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The ABCs of Collaboration in Academia

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Abstract

The occurrence of research collaboration among multiple researchers is becoming more widespread within the academic research community. Research collaboration endeavours offer many benefits yet are not without challenges. This think piece draws on our lived experiences as educators and university researchers to evaluate a research collaboration journey. The process prompted us to deeply question and critically reflect on what enables and supports research collaboration in academic research partnerships. We undertook a critical reflective-in-action study collecting and analysing data for a period of 15 months. We uncovered three elements we propose are integral to supporting effective research collaboration practice and outcomes in academia. These are Acknowledging the Affective, Becoming Bolder, and Cultivating Creativity in what we term, the 'ABCs of collaboration in academia.

Keywords

Collaboration; research partnerships; higher education; affective; creativity

Introduction

Collaboration among multiple researchers is becoming more commonplace within the academic research community. Researchers propose there will be dramatic increases in collaboration in the future (Calabro, Le Beau, & Bolwell, 2013; McNae & Cowie, 2017; Thurow, Abdalla, Younglove-Webb, & Gray, 1999). Collaborative endeavours offer many benefits yet are not without challenges (Anfara, Brown & Mangione, 2002; Paulus, Woodside, & Ziegler, 2008). In this think piece, we reflect on and critically evaluate our lived experiences of engaging with collaboration for research purposes in an academic setting. Specifically, we examine our rationale for engaging in collaborative research, our collaborative process itself, and what we found enables and supports effective collaboration in academic research partnerships.

Our investigation emerged in response to a puzzling and contradictory phenomenon in our shared academic work context. It was initially sparked during informal discussions among all three authors and other academic staff in the university workplace staffroom. There was a consensus amongst those present that collaboration was an important element of advancing research efforts and productivity. Paradoxically, there was also general recognition that the diverse work responsibilities and associated time pressures that we each experienced in academic life did not always support such collaborative



endeavours, even within a pressure-to-publish environment. Noticing this phenomenon was what prompted our initial decision to pursue a more formal research undertaking.

Researcher positionality

This research was conducted by three higher education academics working in the same university in one region of Aotearoa New Zealand. Each author each had experienced research engagement within their own disciplines before embarking on this study and had previously experienced being part of collaborative research processes. For instance, Diana Amundsen had collaborated and co-authored on a research ethics project related to the problematics of accessing research sites and participants (see Amundsen, Msoroka, & Findsen, 2017); Nadine Ballam had been involved in a multi-country international research project spanning four years pertaining to the pedagogies of educational transitions (see Ballam, Peters, & Paki, 2017); and Marg Cosgriff had been a research collaborator in the ‘Everybody counts? Reimagining health and physical education in the primary school’ study, a Teaching Learning Research Initiative-funded project (see Petrie, Cosgriff, & Burrows, 2013; Petrie, Burrows, & Cosgriff, 2014). We noted that our experiences of those prior collaborations varied somewhat but also had common characteristics. All three projects were worthwhile endeavours generating valuable outcomes in research knowledge (as well as unanticipated professional learning for us individually), yet all had their challenges and periods of intense frustration.

Although we each come from different subject disciplines and are at different stages of our academic career, we also noted shared characteristics of our daily workloads that echo others reported in the literature (e.g. Angervall, 2018). This includes the multiple responsibilities and tasks associated with conducting teaching and assessment of learning, the pastoral care of students, post-graduate supervision, general administration, community service and outreach, and research itself. Furthermore, our experiences resonated with claims by others (Barbour, 2018; Lawn & Prentice, 2015; Whelan, 2015) that contemporary academic staff face continuous changes such as fluctuating student enrolments, curriculum enhancement and new degree architectures, re-structuring of departments, and the pressures associated with research portfolio and external funding expectations. Finding the space and time to write research proposals, papers and other publications may be challenging, isolating and sometimes insurmountable in the context of heavy teaching responsibilities (Angervall, 2018) and flux in the workplace environment.

Although we draw upon our prior experiences of research collaborations and our academic workplace context as described above, our current collaboration project is the subject of this think piece. From this context, we offer a reflective commentary about our endeavours to investigate collaboration in higher education. We begin by briefly charting literature about collaboration in academia, exploring some of the espoused benefits and challenges. Building on other research in this field (Paulus et al., 2008; Thurow et al., 1999) we then consider the nature of our collaborative process and the ways in which the focus and methods evolved through the 15-month period of our study. The data set and three over-arching themes arising from analysis are introduced. Attending to the affective dimensions of collaborative interactions, developing an environment where boldness is fostered, and drawing creativity to the surface were found to be necessary elements of a respectful and productive academic collaboration.

Collaboration research in academia

In many studies, collaboration is taken to mean something which occurs between researchers and research participants (Bray, Lee, Smith, & Yorks, 2000; Gergen & Gergen, 2000; McNae & Cowie, 2017; Van Maanen, 1988). Some argue that studies which investigate collaboration among researchers themselves are rare (Paulus et al., 2008). Among those, the focus has included the power dynamics and hierarchies of collaboration (Bryan, Negretti, Christensen, & Stokes, 2002; Rogers-Dillon, 2005), individual effort towards the group’s project (Bennett & Kidwell, 2001), and an ‘insider’ examination

of the collaborative research process including its potential for transforming qualitative inquiry (Paulus et al., 2008).

Five different types of collaboration patterns have been identified in academic research between scholars, disciplines, institutions, sectors, and countries (Shin, Lee & Kim, 2013). Leite and Pinho (2017) postulate that the reasons for entering into a research collaboration do not occur in a vacuum of meanings. A range of reasons exist, particularly in contemporary research climates where, to achieve larger and more complex multidisciplinary projects, specialised skills are required (da Silva & Dobránski, 2015). Diverse motivations and circumstances thus underpin a collaborative arrangement. For example, Becher and Trowler (2001) suggest that scholars in so-called “hard” disciplines such as physics and mathematics tend to conduct research with multiple co-researchers more than those in the “soft” disciplines like modern languages and sociology (p. 190). Viale (2010) proposes that junior scholars in countries such as Korea, Taiwan and China tend to be more eager to engage with collaborative research than their senior scholars because of early stage career pressures to publish.

Providing further insight into the motivations for engaging in collaboration for research or publication, Schmoch and Schubert (2008) argue that scientific publications co-authored with international peers are generally cited more than domestically co-authored publications. Certainly, technological advances through internet use have facilitated research activities taking place on an international scale (e.g., co-design of research instruments, sharing and integration of data sets). In some disciplines, this is a preferred way of working, further highlighting the importance of research cultures in establishing a mind-set and reception of collaborative working arrangements (with their own dynamics of power relationships bound up in such cultures which require junior researchers to engage in this way of working from the outset).

Interestingly, scholars in non-European countries are more actively involved in collaborative research internationally than their European counterparts (Eduan, 2017; Shin et al., 2013). Some suggest that non-English speaking countries, notably sub-Saharan Africa, pursue global collaboration to enhance their world-wide status (Altbach, Reisberg, & Rumbley, 2009.) Furthermore, Ferrier-Kerr and Haxton (2017) argue that significant economic benefits can arise from collaborative research partnerships. Indeed, one major reason for inter-university collaborations is to support universities to become more competitive in global markets—a goal influenced by widespread neo-liberal ideologies. In an Aotearoa New Zealand context, McNae and Cowie (2017) propose that collaborative partnerships in the education sector between public-private, formal-informal, tertiary-industry and among school communities have materialised as key policy and practice drivers. Collaboration is seen as a means for enhancing instructional practice and overall systems improvement. Illustrating numerous benefits, they specifically highlight the “powerful potential” (McNae & Cowie, 2017, p. 307) of collaboration in the field of educational research, drawing attention to relational aspects of collaborative work.

Benefits

Diverse benefits of collaboration for researchers are therefore gaining prominence (Eduan, 2017). Robins (2014), a public university leader, describes how his institution hires scholars away from highly-ranked private universities through the “promise” (p. 2) of substantive and interdisciplinary collaborative opportunities. In this setting, the potential for collaboration has proved to be the key attraction for exceptionally talented scholars. Other literature exposes an array of additional benefits of collaboration, notably for professional development and learning and enhanced academic exposure.

Across a number of studies, Shin and colleagues point out the attractiveness of collaborations for funders (Shin, Lee, & Kim, 2012). The importance of demonstrating research impact and value for public investment in research is a driver for academic collaborations to demonstrate practical contributions to society—in this way supporting inter-disciplinary research. Furthermore, collaborations boost an author’s affiliated institution and contribution to university rankings (Shin et al., 2013). As well, the inputs of university, industry and government collaborations to industrial development has been shown to be advantageous (Shin & Kehm, 2013). Further benefits arise from reduced duplication, pooling of resources and increased social capital (Marek, Brock, & Savla, 2015).

Merchant (2011) asserts that collaboration is enthusiastically championed by some in business as the answer for enhancing problem solving and creativity, and as holding the key to innovative productivity and empowerment strategies. In educational arenas, McNae and Cowie (2017) suggest research relationships and partnerships supporting innovation and change are "... central to the authenticity of research agendas, design and conduct, and to the relevance of outcomes" (p. ix). These researchers point out that collaboration and partnerships are demonstrated strong policy and practice drivers, especially in relation to the Treaty of Waitangi principles of partnership, protection and participation to ensure they are actively addressed.

Challenges

Such reasons beget the question of why collaboration is not more widely engaged in among the academic community. As Ferrier-Kerr and Haxton (2017) point out, although economic incentives may motivate universities to collaborate, an effective collaboration may not necessarily be assured. The practice of collaborative research is not without difficulties, barriers and challenges, notably so in a neo-liberal context (Giroux, 2014) which normalises competitive environments for academics (Barbour, 2018; Whelan, 2015). For instance, in our local Aotearoa New Zealand context, the Performance-Based Research Funding (PBRF) system has been argued to be an increasingly important means of regulating research output performativity in universities (Curtis, 2016). Since this system has been argued to undervalue Indigenous Māori and collective research approaches by privileging sole authored papers over those with multiple authors (Roa, Beggs, Williams, & Moller, 2009), valuing individual contributions in this way may detract from collaborative research efforts.

Reported concerns over failed collaborations (Anfara et al., 2002; Merchant, 2011; Paulus et al., 2008) centre on a loss of autonomy, the complexity of decision making, unclear or uncomfortable roles, waste of resources and time, conflicting priorities among collaborators, academic 'turfism' and egos (Morse, Nielsen, Pincus, Force, & Wulfhorst, 2007), and disciplinary chauvinism (Thurow et al., 1999). Individual efforts are less visible and harder to measure as collaborative projects receive judgement on their outcomes (Merchant, 2011). Consequently, a tension may exist between collaboration and competition. Paulus et al. (2008) exemplify elements of a collaboration-competition dynamic in contrasting their dialogic collaborative research approach with the individualistic assumptions typically embedded in qualitative research.

In sum, collaboration is accepted as a successful means to address multi-faceted issues. However, effective collaboration is not easy to achieve, evidenced by numerous failures (Marek et al., 2015) owing to onerous time commitments and the necessity for collaborators to compromise. Despite efforts within the research community to better understand and measure collaboration effectiveness, little is known about processes which result in successful outcomes (Marek et al., 2015; Sandoval et al., 2012). A comprehensive model of collaboration and an accompanying evaluation tool that pivots around seven interrelated aspects—context, members, process/organisation, communication, function, resources and leadership—is proposed by Marek et al. (2015). Threads of these proved relevant in this current study. Yet more work needs to be done to better understand elements of a successful collaborative process. This think piece contributes towards developing understanding about the practice of collaboration to unlock the potential for co-created research and knowledge.

This collaborative process: Methodology and methods

Social constructivism

Our think piece is located in a Vygotskian space between what the authors could achieve alone and as a collective. This research is premised on a social constructivist theoretical stance about how knowledge is constructed and thus how research is advanced. Social constructivist theorists maintain that knowledge may be perceived and socially constructed through interactions with others (Berger &

Luckmann, 1967; Bronfenbrenner, 1975; Vygotsky, 1978). Alt (2017) notes that “knowledge is a process that is structured by dialogue and interaction with other learners achieved by experiencing the world together” (p. 99). In this research process, all three authors were experiencing the collaborative process together, and all three researchers agreed that a qualitative research approach was the best fit for this study. Vygotsky (1978) accepts the influence of personal characteristics as well as external social factors, proposing that meaning is constructed from the interaction between existing knowledge and inter-social situations. In knowledge construction, a social constructivist theoretical viewpoint focuses on the collaborative processes. This links together both social and cognitive components of knowledge building, which was one of our objectives for this study.

Having identified that effective collaboration in academia appeared beneficial, our research ultimately pursued the question of, “what supported or enabled effective collaboration in academia”? While seemingly a straightforward question and one which could easily have been researched in a linear process (Cresswell, 2002; Kvale, 1996; Patton, 1990), it did not begin or evolve in that way. In practice, conceptualising this research question was organic and emergent. Becoming comfortable with the discomfort that the research question itself was evolving (and did not necessarily have to remain the same throughout the process) was key to changing the research from a linear to a dynamic process for us. In turn, the shifting emphasis of the research question itself reflected the dynamics of our relationship as collaborators, our relationship with the data and between the question and the data. As Paulus et al. (2008) suggest, “if the overall process is viewed as heuristic, then the question is not separate from the analysis, but an integral part of the analysis” (p. 233). While the research question consistently centred on the notion of collaboration in academia, we found the specifics of the line of questioning were shaped, not from the outset, but through an unfolding process as the collaboration ensued throughout the 15 months of the study.

Data collection process

The aim of this project was for the three authors to work collaboratively on a new project to assess the pitfalls and successes of the collaboration process. Various research methods were considered but ruled out. For instance, identifying and surveying a large sample of collaborative workers would neither be practical nor effective. Few, if any, large scale quantitative datasets about collaboration exist—it may be extremely difficult to randomly assign people to various forms of collaboration. Therefore, one logical method for the particular research question at hand was to undertake the process ourselves, as ‘insiders’.

In essence, we undertook a critical reflective-in-action method using Eby’s (2000) Reflective Model (ERM) from March 2017 to June 2018 describing and evaluating our personally lived experiences of engaging with collaboration for research purposes. The ERM allows the intersection of emotions, critical thought patterns and reflection to comprise a whole reflective practice (Finlay, 2008).

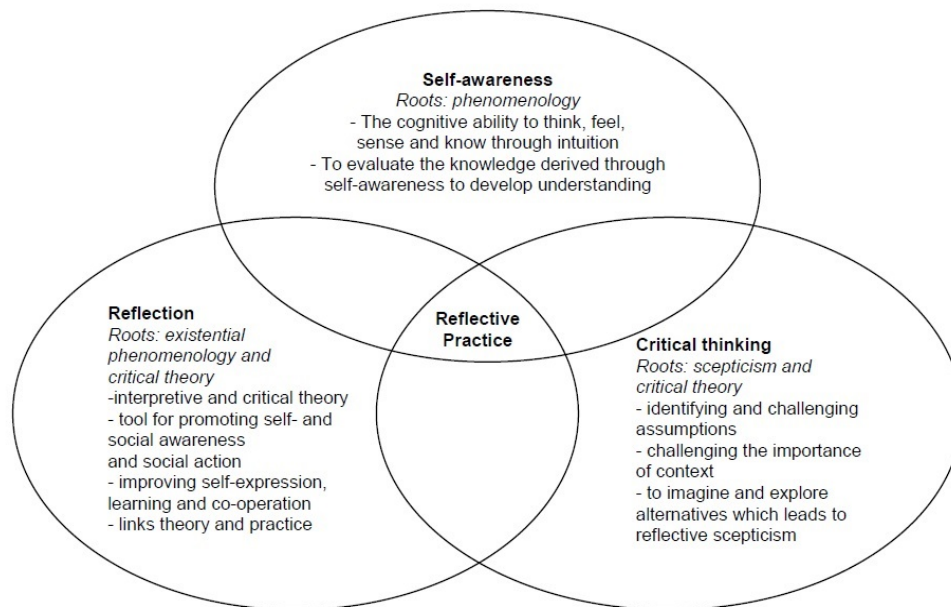


Figure 1. Eby's (2000) reflective model.

One-hour meetings were scheduled approximately every three weeks—more frequently at the beginning, less frequently in the middle, and more frequently at the end of the period as we moved to complete this manuscript. During these sessions, discussions were recorded, our personal experiencing of the current collaboration process were noted, and the research question was consistently reviewed. In all, data were collected and analysed using face-to-face meetings; e-mail interactions; individual researcher journal note entries; data coding, categorising and theming. Triangulation occurred through each researcher individually analysing and theming the data and then bringing the results together for the collective negotiation of themes.

Although we each brought prior research collaboration experiences to this study as previously described, the workings of this collaborative journey became the object of analysis. This subtle shift reflected a realisation that examining collaboration in an abstract, or ‘hindsight’ fashion did not speak to our subjective experiencing of what enabled or inhibited collaboration in the present process itself. The nature of the meeting discussions themselves were thus fluid, not necessarily picking up from where we finished last time. Indeed, and as with Paulus et al. (2008), sometimes we started the next meeting as though we did not even have the previous discussion. We retraced old footsteps until we arrived at common ground again, although at times, this re-working took us to different places.

Our data analysis

Thematic analysis (Smith & Osborn, 2008) began with us collectively coding data, next categorising codes into clusters or patterns, and then developing themes through analysis (see Figure 2). Thematic analysis strongly aligned to the research inquiry as themes could consist of descriptions of behaviours within our context, explanations for why things happened, iconic statements, and morals from our personally lived stories (Saldaña, 2016).

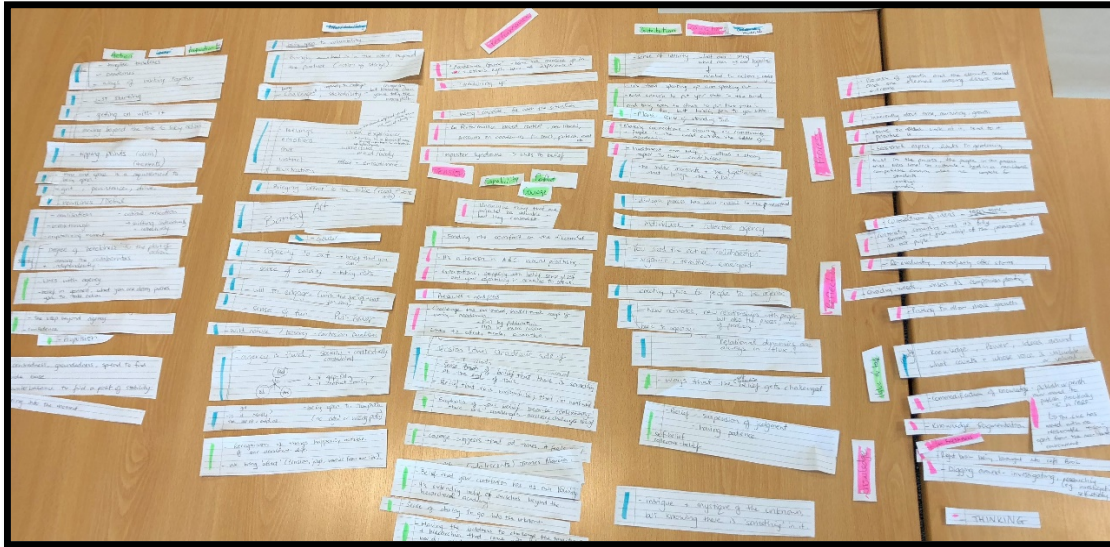


Figure 2. Developing core themes into overarching themes.

Coding was a shared process and occurred in cycles. Our coding aimed not just to label, but to make links. “Coding leads you from the data to the idea and from the idea to all the data pertaining to that idea” (Richards & Morse, 2013, p. 154). Saldaña (2016) proposes that coding is not a precise science, but rather, it is primarily an interpretive undertaking. Consistent with the iterative and cyclical coding approach, we reviewed earlier data sets in light of any new themes and reflected on past discussions to decipher more meanings. As we made the transition from coding to categorising, patterns began to emerge, alongside ideas about why those patterns might exist in the first place.

At this stage, we grouped similarly coded data together into categories. Some data were quickly and unanimously agreed upon, others were not. Where we disagreed after debate and sometimes tense moments, we duplicated the information and placed it in two different categories, agreeing to either compromise or re-visit it next time. What was key was that we were continually open to divergence and convergence (Paulus et al., 2008), the messiness of the data, the evolving nature of our progress being guided by flexibility, and a belief that a way forward would emerge in time.

We moved from coding, to categorising to developing core themes into over-arching themes (Table 1). In practice, a theme is really an outcome of coding, categorising and reflecting analytically (Saldaña, 2016). The themes we “arrived at” were based on consolidated patterns across the data set which were key to the explanation of the phenomenon of our personally lived experiences of collaboration in academia. Thus, the data collection and analysis were a process of individual discovery and collaborative meaning making. Like others before us (Paulus et al., 2008), our work pointed to collaborative research itself as a method for enhancing rigour, and this was a vital part of us making sense of the complexity of human experience to enable collaboration in academia.

Table 1. Core and Overarching Themes

Core themes	Over-arching themes
<ul style="list-style-type: none"> • Acknowledging things in our personal lives influencing the process. • Frustrations, tensions, pressures relating to the collaborative process. • Recognising moments feel like ‘A-ha!’ • Individual affect and the ‘affect’ of the collective. 	Acknowledging the Affective
<ul style="list-style-type: none"> • Boldness to bring our ideas, protect time, take leadership take risks, be vulnerable. • Belief that ‘there is something in this’ driving force. • Recognition that together we have something more powerful than individually. • Breaking beyond barriers in our thinking and being brave enough to put our stake in the sand. 	Becoming Bolder
<ul style="list-style-type: none"> • Taking time to invent, take the blinkers off and widen the gaze. • Investing in relationships to grow and evolve meaning making. • Developing skill of re-theorising, de-theorising and reimagining. • Purposefully putting things in place. • Developing a sense of ownership individually and collectively. 	Cultivating Creativity

Results and discussion

Our lived experiences of engaging with collaboration for research purposes revealed three key elements which we term the ‘ABCs of Collaboration in Academia’. Although we discuss each of these separately, it is important to note that, in practice, the interplay of the ABCs are intertwined, reciprocal and dynamic.

Acknowledging the affective

The first theme underscores the importance of the affective in supporting collaborative endeavours in academia. Paying attention to our subjective experiencing of the collaborative process revealed the multiple and different ways that our bodily thoughts, feelings and senses were constantly in play. Rather than ignoring, suppressing or seeing these as time-wasting or annoying by-products of a research process, documenting and discussing our emotions and feelings proved to be an integral feature of an iterative, emergent process that was able to be sustained through to the final stages of writing this paper.

One affective element particularly evident in this study centred on our varying expressions of and responses to feelings associated with frustration, unease and tension. After a challenging meeting approximately half-way through our study, one co-author reflected on the utter frustration she had felt at us not meeting a previously manufactured deadline, especially in the face of other pressing research commitments being juggled. Although she went on to experience relief at our joint decision to continue with the project by relaxing into rather than cramming the analysis and writing phases, feelings of vulnerability surfaced from the tension between this and the performative pressures of demonstrating competence and getting things done in the academic environment.

The complex interplay between feelings of frustration, tension and relief emerged for the other co-authors at this point too. A second author summed up her sense of hope and gratitude to co-collaborators for their latitude in letting go of prescribed timelines, especially in light of the pressures she recognised this placed on them. A follow-up email after this meeting revealed the third author’s sentiments: “... the element of frustration, to me, is essential to ‘shake’ comfort zones and re-create usual ways of working ... a smooth easy process is ‘nicey-nice’, but sometimes limits the capacity to see beyond what could be.” Data fragments such as these expressed our experiences of pressures at the shifting goalposts in the

academic game. Our ongoing dialogue about the importance of the affective realm in our collaboration also helped bring to our attention the dynamic social-structural conditions shaping our embodied experiences working in academia. Most notable was the conflict experienced through feeling we needed to leave emotional expression and the tensions, joys and worries of our outside lives on the ‘side of the field when playing’.

The notion that only minds, rather than bodies and emotions, are to be involved in pursuit of academic knowledge urges us into behaviour performance (Butler, 1997) that can constrain, limit or prohibit researchers’ emotional expression in traditional research endeavours. Based on our findings and guided by our social constructivist theoretical lens, we argue that effective collaboration relies on social interactions and integrations, and as such, affective dimensions of engagement with others are necessarily present. Arndt and Tesar (2018) also suggest that emphasising a particular attitude that is “relaxed and informal” (p. 56) through ‘yarning’ in collaborative research endeavours challenges research ideologies that are outcomes driven and require set time frames for interviews, focus, groups etc. Instead, allowing fluid, diverse and inherently heterogeneous research conceptions which invite the affective dimension into the research process has the propensity to develop respectful attitudes during research interactions.

From this study, we propose a need to move away from downplaying the affective dimensions of knowledge-building towards recognition and acknowledgment that affective dimensions are necessary to dynamic, resilient and respectful research collaborations. Marek et al. (2015) target membership, process and communication factors including those related to respect, trust and conflict resolution as some of the components of their collaboration evaluation tool. Our experiences resonate with and extend these aspects. Active attention to acknowledging the affective may, at times, require bravely treading into unfamiliar territory and being open to the possibility of vulnerabilities being visible. It was precisely the exposure of our affective which enabled or supported significant, sudden and important developments or discoveries in this study.

Becoming bolder

Becoming bolder emerged as a second key element of effective collaboration. Academic environments by their very nature enable a particular type of confidence that stems from the familiar and comfortable and reflects the pressures of a neo-liberal discourse of performativity. This becomes a default functional confidence where, in our attempts to work smarter, or play by the ‘rules of the game’ (Bourdieu, 1996) to meet sometimes overwhelming demands of academic roles, we are drawn to the spaces and bounds within which we are most likely to find a manageable balance between demands and workload. In this study, we recognised that our collaborative experience required the development of a crucial layer of confidence that was not necessarily present to start with. This process acknowledged the individual confidence we each brought to the collaboration, but subsequently enabled us to collectively become bolder in our understanding of and engagement in the collaborative process.

Becoming bolder first required a belief in ourselves that we individually had something to offer, and the bravery to bring our ideas to be critiqued and challenged. Collectively, the belief that together we had something more powerful than what we individually brought to the collaboration added another layer of boldness. Recognising this resulted in productive actions such as committing to adding the project to the precarious balance of existing workloads, protecting time set aside for the collaboration, and avoiding the inevitable distractions of academic life. This belief became a catalyst for sharing, evaluating, debating, adjusting and readjusting ideas, and making the space to create “group meaning” rather than merely “synthesising individual contributions” (Paulus, et. al, 2008, p. 238).

However, presenting individual meaning systems to be moulded and redefined into collective meaning is risky and challenging, and reliant on the establishment and maintenance of a strong community where there is safety in the questioning of sociocultural norms. Others (Fam, Neuhauser & Gibbs, 2018; Marek et al., 2015; Thapa, Akpovo, & Young, 2018) suggest that such interdependent factors similarly suggest the importance of a safe and respectful collaborative environment. In our study, a safe and respectful environment enabled our boldness to offer up often deep-seated values, assumptions and beliefs for challenge, and the expectation that we would all engage in the interrogation

of these, even when confronting. However, becoming bold enough to be part of this process gave us permission to collectively break the rules or move beyond the comfort barriers in our thinking and to become audaciously bothersome in our presentation of ideas.

In many ways, becoming bolder was the crucial task that existed in the Vygotskian space between what we could achieve alone and as a collective. The power of the collective was in the support to shift through this space, imagining, attuning and reimagining the possibilities of what could be along the way. Like Fam et al. (2018), collectively embracing the uncertainty and complexity of real-life research challenges facilitated a conceptual leap beyond pre-ordained methods, creating new ways of thinking, behaving and informing critical reflection. Taking this step beyond individual and into collective to break beyond barriers in our thinking and be brave enough to put our ‘stake in the sand’ was emboldening. In our experiences in this study, becoming bolder was the hinge between our acknowledgement of the affective and the cultivation of creativity; it became the vehicle for disrupting the familiar and comfortable and using discomfort and dissonance as a means to foster creativity in our ideas.

Cultivating creativity

Cultivation and creativity were both integral to our collaborative process. First, we look at the importance of cultivation as it pertained to the process in this study, and second, we evaluate the role of creativity in being a catalyst to drive forward our ideas. Last, we explain how cultivating creativity is an essential element of an effective collaborative research process.

Cultivation is inherently linked to a process, and usually one that requires time in order to allow some type of creation to eventuate (see for example, Berryman, SooHoo & Nevan, 2013; Marek et al., 2015). Our study progressed over a 15-month period, requiring time, persistence and energy to tend to our professional relationships, develop a sense of ownership, and to purposefully put things in place for an environment in which ideas could be fostered.

The process of writing this article itself was an example of how cultivating creativity was an important element of effective collaboration. Quite early on in the process, after the decision to pursue this endeavour in a more formal way, one author began drafting an early version of this article, framing up sections of the paper. The idea was to share out certain sections of the article as particular writing tasks to each member, which is not an uncommon approach for researchers operating in a ‘publish or perish’ research paradigm (Viale, 2010). It was intended that, supported by themes apparent in the literature, each co-author would reflect on and critique their prior experiences of collaborating for research purposes. Then, after independently writing their part of the article, all three would weave their contributions into one cohesive paper.

However, this approach proved ineffective as each person was at a different point in their understanding, commitment and knowledge of the research inquiry and importantly, a clear research question and direction was not yet fully evident. Therefore, frustration was experienced by all three authors. However, it was this frustration itself which proved to be the catalyst for discovering a more creative approach towards writing this article. As we pushed through the uncomfortable tensions accompanied by the frustration, the ‘a-ha’ moment dawned on us collectively. Having to re-evaluate and re-adjust our expectations of what could be possible was when the issue of cultivation came to the forefront. Without enough time for ideas to ripen and space for creative thoughts to percolate, producing a rich and meaningful article could not be achieved with clarity.

Ultimately, cultivating a space which fostered creativity—a vital element of constructing new knowledge—relied on an investment and a belief in the other co-authors’ knowledge, competencies and value. Like Paulus et al. (2008), our collaborative article went beyond the coordination of multiple authors’ individual and siloed contributions and into iterative discussions of past ideas being collaboratively re-worked into present ideas. This was not only done by respecting each other’s contributions, but also by moving away from the more known, comfortable pathways and stepping into the less known, uncomfortable ‘trialogic’ spaces. Our trialogic conversations became so embedded within the data and this article that it became indistinguishable as to who was the source for which words or ideas, and it ceased to matter. What became important was the safe, yet challenging space we had

collectively cultivated, worked at, tended to, and prioritised in order to allow creativity to flourish. As others (Cowie, 2017) have found, our innovation and improvement relied on the interaction and knowledge exchange amongst the stakeholders involved.

As we critiqued the data of our past thoughts and conversations, one thing stood out strongly: the more we actively recognised the collective power of our emotional dimensions and grew braver to contribute our thoughts, the more our contributions became intertwined and synthesised, even in the face of conflicting philosophies. This recognition that capacity building for innovative and collaborative research to evolve must take, not a linear process, but a complex and networked interactive path (Cowie, 2017) was significant in our research endeavour. By taking time and expending energy on cultivating the collaborative process, our creative fruits became as entangled as a passionfruit vine, not allowing us to see where one branch ended and another began. Yet when our ideas had matured and the themes were ripened, the fruits of our collaborative endeavour became clearly visible. Without cultivating creativity, the fruits of collaborative labour are compromised, unlikely to ripen. This notion was expressed by one co-author who, during a brainstorming meeting, exclaimed, “You can’t just whip it off the passionfruit vine if it’s not purple!”

Conclusion

In this think piece, we have illustrated how our collaborative process caused us to question and critically reflect on what enables and supports collaboration in academic research partnerships. Effective research collaborations, we argue, are grounded in an epistemological understanding that new meanings are created in dialogic (and trialogic) contexts consistent with a social constructivist theoretical standpoint. An inherent assumption is that each collaborator learns to understand each other and themselves in the social world (Cranton, 1996). Using Eby’s Reflective Model to analyse and critically reflect on our collaborative process, we were challenged to find ways of working around tensions from three different vantage points. This proved to be an essential element of an iterative collaborative process.

Evaluating this particular collaborative process revealed to us that even though the authors had pre-existing working relationships, this was a new collaborative endeavour and it was important to go through the full process without skipping through or ignoring any key steps. For instance, owing to a prior working relationship among each of the three authors, we could not assume that time for relationship building would not be needed, as the dynamics of this particular research collaboration brought out different and new aspects among the three authors. Furthermore, each collaborative endeavour appears to be unique; though past collaborative experience may be useful to draw upon, without creating the environmental conditions for a collaborative research project to address the three elements we outlined here, we suggest that the process may be hampered.

With any qualitative, social-constructivist research, elements of subjectivity exist. At the same time, the subjective nature of this research design was pivotal to co-creating and co-constructing meaning. This study has limitations in terms of generalisability; it was context-specific, leaving the reader to draw their own conclusions of the applicability to their own context. Despite these limitations we consider the ABC framework itself may be applied to a range of diverse contexts as an effective lens through which to enhance future collaborative work and outcomes. There are implications for other academics engaging in future research collaborations. The purpose in this article was to communicate advantages of adopting these approaches intentionally into collaborative research designs.

Our exploration of the collaborative research process revealed the ABCs of collaboration—three essential elements enabling and supporting our work together. The first implication is for researchers to acknowledge the affective, which speaks to the importance of not ignoring, but actively acknowledging the fluid, wider contextual influences that underpin each individual’s state of being. A further dimension of this is actively responding to the emotional dynamics of the collective itself as they arise. When these affective dimensions are explicitly tended to, the work of the group becomes more effective. Becoming bolder, the second important implication, urges academics not to settle for the status quo—or perhaps more importantly, to act on the conviction to ‘unsettle’ the status quo. Power is in the collective; a power that can be fruitfully harnessed when facing the inevitable barriers that confront academic research. The final implication, cultivating creativity, reminds us to make room for the intricate elements that enable

collaborative meaning making: making time for respectful relationships so that pushing through the uncomfortable tensions and frustrations can give rise to generation of creative ideas and meaningful knowledge.

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