**Entangling Our Thinking and Practice:**

**A model for collaboration in teacher education**

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Abstract: *Collaboration is a key component of our practice as teachers and teacher educators and there is a need to develop generative models for collaboration among teacher educators. We have created and tested a model of collaboration. Data were drawn from: recordings of monthly group meetings; discussion threads and documents on our leaning management site; individual interviews with all members of the group conducted three times across the project; and reflections on these interview transcripts by individual annotation and group discussions. The model includes a collaborative overarching research project and, nested under this mantle, a series of focused research projects conducted by pairs of collaborators, international networking, and enactments of scholarship. A key element of the success of this model was the foundation of this research in arts-based inquiry. The model has enabled rapid and rich development of academic collaboration with flexibility to develop new practices and projects that benefits research and teaching.*

**Key Words:** Collaboration, Self-study methodology, Arts-based inquiry, Reflective practice, Teacher education

# Introduction

Working collaboratively is a valued practice in teaching and teacher education and has been investigated as part of the practice of co-teaching (Yoo, Heggart, & Burridge, 2019); coaching (Hohensee & Lewis, 2019); school-university partnerships (Chan & Clarke, 2014); early-career academics (Kitchen, Berry, & Russell, 2019); identity development (Lunenberg, Korthagen, & Zwart, 2011); and within discipline teams (King, Logan, & Lohan, 2019). There is also a growing body of research investigating the theory of collaboration in education (Cripps Clark, 2014; Kitchen et al., 2019; Soliman, 2001; Steven & Philip, 2018; Woolley, Chabris, Pentland, Hashmi, & Malone, 2010).

It takes time, effort and skill to create successful collaboration (Edwards, 2010) and there is a need to research how to initiate and sustain collaborations within the particular context of teacher education. As a collaboration of teacher education academics, we have been meeting since 2014 to act, reflect on, and improve our academic and teaching practice through the application of self-study methodologies. In this paper we unpack the model of collaboration we devised and refined; a process that has taken several years of conscious effort to shape and develop our practice into an ongoing tradition.

The period from 2013 to 2015 was a time of significant politically motivated educational reform in Australia. The Australian National Curriculum for schools (ACARA, 2013), the Australian Professional Standards for Teacher (AITSL, 2014), as well as the Teacher Education Ministerial Advisory Group report, *Action now: Classroom ready teachers* (TEMAG, 2015) reshaped the landscape of initial teacher education. Our institutions are expected to be at the ‘cutting edge’, infusing the latest technology and pedagogical research while delivering “delight and success” to our students (Deakin University, 2014). Additionally, teaching can be an isolating profession with a constant impetus to adapt our practices to meet new contexts and challenges.

*We often work in isolation in our teaching. Classroom doors are frequently closed, and there is little time to talk to someone about your teaching and listen to someone talk about theirs. Instead, we move on to the next class, our thoughts about our teaching unspoken and unchallenged.* (Jo, Reflection)

In this environment, we needed to build support for our continued professional learning to develop our effectiveness as teacher educators.

The *Collaborative Reflective Experience and Practice in Education* (CREPE) Faculty Research Group was formed in 2014 by eight academics from three campuses, urban, regional and rural, covering a large geographical area across Victoria, Australia. The group came together to research the scholarship of teaching, through collaboration and reflexivity, using self-study methodologies. The eight scholars represent diversity in experience and discipline, including: Science, Mathematics, the Arts, Professional Studies, and Pedagogy and Curriculum Studies.

Our initial research question asked: *How can we continue to develop our teaching practice to ensure we are high quality, contemporary teacher educators, and practice informed researchers?* This question drew us all together with the desire to develop our teaching and research practices simultaneously and collegially. However, the question addressed in this paper is more focused: *How can we enact and understand our teaching and teacher education practice as a collaborative self-study group?* We share our collaboration model that reflects our refined research practice, along with evidence from our meta-reflective strategy and data from collaborative activities, to exemplify and justify each of the components of the model. We discuss some of the successes and failures we experienced in doing this kind of research.

# Theoretical Framework

The idea of emergent self-organisation occurs frequently in collaborative self-study (see for example Jess, Atencio, & Carsel, 2016). However, there have been models developed to facilitate collaboration in self-study groups, an example is the process model of Louie, Drevdahl, Purdy and Stackman (2003) which uses a cycle of action research. Given the paucity of general and generative models of collaborative self-study, there is a need for models to be developed which can be used to structure and facilitate collaborative self-study and it is in this spirit that we offer an analysis of the model developed by the *Collaborative Reflective Experience and Practice in Education* (CREPE) Faculty Research Group.

As it emerged, our model was developed based on the following principles:

1. *Community of practice*: Horizontal accountability through shared activities and negotiation, recognition of collegial support, and a commitment to collaborative scholarship (Wenger, 1998; Wenger, McDermott & Snyder, 2002);
2. *Shared boundary objects*: Connecting and mobilising across the fragmentation arising from discipline and social practices (Akkerman & Bakker, 2011; Star & Griesemer, 1989);
3. *Inter-disciplinary dialogue*: The group brought together members from different disciplines and this enabled epistemological and experiential diversity;
4. *Ethical unity*: While the creativity of the group was stimulated by a variety of epistemologies it was held together by common values in a commitment to teaching.

Articulating these principles afforded greater insight and depth of understanding as well as respect for individuals and collaborative practice. We valued and honoured the time taken to work collaboratively, which led to increasing confidence in our protocols and practices. Two traditions, central to our practice of collaboration, deserve elaboration: self-study methodology and critical friend method.

## **Self-study Methodology**

Self-study methodology was used to develop insights into our teaching scholarship and to enact reflection through practice (Russell, 2010). We used self-study of teaching and teacher education practice methodologies because they engaged each of us in personal inquiry (Samaras, 2011), yet scaffolded us to operate in collaboration with one or more of our colleagues. Self-study:

* *is a personally situated inquiry*: drawing on our own experiences and using research to investigate our teaching scholarship;
* *requires critical and collaborative inquiry*: developing a collaboration that supports critical reflection and action with mutual respect and relationship building;
* *aims to improve learning*: throughout our teaching, scholarship and professional/personal lives;
* *employs a transparent and systematic research process:* with critical friend collaborations based on trust, care, and honesty; and
* *contributes to our fields through knowledge generation and dissemination*: via peer-reviewed articles, professional development programs, teaching modules, and symposia. (Samaras, 2011, p. 10)

The methodology implied the study of one’s self, one’s actions, one’s ideas, as well as the ‘not self’ (Hamilton & Pinnegar, 1998, p. 265) allowing for growth, development, and changes in our practice. Working in collaboration to unpack our ideas afforded a sense of authenticity and intentionality to our research and scholarship. Self-study research enabled us to: enlighten individual reflective journeys through collaboration; apply critical lenses to power and discourse; celebrate successes; trouble the complexities; and, contribute more broadly to teacher education. As John reflected:

*The chance to peer into motives and ethics of my colleagues has been a rare privilege and, by analogy, revealed the importance of motive and values in my students. I have thus started to try and use this insight with my own students.*

Unlike reflective practice, self-study researchers have a critical awareness of: 1) how considerations of power frames, and distorts educational process and interactions; and 2) how to question assumptions and practices that seemed to make our teaching lives easier but actually worked against our own best long-term interests and those of our students (LaBoskey, 2007).

Self-study is, at its heart, collaborative and a variety of practices in collaborative self-study have evolved to serve the circumstances and purposes of practitioners and researchers in teacher education (Loughran, 2007; Samaras, 2011). *Collaborative self-study* is ubiquitous in the literature but it is infrequently theorised – usually just referring to pairs or groups who used self-study methods. The most common interpretation of collaboration is in terms of communities of practice (Wenger, 1998, 2006) or a community of inquiry where leadership is shared and a sensitivity to the “opportunities for contributing expertise and talents” are cultivated (Geursen, Berry, Hagrbruk & Lunenberg, 2016, p.161). Communities of practice are able to nurture development because they facilitate open engagement across boundaries through a suspension of judgement (Wenger, 2010) and consequent translation across these boundaries (Akkerman & Bakker, 2011). This translation can occur through stories and counter-stories (Craig, Curtis & Kelley, 2016), jamming (Pithouse-Morgan, Coia, Taylor & Samaras, 2016), arts-based methods (Hannigan, Raphael, White, Bragg & Cripps Clark, 2016; Raphael, Hannigan & White, 2016; Hannigan & Raphael, 2020) and the giving and accepting of reasons (Brandom, 2000).

## **Critical Friends**

Central to this self-study research is collaboration and the establishment of critical friendships (Loughran, 2007). We used critical friend method (Bullough & Pinnegar, 2007; Handal, 1999) to “prevent self-deception” (Lomax, 1991, p. 14) and see our practice through the lens of others (Samaras, 2011). Critical friends can exist as pairs or groups coming together to provide honest feedback in an encouraging and supportive environment. Critical friendship groups are typically communities, learning together using protocols and giving attention to guided facilitation (Breidenstein, Fahey, Glickman & Hensley, 2012). These groups vary greatly in structure but usually focus on instructional improvement and school reform through a wide range of activities, loose organisation, interdisciplinary membership, and protocols (Curry, 2008). However, critical friends are most commonly pairs and can be electronically mediated (Hostetler, Mills, & Hawley, 2014), although Greene, Kim and Marioni (2007) developed these ideas and practices into a model of reflective trios. All members of the group will participate as critical friends to “lighten individual reflective journeys; apply critical lenses of power and discourse; celebrate our successes; and to trouble the complexities of our tasks” (White, 2014, p. 3).

## **Data Collection**

While this study was exploratory, it built theory from themes and patterns that emerge through careful exploration of the development of collaboration within the group. Data was drawn from:

1. Recordings of our monthly video-conference meetings;
2. Discussion threads and documents lodged on our learning management site;
3. Interviews with all members of the group; and
4. Reflections on the interview transcripts by:
	1. individual annotation; and
	2. group discussions.

Figure 1 shows the relationship between these data types (and the form in which they were collected) and the analysis. The right hand side descriptions indicate the work that data collection and analysis did for the development of the group and collaboration. This includes attention to the values expressed and explored by the group.



**Figure 1: Relationship between data collection and analysis**

We analysed the data using an inductive analysis (Patton, 2002), where insights captured from the data provided clarification as to the purpose (and potential usefulness) of the aspect of the model. The intent was to showcase the application of the model in a teacher education context.

# A Model of Teacher Educator Collaboration

The collaboration model (Figure 2) became the strength of our collaborative research. By living these elements and processes, we generated not only a stronger community, but affirmed our conceptual and methodological knowledge, skills, and dispositions. We have come to understand the nature of collaboration and live the benefits of this close collegial research through meta-reflective processes, framed theoretically and methodologically.



**Figure 2: The Collaborative Reflective Experience and Practice in Education (CREPE) Faculty Research Group research model**

This model represents the practices of our self-study collaborations and maps the ways in which we embraced our research question: *How can we enact and understand our teaching and teacher education practice as a collaborative self-study group?* All academics participated in the *overarching research project*. The *focused research projects* allowed smaller groups to engage more directly with research aligned to challenges or opportunities specific to our teaching practices. *International Networking* and *Enactments of Scholarship* were elements of the model that came about as we developed our practice and worked together with the strengths we each brought to the collaboration. Central to our model were the *group meetings, reading discussions, research retreats* and *arts-based inquiries* that comprised the activities that held our research practice together enabling participation from our geographically disparate university community. These five elements provided opportunities for scholarship and collaboration that were synergistic, represented by the circle joining each element and encapsulating the central practices. Each of the outer four elements communicated to both the group and the wider research community (through publication and presentations).

The development of this model was iterative through sharing artefacts and practices to generate new knowledge and practices and, in turn, reflect on the process/model. The new knowledge and practices that develop from this iterative process include arts-based inquiries and the *Kahoodle* with international colleagues (both explained below). Each model element will be described in detail below using supporting quotes from collaborators interviews and reflections.

## **The overarching collaborative research project**

 In a rapidly changing knowledge environment, collaboration was found to be the key to responding quickly and creatively to challenges (Franz, 2005). Collaboration enhanced the development of individuals, groups, and organisations through greater creativity, more effective problem solving, and adaptive strategies to change (Brew, Boud, Lukas, & Crawford, 2013). It was important to understand collaboration itself rather than treat it just as a topography over which we walk (Hamilton & Pinnegar, 2013). The purpose of establishing the collaborative research group was to develop a community of practice that supported our reflective endeavours and focused our aims as we engaged in reflexive practice to enhance our teaching, research, and scholarship.

 The overarching collaborative research project aimed to examine transformative development within the CREPE Faculty Research Group, asking:

* What were the values brought to our participation in the CREPE Faculty Research Group and how did these develop during and through our collaboration?
* How did the social and communicative structures of the group mediate the co-construction of our research narratives?
* How did the interaction between the collaboration and personal reflection mediate the development of identity?

Our overarching research project included three phases of interviews. Data was drawn from semi-structured half to one-hour interviews with each group member; individual annotation to the transcripts as part of the checking process; and subsequent audio-recorded group discussions. The initial interviews provided a baseline for documenting the development of values and identities of members of the group. The initial interviews were refined (through member-checking) and, at the first writing retreat, each member identified the three most salient points from their interview transcript. Although from diverse disciplinary backgrounds, group members were united by a deep, shared commitment to improving our teaching. “*My interest in research for this project is how to improve teaching and the impact of what we do on students*” (Leicha, Interview 1). The shared motive was instrumental in the coordination necessary to develop practice and identity (Edwards, 2010). “*The way that my colleagues worked inspired me*” (Leicha, Interview 1).

By focusing on reflection, the second round of interviews sought to identify practices that had been enacted over the preceding year which had both arisen from and contributed to reflection. Crucial to this process are the social and communicative structures that had been inherited and created in the group. The knowledge and skills of the group were exchanged and developed through these practices. These were not static, acquired through acculturation of institutional practices, but responded to, and were mediated by our communication and social exchange. The second set of interviews and analysis revealed how the developing relationships “*nurtured a healthy inner critic*” (John, Interview 2) and brought a willingness to observe and be observed in the practice of teaching. The aim became to “*build up each other rather than the project*” (John, Interview 2). Distributed leadership gave the opportunity for projects to arise with individuals or pairs and move to the group as a whole and vice versa.

Reflection was both a contribution to our community, by association to wider bodies of human thought and action, and an appropriation of the community and human cultures into our own consciousness. The group embedded reflection as a regular practice: “*Apart from occasional serendipitous corridor conversations it is difficult to find a forum in which you can just talk to colleagues about teaching successes and challenges*” (John, Interview 2). The increased confidence enabled members to “*write and share valued research outputs*” (John, Interview 2) and thus act in the world. As our collaboration deepened there was a movement from the practice of teacher education to theory and we confronted questions, such as: “*the problem of creativity - because it’s a commodity now*” (Shelley, Interview 2).

The third round of interviews were conducted focusing on the outcomes of the CREPE collaboration, values and contradictions. The interviews were reviewed and summarised by the participants and analysed looking for silences, contradictions and resolutions (Sandretto, 2009). This analysis identified four sites of tension: the nexus between research and teaching, between discipline and profession; and contradiction between our personal use values as researchers and teachers and the institutional exchange values.

Tension was experienced by some members, between teaching and research: “*Research is an artificial construct. I think education is, at its core, about development. I think development is something, in a fundamental sense, that we're keyed into as human beings. This is something more fundamental than research*” (John, Interview 2). One response to this was to think of our research as embodied (Forgasz & McDonough, 2017), “*There’s a lot to be said about us being fully present and fully human, because if we are researching instruments, we bring our whole selves to that research process*” (Jo, Interview 2). The tensions in our identities as teachers enabled a growth to a more student focused pedagogy: “*I actually think that we should listen much more carefully to the student voice and to involve students in that process of thinking about how in our teaching and learning they are the ones that experience it after all*” (Jo, Interview 2).

Finally, there was a feeling of the corrosive effects of contemporary academic life, as Marx (1904) expressed it, between exchange and use value: "*Some schools may take the commodity form of creativity, as it suits the business model that schools are becoming*" (Shelley, Interview 2). “*The neoliberalism that is occurring in the university is something we talk about in our conversations, but I don’t talk about that to my other colleagues. I think that a competitive environment isn’t helpful … there are really corrosive and damaging relationships in academia*” (Jo, Interview 2).

These meta-analyses based on individual yet collaborative interviews punctuated our work, providing opportunities for deep reflection when each member of the group could respond to the same questions and prompts and then respond again, in collaboration, to further unpack ideas and findings.The overarching collaborative research project has been central to the coalescing of our shared understanding of the process of this research, the benefits of collaboration and self-study methodology, and the value of forming a community of practice and impacts/changes to our teaching. The overarching project also brought mechanisms to explore embodied ways that mapped our transition to form a cohesive group. Finally, we have come to rely on the practices to progress the three other aspects of our CREPE group actions as represented by the model (Figure 2). The next element of the model to be unpacked is the focused group projects.

## **The Focused Research Projects**

Under the umbrella of the overarching collaborative research project a number of smaller projects were undertaken in teams of two or three. As colleagues we found alliances formed naturally with our interests. By discussing these alliances, the more formalised focused research projects were co-constructed.

*I was involved in two focused research projects and loved them both. Each gave me colleagues to work with who pushed me and supported me to consider things that I might not have. One project was about the use of drama in science to unpack and explore controversial issues. Through timeliness and good luck this project has really turned into something of value resulting in an online teaching resource around stem cells that is being taken up by teachers as they implement a new curriculum in year 11 and 12 biology.* (Peta, Reflection)

Because we operated as individuals within a collective we found that the focused research projects provided space to explore specific situated inquiries, supported by the cumulative resources of a wider group of academics all lending their experience and insight to each project. The democratic processes that infused each project generated greater breadth and depth of possibility.

*A group of 8 is hard to manage as a writing or research group. I usually prefer to work with one or two others, so I thought the focused research projects were a good idea. We were able to all benefit from hearing from each focused research project regularly.* (Shelley, Reflection)

Opening our classrooms to one another in these projects, to observe or critically analyse our teaching practices, allowed for a sharing of teaching practices across discipline areas (Raphael, 2015). This led to insights into common issues, such as how to work with and challenge students’ preference for only one discipline area, such as science, (Anderhag, Hamza & Wickman, 2014) when they are training to be generalist teachers. Our improved teaching confidence has led, anecdotally, to improved student engagement in seminars and improved student evaluations.

*Not only have I had the privilege of stickybeaking into the research of others but I have also made discoveries important to my own pedagogy. There have been practical insights that have wandered straight into my teaching, such as the use of drama to engage students in both concepts and values. However, it is the model of focused research projects that intertwine to make a whole greater than its parts that has inspired me to engage my students to work on strategically directed learning activities, in groups, in rich learning environments such as museums and environmental parks. It has reminded me that teaching and learning is a collective social enterprise: through discussion, debate and conversation.* (John, Reflection)

Undertaking the focused research projects and sharing across the full group brought tacit understandings into the explicit contexts in which we work, vital in times of change.

## **International networking**

 We started this project with an international mentor, Professor Ann Schulte, and further developed our international connections by developing new ways of meeting in online spaces (*Kahoodles*, see later) to network and engage. We also actively, as a group, regularly read scholarly works and engaged in discussions with closer colleagues when possible. We took opportunities to engage beyond ourselves and our own practices, as often as we could.

### ***Our international mentor***

 We met our international mentor while she was a Visiting Scholar at our University.

*I was new to Deakin University when a notice about Ann’s seminar came to my inbox. “THIS is someone I need to speak to” went through my head as I read her presentation abstract, so I phoned her. What I found was a wonderfully responsive and encouraging colleague. Ann offered advice and guidance to me as I called for a group to come together. She was present in those first few meetings – even after she left Deakin University to return to her US home. She has continued to provide support and advice from afar and we welcomed the mentoring.* (Peta, Reflection)

We seized the opportunity to engage our mentor in initial conversations and this encouraged those new to self-study and supported those with more experience.

*Ann’s mentoring was part of a halting progress towards putting myself into the public gaze. Being a physical and then virtual presence since our meeting has been a pole star to our sometimes quotidian conversation. The initial impulse of engaging a mentor segued into the practice of ‘Kahoodling’ which engaged colleagues and guides from across the world. Together with our collective reading of the literature it established a practice of entangling our thinking and practice with the wisdom of the self-study community.* (John, Reflection)

### **The ‘Kahoodle’**

 The group decided to expand our connections by drawing upon our international colleague’s network for online discussions that we defined as the “Kahoodle”. We spoke about what we wanted to achieve with our collaboration and decided that strong relationships with researchers outside both our group and country would benefit us all with their guidance and rich research conversations. The *Kahoodle* was thus conceived and we entered this definition into the Urban Dictionary (See Figure 3).

[Kahoodle](http://www.urbandictionary.com/define.php?term=kahoodle&defid=8301234)

A local or international collaboration between researchers in self-study methodology. Intended to be positive and generative in nature.

“Our Melbourne-based research group organised a *kahoodle* to link with researchers with similar interests in other parts of the world.”

[#conference](http://www.urbandictionary.com/define.php?tag=conference) [#collaboration](http://www.urbandictionary.com/define.php?tag=collaboration) [#meeting](http://www.urbandictionary.com/define.php?tag=meeting) [#seminar](http://www.urbandictionary.com/define.php?tag=seminar) [#symposium](http://www.urbandictionary.com/define.php?tag=symposium) [#webinar](http://www.urbandictionary.com/define.php?tag=webinar) by [crepe030615](http://www.urbandictionary.com/author.php?author=crepe030615) June 04, 2015

<http://www.urbandictionary.com/define.php?term=kahoodle>

**Figure 3: The Urban Dictionary definition of a Kahoodle.**

*As I came to know more about self-study as a methodology, I began to understand that there was a wider community of very generous self-study researchers who were interested in connecting up and sharing the conversation about teaching and teacher education. The idea of using a conferencing system to connect our group with self-study colleagues in other parts of our city as well as other parts of the world was something we agreed would be worthwhile. We wondered what to call it, ‘a tele-conference’ seemed too formal, ‘a meeting’ seemed too boring. Someone suggested a collection of self-study researchers might be something friendly like ‘a huddle’. Another cheekily suggested that in our shared methodological knowing such a gathering would be ‘in kahoots’. After a few more mad minutes the name ‘kahoodle’ was selected and for good measure, we defined the word in Urban Dictionary. At least, we thought, when we heard the term, we would all know what we were talking about*. (Jo, Reflection)

Our first Kahoodle engaged researchers from the USA and Australia. We have hosted four events in which we experienced collegiality and research understandings, practiced with arts-based inquiry techniques to deepen reflection, and engaged positive networks for further exploration and development.

*Prior to each ‘Kahoodle’ we offered arts-based inquiry projects for all participants and invited everyone to share these. This scaffolded conversations around metaphoric meaning of the artefacts and process of creating the artefacts. This helped tap into hidden or subconscious meaning for individuals and groups, that I think takes us to the heart of self-study.* (Shelley, Reflection)

We thus tied our practice and research firmly to the community beyond our and broadened the scope of our research collaborations through developing and maintaining international networks.

## **Enactments of scholarship**

The enactment of scholarship draws together a number of activities that the group undertook which focused outward to the university and wider research community. These included creating an online learning module, hosting seminars and conference presentations and mentoring research groups in other faculties and divisions. The enactment of scholarship not only improved our own practices, but also shared our understandings with other teacher educators and researchers. Apple (2013) suggests a major task of the critical scholar and activist in education is to “bear witness to negativity” (p. 41). He challenges critical scholars “to point to... spaces of possible action” and “critically examine current realities with a conceptual/political framework that emphasizes the spaces in which more progressive and counter-hegemonic actions can, or do, go on” (p. 41). We shared our research findings with colleagues both informally and formally through seminars, symposia, and conference presentations.

*Presenting our research to other colleagues was an important part of our work in the CREPE group. We had a story worth telling. We were taking the brave action of opening our classrooms to one another, inviting critical friends to join us in improving our teaching practice. We felt that our colleagues should be provided with an opportunity to know about these collaborations, the positive outcomes we derived from them, and what we were learning about our teaching. Most often we presented collaboratively, in the same way we had researched*. (Jo, Reflection)

One of the enactments was working with groups of Librarians to encourage them to form self-study and research groups themselves. In this way the energy, ideas, and practice developed within our group spread throughout the university to students and to other Faculties and Divisions. Another enactment was the opportunity for us to develop an online learning module about self-study as a methodology for improving research and teaching through researching one’s own practice.

*We felt enamoured with self-study methodology and wanted to ‘share the love’. Fortunately, we had three opportunities presented to us. 1: the Graduate Certificate in Higher Education was looking for some support to offer students examples about how to conduct research into their own teaching practice; 2: a Leadership unit wanted to use self-study practices to support mentor and mentee investigations; and 3: a final year Bachelor unit wanted to consider what great reflective practice could look like using self-study methodologies. We decided to produce a teaching and learning program – reflecting Samaras’s (2011) 5 ideas about self-study. We made short videos to scaffold and demonstrate. We generated some writing to exemplify. We crafted 5 modules that would support the implementation of self-study methodology across all three units. Ann (our International Mentor) even crafted a video superbly exemplifying her self-study research.* (Peta, Reflection)

The reflection necessary to develop these enactments of scholarship drew our group together and developed our shared understandings. The boundaries between the elements of this model were fluid as the model is only a crystallisation of a dynamic, organic research group/process. During our discussions with our mentors and colleagues, new focused research emerged and then generated new understandings, which were then expressed in our enactments of scholarship.

## **Our central practices**

Our daily involvement in our teaching and learning groups, project teams and course teams was not optional, but rather a requirement of our jobs. Participation in the CREPE group was different, as active involvement was through choice, we responded to an invitation to meet and to develop our group practices together and with flexibility as a necessity from the beginning. Florida (2012) suggests many people want to be able to “bring themselves to work” – their real identities and selves – “rather than create a separate, instrumental self to function in the workplace” (p.93). Our group set about creating alternative spaces (beach house retreats, online community spaces) and processes (personal check-ins, arts-based inquiries) to be and become our authentic selves as initial teacher educators. To reflect this in our model we called these our central practices: group meetings, reading discussions, retreats, and arts-based inquiry.

## **Group meetings and reading discussions**

We set up monthly meetings which we could attend face-to-face for those on campus, or via video or phone for those off-campus or located at different campuses. Each meeting had a clear agenda and required some preparation in the way of reading (suggested by members in turn), and an arts-based response to a prompt. The meetings were important for keeping our overarching and smaller focused research projects on track and they needed to be something that we felt compelled to attend.

*Let’s face it, at the best of times, we often resent having to attend meetings. We have all sat in meetings thinking about all the important work that we could or should be getting done if we weren’t obliged to be there. To my surprise, CREPE meetings became something I looked forward to and attendance was steady with our members joining remotely from regional areas and even when they were abroad.* (Jo, Reflection)

We began each meeting with a process of personal ‘checking in’, and although this level of sharing felt a little uncomfortable at first, we all agreed that it proved key to the success of our meetings.

*Spending a small amount of time listening to some news or a story unrelated to work reminded us that we were an interesting and diverse group of people, with more complex lives and wider interests than any of us had guessed. Surprisingly, it took a while to get used to talking about something other than work with colleagues. … The check-in time would often lead to laughter and expressions of empathy that served to unify the group and set a positive tone for a productive meeting that advanced our work in teacher education in meaningful ways.* (Jo, Reflection)

In these meetings we each reported on the progress of our focused research projects and shared our artefacts as responses to the arts-based task set for the month and discussed our readings. We also discussed our trajectory and reflected on our overarching findings. These were direction setting and reflective meetings.

**Retreat**

For a few days in each year we planned a research retreat away from the university. To go on a retreat was to withdraw from the usual business of life in order to take time to reflect.

*The place and space mattered. We found an affordable, and slightly ramshackle, beach house on a nearby island that could accommodate us all. It had multiple living spaces including a wide front porch that overlooked the ocean. I found the experience of relocating our discussions about our teaching into these spaces was a way of making the familiar strange. By shifting from the micro focus of our day to day work, to a wide-angle focus in this new environment, we were able to make new connections in our thinking and imagine greater possibilities for our teaching practice.* (Jo, Reflection)

Our annual research retreat offered us the opportunity to come together face-to-face as a research group over a few days and nights and this provided a space for getting to know one another and our practice in different ways.

*The retreat provided an avenue for me to gain insight into the passions of my colleagues: Peta’s passion for sustainability, John’s love for words and deep thinking, Shelley’s amazing artworks expressing her identity, and Jo’s creative ideas for dance and drama. I would not have been able to get to know all this by just meeting on the corridors of the university or even at school forums*. (Esther, Reflection)

The large blocks of time allowed us to work towards more satisfying conclusions of our research tasks such as data analysis, arts-based inquiry, and conversations. The retreat to a quiet and conducive environment was an important catalyst in renewing thinking, creative collaboration, and productive writing.

### **Arts-based inquiry**

The first retreat provided the time and space for our first foray into arts-based research activity (Barone & Eisner, 2012; Finley, 2011). Two of our members came from arts discipline areas with experience in arts-based approaches to research and offered to design and lead activities at the retreat. This offer was taken up enthusiastically by other members in subsequent meetings.

*We considered the diverse needs of the group and used multi-modal arts-based inquiries. We paid attention to the intention of creating artefacts and interpretative approaches to understanding their meanings. We came to see the value in metaphoric and symbolic meanings that emerged from this process.* (Shelley, Reflection)

The natural environment enlivened our senses, and these multi-modal arts-based inquiries, being embodied and aesthetic experiences, were highly memorable and much talked about after the retreat. They have been written about in more detail elsewhere (Hannigan, Raphael, White, Bragg & Cripps Clark, 2016; Raphael, Hannigan & White, 2016; Hannigan & Raphael, 2020). The group decided that arts-based inquiry should become a regular part of our practice, with an arts activity set for each month to be shared at our monthly meetings and for *Kahoodles*.

*These activities, carried out through various mediums, evoked deeper reflections in me and resulted in inspiring and re-invigorating me in my teaching as I adapted some of these activities in my seminars*. *They made sure I participated in every one of the subsequent activities within the retreats and in our monthly meetings*. (Esther, Reflection)

In a pressurised climate of work-place change, time to be playful and create can be seen as a luxury. However, it is through play that we can experiment, without fear of consequences, to problem solve, draw connections, and make new discoveries (Vygotsky, 1933/1966). As well as being playful and enjoyable, the arts-based inquiries were important for opening up discussions about our teaching and learning philosophies and practices. We often commented that we surprised each other and ourselves about the depth of inquiry, the pleasure of reflecting, and the enjoyment found in creating and embellishing the artefacts.

# Discussion and Conclusion

We set out with a desire to work collectively to support innovation and improve our students’ learning and thus explored how our values and beliefs informed our professional practice and how we could disrupt our present practices and ideologies. As we developed and enacted our model of collaboration and sought to enact scholarship, enhance our teaching, and produce research outputs, a number of issues emerged:

* maintaining devolved and flexible leadership;
* remaining open and flexible to the group’s evolving strengths and interests; and
* dissemination and networking beyond the group to enrich our collaboration and research.

Leadership, initially, was not tightly scripted. The idea was to organically nurture a devolved platform of co-research/co-researchers. However, it became easier if one person managed the coordination and organisation; if only for the Research Assistant to receive consistent instruction and to report to one person. In our research enactments, leadership has remained devolved. At different times, different group members have stepped up to take responsibility for presenting seminars; taking on lead author of a writing project; acting as mentor/critical friend to the CREPE group; or organising the arts-based inquiries. Although there were hiccups, the distributed leadership model (Spillane, 2013) challenged members to respond creatively to emerging opportunities and continued to develop our model.

The model, operating at multiple levels, empowered and connected academics new to our university and those isolated in distant campuses. Additionally, working in collaboration allowed for natural synergies and connections between our inquiries to be explored. The success of the focused research projects (applying critical friend method) was an example of how collaboration at differing levels was beneficial across the model and to the group as a whole. The model was organic as it grew and developed to suit the actions and developments of the group, drawing its power from the participants in a *living theory* (Whitehead, 1995).

Although this model of collaboration was contingent in its history and social context, it has implications for the practice of collaboration across teacher education more generally. The overarching collaborative research project worked to create safe spaces and critical friend relationships through which we immersed ourselves into the focused research projects, as well as providing a meta-analysis and deeper reflexivity that gave voice to our practices as teacher educators. It generated new knowledge about the nature and process of collaboration and the development of epistemic agency both collectively and individually (Damşa, Kirschner, Andriessen, Erkens & Sins, 2010; Raphael, Hannigan, & White, 2016).

The mix of social and professional engagement both lightened and enlightened the experience and generated stronger relationships. This playfulness gave freedom to experiment with arts-based inquiries during our monthly meetings and research and writing retreats. In turbulent times, these arts-based inquiries became not only something that all co-researchers looked forward to and enjoyed, but also generated data to reveal our individual voices, at times in contrast and often in harmony, but always provoking thought and conversation. Together with data generated in our individual and overarching projects, new understandings of our praxis were reveeled in response to the challenges we faced as teacher educators. At the heart of our community of practice is the crossing of discipline boundaries and ‘speaking back’ to our practice, we opened the door to our classrooms and invited our colleagues in and this created a third space (Gutiérrez, Baquedano‐López & Tejeda, 1999), one in which we discovered new possibilities and potential, always with a commitment to advancing our teaching practice and improving our students’ learning.

# References

ACARA: Australian Curriculum and Reporting Authority (2013). Teacher Professional Standards, Canberra, Australia: Australian Government. Retrieved from http://www.acara.edu.au/

AITSL: Australian Institute for Teaching and School Leadership (2014). Australian Professional Standards for Teachers, Canberra, Australia: Australian Government. Retrieved from http://www.aitsl.edu.au/australian-professional-standards-for-teachers

Akkerman, S. F., & Bakker, A. (2011). Boundary Crossing and Boundary Objects. *Review of Educational Research, 81*(2), 132-169.

Anderhag, P., Hamza, K-M., Wickman, P-O. (2014). What can a teacher do to support students’ interest in science? A study of the constitution of taste in a science classroom. *Research in Science Education*. 749-784 Springer.

Apple, M. (2013). *Can Education Change Society?* New York: Routledge.

Barone, T., & Eisner, E. (2012). *Arts Based Research.* Thousand Oaks, CA: Sage.

Brandom, R. (2000). *Articulating reasons: An introduction to inferentialism*. Cambridge, MA: Harvard University Press.

Breidenstein, A., Fahey, K., Glickman, C., & Hensley, F. (2012). *Leading for powerful learning: A guide for instructional leaders*. New York, NY: Teachers College Press.

Brew, A., Boud, D., Lucas, L., & Crawford, K. (2013). Reflexive deliberation in international research collaboration: Minimising risk and maximising opportunity. *Higher Education, 66*(1), 93-104.

Bullough, R. V., & Pinnegar, S. E. (2007). Thinking about the thinking about self-study: An analysis of eight chapters. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International Handbook of Self-Study of Teaching and Teacher Education Practices* (pp. 313-342). Dordrecht: Springer.

Chan, C., & Clarke, M. (2014). The politics of collaboration: discourse, identities, and power in a school–university partnership in Hong Kong. *Asia-Pacific Journal of Teacher Education, 42*(3), 291-304. doi:10.1080/1359866X.2014.902425

Craig, C., Curtis, G., & Kelley, M. (2016). Sustaining self and others in the teaching profession: A group self-study. In D. Garbett, & A. Ovens. (Eds.). *Enacting self-study as methodology for professional inquiry.* 133-140.

Cripps Clark, J. (2014). Towards a cultural historical theory of knowledge mapping: collaboration and activity in the zone of proximal development. In *Digital Knowledge Maps in Education* (pp. 161-174): Springer, New York, NY.

Curry, M. W. (2008). Critical friends groups: The possibilities and limitations embedded in teacher professional communities aimed at instructional improvement and school reform. *Teachers College Record, 110*(4), 733-774.

Damşa, C. I., Kirschner, P. A., Andriessen, J. E. B., Erkens, G., & Sins, P. H. M. (2010). Shared Epistemic Agency: An Empirical Study of an Emergent Construct. *Journal of the Learning Sciences, 19*(2), 143-186.

Deakin University (2014). *Strategic direction*. Retrieved from http://www.deakin.edu.au/about-deakin/strategic-direction

Edwards, A. (2010). *Being an Expert Professional Practitioner: The Relational Turn in Expertise*. Dordrecht Heidelberg: Springer.

Finley, S. (2011). Critical Arts-based Inquiry: the pedagogy and performance of a radical ethical aesthetic. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research*. 4th Ed. (pp. 435-450). Thousand Oaks, CA, USA: SAGE Publications.

Florida, R. (2012). *The rise of the creative class.* New York: Basic Books.

Forgasz, R., & McDonough, S. (2017). “Struck by the Way Our Bodies Conveyed So Much:” A Collaborative Self-Study of our Developing Understanding of Embodied Pedagogies. *Studying Teacher Education, 13*(1), 52-67. doi:10.1080/17425964.2017.1286576

Franz, N. K. (2005). Transformative Learning in Intraorganization Partnerships: Facilitating Personal, Joint, and Organizational Change. *Journal of Transformative Education, 3*(3), 254-270.

Geursen, J., Berry, A., Hagrbruk, E., Peters, C., & Lunenberg, M. (2016). Learning together as teachers and researchers: Growing shared expertise in a self-study community of inquiry. In D. Garbett, & A. Ovens. (Eds.). *Enacting self-study as methodology for professional inquiry.* 155-162.

Greene, W. L., Kim, Y. M., & Marioni, J. L. (2007). The reflective trio: A model for collaborative self-study in teacher education. *KEDI Journal of Educational Policy, 4*(1), 41-58.

Gutiérrez, K. D., Baquedano‐López, P., & Tejeda, C. (1999). Rethinking diversity: Hybridity and hybrid language practices in the third space. *Mind, Culture, and Activity, 6*(4), 286-303.

Handal, G. (1999). Consultation Using Critical Friends. *New Directions for Teaching & Learning,* 59-79.

Hannigan, S. M., & Raphael, J. (2020), “Drawing out” understandings through arts-based inquiry in teacher education*, Qualitative Research Journal*, pp. 1-14, doi: 10.1108/QRJ-03-2020-0021.

Hannigan, S., Raphael, J., White, P., Bragg, L., & Cripps Clark, J. (2016). Collaborative reflective experience and practice in education explored through self-study and arts-based research. *Creative Approaches to Research,* *9*(1), 84-109.

Hamilton, M. L. & Pinnegar, S. (1998). Conclusion: The value and promise of self-study In M. L. Hamilton, S. Pinnegar, T. Russell, J. J. Loughran, & V. K. LaBoskey, (Eds.), *Reconceptualizing teaching practice: Self-study in teacher education*. London: Falmer Press.

Hamilton, M. L., & Pinnegar, S. (2013). A Topography of Collaboration: Methodology, identity and community in self-study of practice research. *Studying Teacher Education, 9*(1), 74-89.

Hohensee, C., & Lewis, W. E. (2019). Building Bridges: A Cross-Disciplinary Peer-Coaching Self-Study. *Studying Teacher Education, 15*(2), 98-117. doi:10.1080/17425964.2018.1555525

Hostetler, A., Mills, G., & Hawley, T. (2014). *Co-conspirators and critical friends: Teaching and learning action research in an era of rapidly developing technologies.* Paper presented at the Changing practices for changing times: Past, present and future possibilities for self-study research: Proceedings of the 10th International conference on the self-study of teacher education practices.

Jess, M., Atencio, M., & Carsel, N. (2016). The developmental physical education group: An emergent collaborative self-study. In D. Garbett & A. Ovens (Eds.), *Enacting self-study as methodology for professional inquiry*. Herfordshire: U.K.: S-STEP.

King, F., Logan, A., & Lohan, A. (2019). Self-Study Enabling Understanding of the Scholarship of Teaching and Learning: An Exploration of Collaboration among Teacher Educators for Special and Inclusive Education. *Studying Teacher Education, 15*(2), 118-138. doi:10.1080/17425964.2019.1587607

Kitchen, J., Berry, M., & Russell, T. (2019). The Power of Collaboration. *Studying Teacher Education, 15*(2), 93-97. doi:10.1080/17425964.2019.1628560

LaBoskey, V. K. (2007). The methodology of self-study and Its theoretical underpinnings. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International Handbook of Self-Study of Teaching and Teacher Education Practices* (pp. 817-869). Dordrecht: Springer.

Lomax, P. (1991). *Managing better schools and colleges: The action research way*. Bristol, United Kingdom: Longdunn Press.

Loughran, J. J. (2007). Learning through self-study: The influence of purpose, participants and context. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International Handbook of Self-Study of Teaching and Teacher Education Practices* (pp. 151-192). Dordrecht: Springer.

Louie, B. Y., Drevdahl, D. J., Purdy, J. M., & Stackman, R. W. (2003). Advancing the Scholarship of Teaching through Collaborative Self-Study. *The Journal of Higher Education, 74*(2), 150-171. doi:10.1080/00221546.2003.11777194

Lunenberg, M., Korthagen, F., & Zwart, R. (2011). Self-Study Research and the Development of Teacher Educators' Professional Identities. *European Educational Research Journal, 10*(3), 407-420. doi:10.2304/eerj.2011.10.3.407

Marx, K. (1904). *A contribution to the critique of political economy*. Chicago: Kerr.

Patton, M.Q. (2002) Qualitative Research & Evaluation Methods, 3rd Edition. London: Sage

Pithouse-Morgan, K., Coia, L., Taylor, M., & Samaras, A. P. (2016). Polyvocal research jamming: A quartet enacting methodological inventiveness in self-study. In D. Garbett, & A. Ovens. (Eds.). *Enacting self-study as methodology for professional inquiry.* 27-36.

Raphael, J. (2015). Drama, Hope and Imagination in Education for Sustainability. In S. Schonman (Ed.) International Handbook of Arts in Education; Wisdom of the Many. (Vol. 3). Maastricht; New York: Waxmann.

Raphael, J., Hannigan, S., & White, P. (2016). Drawing out understandings of collaborative self-study in teacher education. In D. Garbett, & A. Ovens. (Eds.). *Enacting self-study as methodology for professional inquiry.* 109-118.

Russell, T. (2010). Self-study by teacher educators. *International encyclopedia of education, 3*, 689-694.

Samaras, A. P. (2011). *Self-study teacher research: Improving your practice through collaborative inquiry*. Los Angeles: Sage Publications Inc.

Sandretto, S. (2009). Theoretical and Methodological Tensions in a Poststructural, Collaborative Self-Study Research Project. *Studying Teacher Education, 5*(1), 89-101. doi:10.1080/17425960902830476

Soliman, I. (2001). Collaboration and the Negotiation of Power. *Asia-Pacific Journal of Teacher Education, 29*(3), 219-234. doi:10.1080/13598660120091838

Spillane, J. P. (2013). *Distributed leadership*. San Francisco, CA: Jossey-Bass.

Star, S. L., & Griesemer, J. R. (1989). Institutional ecology, translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science, 19*(3), 387-420.

TEMAG: Teacher Education Ministerial Advisory Group. (2014). *Action Now: Classroom Ready Teachers Report.* Canberra, Australia: Department of Education.

Vygotsky, L. S. (1933/1966). Play and its role in the mental development of the child. *Psychology and Marxism Internet Archive.* Retrieved from <http://www.marxists.org/archive/vygotsky/works/1933/play.htm>

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Wenger, E. (2006). Communities of practice: A brief introduction. Retrieved from http://www.ewenger.com/theory/communities\_of\_practice\_intro.htm

Wenger, E. (2010). Conceptual Tools for CoPs as Social Learning Systems: Boundaries, Identity, Trajectories and Participation. 125-143. doi:10.1007/978-1-84996-133-2\_8

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, Massachusetts: Harvard Business School Press.

White, P. J. (2014). Collaborative Reflective Research Project – Expressions of Interest. Email invitation to the School of Education staff, Deakin University.

Whitehead, J. (1995). Self-study, living educational theories, and the generation of educational knowledge. *Studying Teacher Education, 5(*2), 107–111.

Woolley, A., Chabris, W., Pentland, C. F., Hashmi, N., & Malone, T. W. (2010). Evidence for a Collective Intelligence Factor in the Performance of Human Groups. *Science, 330*(6004), 686-688. doi:10.1126/science.1193147

Yoo, J., Heggart, K., & Burridge, N. (2019). Collaborative Coteaching (CCT): Practitioner learning through shared praxis. *Australian Journal of Teacher Education, 44*(4).

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