, 2012). The central distinguishing features of these research degrees include: a candidate informed, negotiated and driven program of research focused on a context based issue; outcomes that positively affect a candidate’s capabilities and professional career development and which stimulate action and change in the workplace – while making a significant original and valued knowledge contribution to practice (Costley and Lester, 2012).

Contrastingly, traditional doctoral research programs were primarily devised and driven by the academic knowledge and skills procreation needs of tertiary institutions (Costley, 2013; Fenge, 2010; Walsh, 2011) – which is more focused on the production of ‘original’ knowledge (Wellington, 2012) and is less concerned with outputs having relevance to specific workplace contexts or the skills development of industry practitioners.

Work-based research degrees are also distinct from profession-specific doctorates, which involve a significant coursework component and a thesis component based in the candidate’s workplace (Maxwell, 2003) and which makes a significant and original contribution to knowledge in the context of a specific professional field. Notably, on the surface there are some strong parallels between work-based research degrees and profession-specific doctorates. These include research being undertaken in workplace settings and generating context relevant knowledge, and the research being a contributing element in the development of more effective practitioners (Lester, 2004) or ‘scholar professionals’ (Stewart and Chen, 2009). However, there are also key differences concerning the professional motivations and intentions and training of the candidates. These involve the quantum of formal coursework undertaken to inform and train the candidates (relatively high in profession-specific doctorates), a focus on improving a workplace and organisational career potential (in work-based research degrees) versus improving individual career potential in a discipline field, and the trajectory of the knowledge contributions expected in professional doctorates (Costly and Lester, 2012).

Whilst necessary in this paper to conceptually differentiate a work-based research degree compared to other research degrees, in practice the differences between them is often blurred (Costley, 2013) and consequently there remains some ambiguity in assuredly delineating boundaries between the types (Sense, 2015). Nonetheless, this paper has a focus on those research degree students who are in full-time employment and dispersed work situations and undertake their degrees in part-time mode en-route to improve their organisational career potential – and are usually busy adults in middle to senior levels in organisations. Comparatively, these candidates need to deal with their geographic isolation and challenges in balancing and meeting the

expectations of their academic and industry stakeholders. Consequently too, their support needs are likely to be different to a normal full-time candidate.

Given these significant challenges, and from a learning capability development perspective, these candidates may benefit from the social learning that occurs in a COP. Therein, the development over time of a COP involving researchers from across a number of organisations, may aid their collective and individual learning and learning capability development through reflection on research processes and conceptualisation matters, guidance and sharing of ideas between them, and stimulating interactions which prompt or inform new learning. Indeed, higher education literature (see for example Ng and Pemberton (2013), Klenowski et al. (2011), Shacham and Od-Cohen (2009), Gardner (2007), Leshem (2007), Wisker et al. (2007), Weidman et al. (2001)) well recognises the benefits of COPs for empowering researcher learning and higher-order thinking and for researcher moral support. However, it has not been previously examined as to how part-time work-based researcher candidates might best pursue such a development between them and indeed, what may impede it, nor how the employer organisations and participating tertiary institutions may purposefully support such development.

Added to that situation is a difficulty in conceiving this group of researchers in COP terms. That is, given the differentials between full-time co-located and interacting researchers in a relatively supportive university research environment which would normally aid the potential development of a COP, how then does one conceptualise a COP for a grouping of people who are spatially and organisationally dispersed and interacting only on a part-time and infrequent basis (if at all) on an issue of research? Thus, this conceptualisation is important for these work-based researchers to be able to relate to their current social learning situation or opportunity and to then identify and take appropriate learning actions that reflect their contexts and more systematically support the development of a suitable form of COP.

It is important to also emphasise that establishing a COP in this study was an 'active' activity within the operation of the 'syndicate' – not merely a conceptual debate about its possible utility in the context.

Hence, any potential conjecture that perhaps the COP construct was limiting and not the ‘best conceptual frame’ to apply to this social learning situation actually misses the intention of the study. This was a real example case of a group and its attendant temporary organisation intentionally seeking to establish a ‘COP vessel’ to help stimulate and facilitate their social learning. Therein, the idea of a COP was considered to structurally support attempts to realise social learning and consequently, had ‘traction’ with the participants in this case i.e. the notion of building a ‘community’ focused on their research capabilities development was one which the participants could readily value and tentatively support. In that way, the COP construct served as a rallying node to focus participant energy on systematically (and not accidentally or not at all) developing their social learning activities – irrespective of whether the research ‘data’ collected ultimately resisted or supported its development. Thus the ‘COP frame’ was not superimposed over the case to analyse it, it instead was an integral part of the case. This paper reports on the issues/dilemmas associated with that actual activity undertaken in a rather difficult set of contextual circumstances. Consequently, it provides a rare insight into a temporary organisational form (the syndicate) trying to intentionally and systematically support and promote social learning through the formation of a COP – accepting (and not at all detracting from) any notion that the practice precedes the formation of a community (Gherardi, 2009; Wenger, 2000). To generate a ‘practice’ however, one first needs to provide / create structural opportunities / circumstances that may aid the achievement of that outcome. Ultimately, this paper sheds a light on both the conceptualisation and practical gap in knowledge concerning the developmental issues of a COP in these contexts.

This paper will now present a discussion on the conceptual framework of Situated Learning Theory (SLT), which underpins the focus of this paper. The following section will then outline the empirical case study and thereafter, a commentary will be provided on the methodological approach pursued. Following that, a discussion on the outcomes from this case analysis will be presented. Finally, some concluding remarks, limitations of this work and future research opportunities will be articulated.

Conceptual framework

In addition to the COP definition previously provided, a brief explanation of situated learning theory (SLT) and its construct of a COP are appropriate. Embedded in the constructivist paradigm, wherein learning is considered an integral part of generative social practice within a context (Lave and Wenger, 1991; Richter, 1998), and in contrast to cognitive perspectives on learning, the focus of situated learning theory is concerned with learning as social participation within communities of practice (Park, 1999; Senge and Scharmer, 2001; Wenger, 1998). Situated learning actually evolves (explicitly or implicitly) through the learning processes of observation, dialogue, storytelling and conversations between people as they participate and interact within a practice, and can be considered in more pragmatic terms as learning-on-the-job. Therein, participants develop their technical and social competencies and negotiate the construction of their identities and common meanings around situations and objects within their developing practices (Brown and Duguid, 1991; Cook and Yanow, 1993; Dixon, 1999; Gherardi, 1999; Gherardi and Nicolini 2000; Lave and Wenger, 1991; Wenger 1998; Wenger et al., 2002).

A significant construct of SLT is a COP. A COP exhibits the interacting elements of a domain of knowledge and a community of people participating in a shared practice. They emerge and develop as people formally and informally interact over extended time periods on a mutual topic/s of interest and within those interactions, learning and the exchange and generation of knowledge occurs. In this frame, knowledge is thus conceived as an emergent, situated, embedded and negotiated activity (Gherardi, 2009). Moreover, it would be incorrect to simply assume that a COP only consists of people interacting harmoniously and collaboratively together - perhaps embracing the sentimentalized notion of 'community' too strongly. Rather, a COP can also be a hotbed of political activity and contested spaces – and these power relations (amongst other phenomena) are an aspect of the practice within COPs, which could benefit from more evaluation (Fox, 2000).

COPs can exist in any context and we may belong to any number of them for example at work, in hobbies or in clubs. COPs aid the exposure of spatially distributed tacit and explicit knowledge held by individuals and

provides a canvas for the development of individual identities within the practice space. Despite these expressed features, COPs cannot be mandated into existence by an ‘authority’ and expectantly, there is no set of definitive guidelines to apply to this COP development issue – it remains a context responsive and emergent entity which cannot be fully determined at the outset. This emergence view also being entirely consistent with Gherardi’s (2006) perspective that practice organises a community and thus a COP is the outcome of the discursive actions of participants as they interact in and with their environment i.e. the community does not exist before or in the absence of the practice (Gherardi, 2006). Consequently, to underline this formative hierarchy Gherardi (2006) places an emphasis on the ‘texture of practices’ (Gherardi, 2009) rather than give priority to the term ‘community’. Wenger (2000) also offers a similar view that COPs emerge from the convergent interplay of competence and experience via mutual engagement. As a practice emerges, it becomes the ‘social container’ of the competencies that constitute a social learning system (Wenger, 2000).

Despite a COP’s emergent character and lack of organisational legitimacy (Wenger and Snyder, 2000) it is necessary for its formation and persistence that appropriate stimuli and conditions and resources are established to support such development (Wenger, 1998, Wenger and Snyder, 2000) and thereby stimulate participant social learning while they are on-the-job and to create a supportive learning community (Klenowski et al., 2011). In the context of part-time work-based researchers, conceptualising and developing a COP involving these researchers presents particular challenges –which are discussed later in this paper.

SLT and its construct of COP have also provided a foundation for other studies concerned with the social construction of knowledge and the application of such learning within organisational settings. In the discipline of Practice-Based-Studies (PBS) for example, based on their case study of remote consultation in cardiology Bruni et al. (2007) introduce a concept of “systems of fragmented knowledge” – which represents the spatiality of knowledge. This concept places the focus onto the network of interdependent and interacting practice elements (e.g. equipment, people, forms, routines and techniques) in which

knowledge is embedded and which is necessary for the performance of the practice. This conceptualisation tracks deeper into the practice interactions between people and practice technologies to mobilise knowing-in-practice. As such, it is still heavily aligned with and draws on the concept of SLT (and its attendant construct of COP) and the interacting social discourse between human elements but goes further to examine the part that non-human artifacts play in mobilising learning, the generation of knowledge and action within a practice. Similarly, Gherardi (2009; 2006) also recognises that knowledge within a practice is not only an activity situated in social practices between humans, but also actively distributed amongst non-human artifacts. She considers that in the historical development of PBS, a theoretical proposal that knowledge should be defined as an activity, led to it being considered as an activity situated in time and space and therefore as taking place in work practices (Gherardi, 2009). Therein, the work practices constitute the locus of learning, working and innovating. Such observations are aligned to remarks by earlier SLT researchers, namely Brown and Duguid (1991), who similarly indicate that learning, working and innovating were interrelated and complementary and were neither conflicting or problematic forces – thus knowledge is conjoined to practice and learning is the connection between work and innovation (Sense, 2007). These recent example contributions to PBS literature which further examine the dynamics within a practice, do not at all detract from the earlier conceptual work on SLT and COP, but demonstrably reinforce the significance of SLT and the notion of a collective practice as the vessel for learning and organising.

The empirical case study

The case study (the syndicate) involves a network of five local government authorities and a tertiary institution collaborating on developing the staff of the local government organisations through them becoming worked-based researchers. These local authorities are involved in a complex mix of local social, economic and political challenges and also deal with higher-level government policy development and impositions. These authorities formally verified their participation in the syndicate by signing a three year contract with the university which articulates the obligations on all parties and wherein, each year of the program each authority can nominate up to two of their staff to become research candidates. This syndicate is relevant to this

paper's focus because it serves as a revelatory case (Yin, 1994) of ways to systematically support and develop work-based researchers through a network approach and provides insights into issues impeding or supporting the development of a supportive COP for the researchers in such a context.

The structure of the syndicate involves three principal elements, the first being the network of councils and the centrality of their staff being the researchers. Secondly, those candidates pursue research projects on important local or sector issues and conduct their investigations within their own and/or other syndicate organisations workplaces (a specified operational principal and contractually agreed to). Thirdly, the university is a facilitative hub for informing and guiding the research projects and students and for knowledge exchange between the participants and councils. The types of projects pursued in this syndicate are multidisciplinary (a final total consisting of 14 Masters of Philosophy and 3 Doctoral projects). The predominance of a Masters of Philosophy reflects the prior qualifications and contexts of the target population. The researchers are all senior to middle managers, with ages ranging from 24 to 56 and there is a predominance of female researchers (83%) in the group.

This syndicate required a critical mass of industry partners to fully fund its activities (via annual cash contributions) and to support their staff involvement (in-kind support such as time for research, access to people and information, participation in syndicate activities). In this case that critical mass was five organisations. As Sanderson et al. (2001) note, such network collaborations between local government authorities and tertiary institutions benefits the quality of research undertaken, its likely adoption in the sector and the learning of the organisations involved. Therein, local government authorities are introduced to new ideas, new practices and value sets, and improve their abilities to learn and adapt (Kilpatrick et al., 2006). Furthermore, the relatively close geographical location of each council in the network to the university (within a 120km radius of the university) made physical access for researchers to research training, seminars and supervisors achievable on a regular basis. As indicated by the researchers, this proximity has helped create a tangible sense of deep support for each candidate.

Another operational feature of the syndicate was how the candidates became involved with their research projects. After a call for expressions of interest from their employer council, each project is initially proposed and outlined by the candidate, and then reviewed and endorsed or otherwise by their council executive. Consequently, the councils have the freedom to nominate their staff and projects in the first instance without any constraint on the discipline areas or level of study involved. Once nominated, those candidates are then subject to meeting the university entry qualifications for research degrees and the identification of suitable academic supervision for their projects. The syndicate director at the university is particularly involved in these activities. Given these students are additional to the normal intake of full-time research students, an important operational consideration is that research supervision capabilities and capacities at the university involved are carefully assessed and managed.

Similar to Doncaster and Lester's (2002) investigation of a Doctor of Professional Studies program at Middlesex University UK, a feature of this syndicate is coursework on research methods and proposal development. It provides an essential theoretical grounding and pragmatic guidance for these industry-based researchers (who have not previously undertaken formal research) in the ways of formulating and conducting their projects. This coursework is partially customised to this syndicate audience and normally runs on a fortnightly weekend attendance schedule over four months. Research skills training like this has also been acknowledged by Sanderson et al. (2001) as key to building internal research capacities in local government. Additionally, students pursuing research degrees in Australia can complete their degrees without tutoring costs – in contrast to normal postgraduate coursework programs. This financial saving, coupled to a program that does not require these time poor professionals to attend 'regular class lectures', is a further attractant.

The syndicate also includes opportunities for networking, knowledge exchange and relationship building (centred on research) wherein participants cross boundaries between different organisations and fields of expertise (Tynjälä, 2008). Sanderson et al. (2001) and Tynjälä (2008) argue that a well-developed infrastructure that captures, manages and disseminates information from research is also important to bring about

learning in a network. For example, the syndicate involves interactive forums where the research students' projects and their activities are presented to representatives of all the participating councils and university academics. Attendance at these formal and other less formal gatherings is often challenging from a time perspective for these researchers distributed across five organisations. The syndicate also takes a collaborative approach to decision-making about its activities with its partner organisations. This feature is intended to facilitate the development of a more expansive, ongoing relationship between the participating organisations – that which involves further research partnerships and ongoing industry-academia involvement in improving council operations. For a more detailed discussion of the case study context and operational structure, please refer to Sense (2012).

Methodology

This paper utilises a case study methodology. Therein, data collection methods of semi-structured primary stakeholder interviews, a focus group activity and limited observations of the work-based researchers were executed. Here, the primary stakeholders were the work-based researchers and their academic supervisors. Six months after the program commenced nine of the initial twelve researchers and their academic supervisors were interviewed. A research assistant who was not in any managerial position within the syndicate performed these interviews and university ethics protocols were followed with respect to how those discussions were actioned. At the time, given their availability and relatively high number and mix of interviewees compared to the total participants involved i.e. interviewing 75% of the current candidates and 90% of all academic supervisors involved, was considered to provide a sufficiently large volume of rich data to inform the study.

The candidate interviews sought responses to questions concerning their learning experiences in the syndicate thus far and on what they were doing about developing their learning connections and relationships and sharing knowledge between each other. The academic supervisor interviews sought their responses to questions on how the syndicate supported work-based researcher learning development, their role in those learning processes and what knowledge generation and

development and sharing they observed between participants. The candidates' learning behaviours were also observed in research methods coursework sessions, less formal candidate get-togethers, and in seminar sessions. These observations served as secondary data sources and aided conclusions arrived at from interviews. The focus group activity involved nine candidates from two intakes and sought explicit reflections and suggestions on building a research COP between them. Data analysis involved an interrogation of the data streams from the interviews and focus group discussion to identify common themes. From that thematic analysis, key themes indicating the conceptual difficulties involved and gestational dilemmas experienced by these work-based researchers in respect to developing a COP and those able to assist such a development i.e. the supervisors, were derived. These themes are detailed in the following section.

Outcomes and discussion

Consistent with the declared purposes of this paper, the outcomes address the conceptualisation of a part-time work-based researcher COP (WBR-COP) and the pragmatic difficulties faced by participants and supporting organisations in supporting such a development.

(a) Conceptualising a WBR-COP

Why is it beneficial to conceptualise a COP in this particular context? As mentioned in the introduction, these spatially dispersed work-based participants pursuing their research in part-time mode represent a particularly difficult group to expect to successfully stimulate and promote their social learning activity. Yet, as earlier indicated, the concept of a COP has high relevance/value for any research degree students' learning and moral support while in the process of completing their studies. A COP framework endows a holistic and structural perspective towards addressing this social learning conundrum. Thus, a conceptualisation of a WBR-COP may help these students to better understand and systematically and more wholly explore their social learning challenge/opportunity in their context and help frame their coordinated actions to achieve it - that which otherwise may remain a fragmented activity or be left purely to chance or inaction.

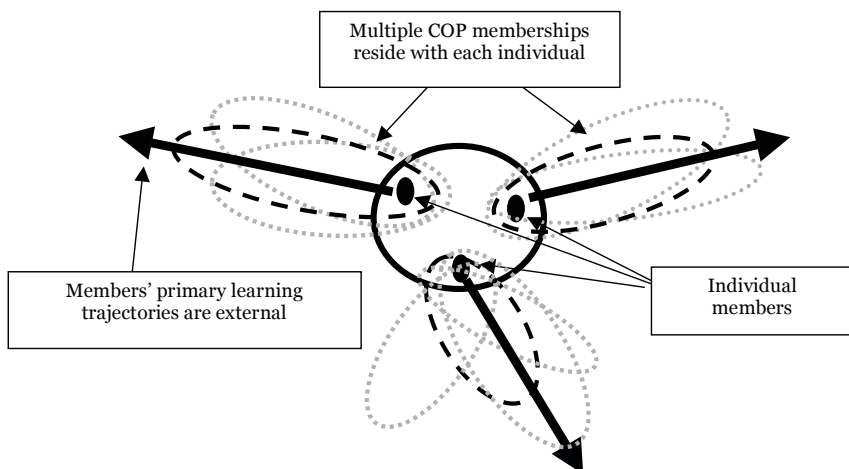
In the case, the term COP was not explicitly highlighted in responses from interviewees. The participant interviews sought commentary about developing the connections, relationships and sharing knowledge between the parties so far, and any potential future actions to build their collective knowledge and learning practices. Their responses related to the general notions about the value of sharing information and establishing contacts in other councils that would benefit their learning and research – rather than a forthright focus on developing a functioning COP. Also, interviewees were not particularly conversant with a detailed appreciation of the elements of a COP although all were comfortably familiar with the term and its intentions concerning building a ‘practice’ and a ‘community’. In these interviews, there was also a profound acknowledgement of the value of the coursework learning sessions in establishing initial relationships between the parties and for ‘forcing’ them to get involved in reading the literature and considering and knowledgeably developing their research plans. As one candidate commented “Once the coursework is over....we are going to miss that opportunity to get together as a group to talk about things... because we are not going to have the same impetus” and another, “the coursework will end, it’s like the safety security blanket being ripped away”. This recognition was coupled to expressed desires to want to continue to meet up face-to-face and to exchange information via electronic media on an ongoing basis, e.g. as one candidate offered, “to keep on getting together and keep supporting each other”.and another, “it takes a few times together to get that cohesion and we’ve got it now so it would be a shame to lose it”. It appeared that the desire for future ongoing ‘learning connections’ and a ‘knowledge domain’ were evident at the time of interviews so as to build on the initial contacts made and to continue in some form to share knowledge and support each other to learn in their research process. These exhortations however, lacked supporting commitments to action by individuals.

Six months after the interviews were conducted, the focus group activity involving two student intakes, also revealed very little in way of committable ideas and a propensity to ‘spend the time’ on developing a COP. The candidates ran the session, and could take the conversation anywhere they liked provided it focused on a core question of “What can we do in the future in respect to building a ‘research community of practice’ between each of you and between your councils?”. Given this

focal point, this outcome is particularly interesting, given all candidates were observed to acknowledge and reinforce the perceived benefits of more systematically ‘getting together’ to support each other and to learn, but seemed reluctant to fully commit to actually doing things that required their face-to-face time, other than to ‘digitally’ support knowledge sharing. The digital medium was enthusiastically supported by all to assist the sharing of knowledge between them e.g. a webpage share file, digital stories on them posted on the webpage, in addition to email contacts being readily shared. These ultimately were actioned by the syndicate administration team but to limited usage by candidates and between candidates.

Overall in the case, the functioning of a COP between them appeared difficult for these participants to grasp and action – particularly given all their other time commitments and relative spatial distribution. How then can one conceptualise a WBR-COP and better inform participants’ actions in this regard? Fortuitously in 2007, a researcher articulated a conceptualisation of a project team from a situated learning perspective – that which involved conceiving project teams as an amalgam of many different communities of practice - which simulated an embryonic form of a new COP (See Sense, 2007). Figure 1 depicts this conceptualisation.

Figure 1. *A typical dedicated project team*



(Adapted from Sense (2007))

There are strong similarities between this conceptualisation of a project team and a WBR-COP condition. In comparative reference to Sense's work where he initially argued project teams cannot be considered a COP, the WBR-COP participants also: have a defined start and finish cycle and do not intend to continue on indefinitely nor do they have a collective past or future; have a specific focus i.e. progress their personal learning in respect to their specific research project – and are not concerned with a longer term practice development between members; have participant identities strongly forged externally to the group and these generally reflect other communities world views; have participants who do not share a common negotiated perspective on the world and get-togethers between them serve as knowledge exchange venues for multiple communities of practice. Therein, participants can access external sources of distributed knowledge in other communities of practice or, as Tynjälä (2008) articulates, participants cross boundaries between different organisations and fields of expertise. However, they do not develop a mutually negotiated and shared practice involving their own artefacts. In effect, like with project teams, a WBR-COP situation is not structurally able to be considered a COP – as generally defined.

However, Sense (2007) also argued that in project teams, they: provide a focal point on a topic that people have an interest in and thereby act as a causal prompt for COPs to emerge and grow; participants are involved in negotiating boundary objects and brokering to determine the imported artefacts relevant to the group's activities; provide the opportunities for individuals and the team to learn and develop their capabilities and their identities and their mobile practice. Similarly, and on the proviso they regularly 'gather together' in some way in a WBR-COP grouping: a focal point is necessarily evident (i.e. research knowledge and skills and mutual support); participants can negotiate the artefacts they choose to use to function when together; it may provide multiple potential opportunities for participants to learn from each other and develop their research capabilities and identities while also developing their research practices which may translate into their other work activities. Given these structural similarities to dedicated project team structures, it appears reasonable to suggest that one can conceive a WBR grouping also as an embryonic form of a new COP. The emphasis here being on the term 'embryonic' particularly when accounting for the added complications of their temporal part-time

connections and spatial separation to each other further impeding the opportunities for social learning development. As exemplified in Figure 1, this conceptualisation signals the primary learning trajectory for individuals as external to the immediate WBR group and the core challenge is to amend that to an inbound learning trajectory wherein the various COPs of WBR participants would abut, since this is where major learning and knowledge generation is stimulated and where new practices can emerge. Consequently, this embryonic form of a new COP conceptualisation pointedly draws participant attention to the primacy of their commitment, their participation, and their efforts necessary to realise social learning amongst their group.

(b) Pragmatic dilemmas faced by participants in developing a WBR-COP

Developing and operating a WBR-COP also poses core pragmatic dilemmas for the participants. Some of these have previously been alluded to and based on the case examined, include:

(i) Time prioritisation – workplace context and work task hegemony over research task activities and activating a WBR-COP

In the first instance, this dilemma involves workplace context issues and changes attracting researcher attention over and above their research activities and cultivating a COP. For example, in the case examined these included concerns of council amalgamations leading to potential job losses particularly at middle management level, changing organisational structures meaning more role responsibilities being placed on some researchers compared to when they commenced their research, and the shifting priorities of their day to day responsibilities which directed their attention onto more shorter-term urgent work task matters. Concomitantly, candidates were time poor for research and research network activities given their many work tasks (and other personal commitments) taking centre stage. This dilemma/challenge is not unique to this case as there are other studies which also identify such time prioritisation and balance challenges e.g. Klenowski et al.'s (2011) study on building support for learning in a Doctor of Education programme. As one researcher noted in an interview, "...being a senior manager makes it really really hard..... This gets squeezed in around everything else I might do". These participants actually claimed en-masse that they had little time if any to participate or plan to regularly

network with their colleagues. As another participant in the focus group activity noted (and was subsequently supported by all present) “People are really time poor in local government, it is usually thin numbers of practitioners doing everything” and another, “...we are all time poor, even it’s hard for us to meet now”. Consequently, any considerations regarding the actions required for developing a COP between the participants appeared lowest on the pecking order (if at all).

From an adult learning perspective as it relates to their research processes, this work task hegemony was very negative – and constantly so. One can certainly appreciate the significance of these candidates needing to attend to work matters given that is their paying job and figures prominently in their sense of identity and comfort in span of control and competence. Conversely, research and research processes challenge their sense of control and competence, and places them in situations where they need guidance and support. This impact cannot be overstated as seen in the case examined. To highlight this differential, when one candidate was asked what was it like becoming a researcher compared to her normal work, her response was simply “daunting!” The research coursework sessions and showcase forums undertaken in the case were some key activities designed to help build these researchers’ knowledge and competence in understanding and discussing their research. Both of these activities were considered by the candidates and supervisors to be seminal in helping provide the requisite research skills and in building researcher confidence about their projects.

In a cognisant response to this challenge, in the focus group session, the participants, in recognition of their ‘time poor’ condition (and lack of ready accessibility to each other) unanimously endorsed an idea of building a form of an electronic research information sharing network between them – wherein they could share details of their projects and their staged outcomes across the councils and beyond the immediate researcher group. Coupled to that, they also supported the notion of ‘digital stories’ from each of the researchers being posted on that site and the councils and their people could access those for a ‘taster’ of the projects. The intention here of course was to be able to access and share potentially useful information without any regular commitment to ‘get together’. Thus these actions served as a partial step in helping remain ‘connected’ in some way after the coursework finished, and as one

participant previously noted in an interview that staying connected to each other “may help maintain a conduit for access to others councils”. The administration team for the syndicate did institute such a network through their university webpage and also recorded and posted digital stories from some candidates. After some initial interest, it appears that these resources have not been utilised as initially endorsed. That issue will be the subject of further enquiry.

Also, as indicated in the focus group session, a regular monthly meeting was considered helpful and was endorsed, but no participant could offer a firm commitment to regularly attend – further highlighting the priority work matters had over a WBR-COP development. It was also suggested by the group that each council could take a turn at hosting the researchers from the syndicate – either a formal presentation arrangement or simply other ‘get-togethers’ to catch up and compare progress. However, during their research process, none could commit to being able to present or attend such events – pending their work priorities. As one participant noted “Even if we take turns in hosting it, you need to take the time out, you just can’t expect the individual to. I think that is a really good idea, I guess whatever it is we do, there has got to be some structure around it so that there is some plan dates, some plan times.” In all, the following comment from one candidate in an interview sums up the candidates’ conundrum “Progress wise, the biggest part is just struggling on workload with the research, it’s like my job versus research”.

Based on the case and all the supportive infrastructure and resources provided to ‘structure’ some gatherings and the strong explicit commitments of the participating organisations and the candidates, it appears that this dilemma is a particularly difficult one to successfully address. This would be an even greater challenge for work-based candidates undertaking such studies on a private and organisationally unsupported basis. Thus, in this hegemonic condition developing a WBR-COP does not necessarily become emboldened as an essential condition of candidate learning and development and in being so positioned, those multiple social learning opportunities are left unexploited.

(ii) Spatial separation between participants

In the case examined this dilemma simply involved the physical distances between participants in different organisations in different locales making interactions and sharing knowledge (both formally and informally) more difficult to achieve or occur spontaneously. The focus of these possible interactions was to be between the candidates in the program rather than between the candidates and other researchers at the university. As one candidate noted “it isn’t easy for us to travel from council to get to these meetings and these sorts of things”. Moreover, as indicated earlier, these candidates very explicitly acknowledged the value they placed on the social interaction and informal learning taking place amongst the group while in their coursework sessions and as such lamented when the coursework was to finish. This tended to reflect a general concern that they as individuals would find it hard to organise and action regular get-togethers when removed from the ‘necessary’ coursework commitments. The physical distances between them coupled to their other work and personal commitments suggested they had little direct or immediate incentives to seek out regular gatherings with the group. To that end, some candidates suggested that if someone were to organise a regular event with an agenda where people could come along if they were able to, might be useful e.g. “maybe if we get it together monthly or bimonthly and we have an agenda of the things we are going to talk about...”, and, “I think the monthly thing would be helpful just to help keep me on track.....”. However, the Showcase forums partially served as a venue to aid some ‘gatherings of the clan’ to occur but over time, attendance at those events has dwindled. The primary reasons expressed in relation to this declining attendance being their work pressures and travel time issues to meet-up. It appears that these general ‘intentions’ to want to continue to connect with and ‘share their research practices’ were stifled through their spatial separation and other pressures.

(iii) Pluralistic interests

This dilemma involves the candidates having separate and differently focused projects meaning their reasons for seeking to ‘come together’ are primarily on the processes and practices of research and for mutual support (apart from general interest) rather than a singular overriding

mutual 'output' topic of interest. From a learning perspective, such differences might be considered beneficial to learning activities as people explore the different focal points, reflect on and compare to their own activities and share such expositions. But from a COP development perspective these multiple 'output' foci may not provide sufficient and more specific stimulus for people to actively seek out their colleagues to interact regularly and at multiple levels. As one candidate commented on this matter "After we've done this group of coursework, I'm struggling to see how much contact I'll have with the restespecially because mine [project] is so far removed from everyone else's". That being said, the syndicate processes provided opportunities for interaction (both formal and informal) from time to time, and this did occasionally as one candidate commented "... encourage tapping into other consortium members' fields of interest and their examples and learning from that....." But, occasions such as these were relatively limited compared to the candidates furnishing such opportunities through more regular interactions.

Additionally as stated earlier, the motives of some candidates in doing any 'connecting' to other members was primarily concerning, as one candidate indicated "The biggest thing is about the information sharing, of getting contacts within other councils to be able to access good practical data". While understandably a candidate may be concerned with 'getting the research done effectively and efficiently' in accordance with their usual workplace practices, only having that focus misses the 'other opportunity' for learning that occurs through a researcher networking and interacting on a more general level. This dilemma particularly points to an issue of candidate education about the value of social learning to individuals at a more general and discipline unbiased level and to emphasise the duality of their researcher roles i.e. as both learner and task achiever.

In sum, in the empirical case, there was a keenness of spirit about the notion of a WBR-COP but participants faced some significant dilemmas in pursuing it. Therein, they lacked time commitment to systematically undertake such an endeavour due to their workplace issues taking priority. Adding further complexity to this condition was the spatial separation of participants across different locals making 'participating together' in any form very difficult. The pluralistic research focus of

individuals within the group was also not conducive to stimulating their actions to regularly meet and share knowledge beyond the mutual interest of research processes and the limited structured activities provided by the syndicate in that regard.

(c) Challenges for higher education institutions and organisations in sponsoring a WBR-COP development

Based on the experiences in the case examined, some tentative general arguments can be made concerning the challenges for organisations involved in generating and sponsoring a WBR-COP. For higher education institutions, the primary challenges include the provision of opportunities and resources to help generate conditions supporting a WBR-COP and thereby expose these candidates to distributed knowledge (conceptual, methodological and practical knowledge). These may include for example the provision of flexible and more mentor-oriented supervisors willing to be accommodative of the shifting workplace priorities of these candidates as they progress their projects, physical resources such as rooms and IT equipment to aid their ‘gathering together’ or the provision of an officer of the university to coordinate structured regular activities between these third generation research degree candidates throughout their candidatures – which may also incorporate exposure to other full time research degree candidates.

For organisations whose staff are the work-based researchers, they should demonstrate explicit support for their candidates’ research and actions in pursuing their learning in their projects and, although often difficult, provide them the time and encouragement to attend gatherings and events involving other industry-based researchers. This, coupled with the candidates themselves being motivated to ‘come together’ implies a genuine recognition of the perceived value of such social learning activities – that which may not be readily acknowledged at the outset without some form of intervention to educate all the parties to that effect.

Conclusion

The functioning of a part-time work-based researcher and the challenges they face in pursuing their research and associated learning is relatively unexplored. Drawing on a case example this paper has examined the

difficulties of conceptualising a part-time work-based researcher COP (involving a number of researchers in different organisations), and some core pragmatic dilemmas candidates, tertiary institutions and supporting organisations face in attempting to forge or facilitate these social learning practices. These researchers' social connections to each other are difficult to initiate and maintain and they necessarily juggle multiple commitments across different contexts whereby research and learning activities need to 'fit' within those complex and often competing conditions. This in turn has impacts on participants' abilities to want to or be able to seek out researcher colleagues to interact, converse, observe each other and share and create knowledge on research topics and processes on any regular formal and/or informal basis. Given these elements are essential for a COP to progressively develop it is not surprising that the conception and emergence of a WBR-COP appears to be a particularly difficult task – as indeed has been highlighted by the case presented.

Of course a COP of any kind cannot be mandated into existence, but they can be intellectually and practically supported and encouraged to emerge and prosper (Sense, 2007). Also as illustrated via the case, the practical implications for organisations and any academic institution involved in fostering such activities are reasonably significant and warrant further investigation and attention particularly if work-based people are to be considered an important source of candidates for research degrees. For researchers, the identification of issues affecting the social learning of candidates in this study pose new questions and present new avenues of enquiry into how best to support the learning activities of these third generation research degree candidates.

Thus, in recognition of the social learning potential inherent in a COP and the communal support network a COP affords its participants, work-based researcher candidates and their supporting organisations would do well to intentionally consider and systematically seek to address these conceptual and pragmatic dilemmas impacting such development. To do so and thereby actively facilitate the emergence of a WBR-COP possessing a focus on research and research processes, can only enrich the candidates' learning and the expansion of their learning capabilities throughout their candidatures. Ultimately, such activity only advantages the generation of new knowledge for participants, their

organisations and for the broader community.

Limitations and future research: The limitations of this research involve the case data which was sourced from one collaborating group of five councils and their staff participants and one academic institution in Australia. Future research in this area may explore alternate ways to stimulate and assist researcher social learning practices in these demanding work-based contexts. Furthermore, a phenomenological investigation on work-based researchers ‘becoming’ competent researchers may also identify further valuable lines of enquiry into this issue.

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About the Author

Andrew Sense is an Associate Professor within the Faculty of Business at the University of Wollongong, Australia. One of his primary research interests involves building the learning capabilities of human resources within organisations. He is the Founding Director of two industry funded research networks consisting of thirteen industry organisations – one group centred on local government and another in the community services sector.

Contact details

*Andrew Sense
University of Wollongong
Northfields Avenue, NSW
Wollongong 2522*

Email: asense@uow.edu.au