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Collaborative Coteaching (CCT): Practitioner Learning through Shared Praxis

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This paper explores the benefits of coteaching a philosophy and ethics subject for final year Australian primary preservice education students. It depicts the learning experiences of two early career academics, who were the coresearchers and coauthors of this article. A third author acted as a critical friend who facilitated reflective discussion around their coteaching practices. The coteachers adopt the living theory methodology to investigate collaborative coteaching as an effective model of instruction in higher education through a case study of their own practice. The primary data sources include both coteachers' weekly journals, an interview discussion with a critical friend, informal conversations and student surveys. The main themes emerging from the data include: the evolution of the coteaching relationship, practitioner learning and the viability of coteaching as an effective pedagogical tool. The findings illustrate the potential benefits of collaborative coteaching, particularly within the teacher education field.

Keywords: collaborative coteaching, self-study, teaching as praxis, professional learning Communities

Introduction

Coteaching, also referred to as collaborative coteaching (CCT) or team-teaching, involves two teachers of equal status sharing planning, teaching and learning strategies and assessment in a teaching partnership (Bouck, 2007). This instructional mode can benefit academics and students by adding an extra layer of support in the classroom that can enhance student outcomes (Roth, Tobin, Zimmermann, Bryant & Davis, 2002). CCT, as opposed to simply CT (coteaching), is characterised by a strong collaborative relationship at all stages of instruction (Murphy & Martin, 2015). Although the coteaching relationship has been commonly referred to as coteaching (CT), it will be defined as CCT within this paper to stress the significance of teacher collaboration (Crow & Smith, 2005). The primary difference between the two models lies in their purpose. Collaborative coteachers are not motivated to teach together to minimise the administrative and teaching workload (Milne, Scantlebury, Blonstein & Gleason, 2011). Instead, they seek to increase learning opportunities through the deep and dynamic interaction and sharing expertise through regular reflective dialogue about practice (Murphy & Martin, 2015). Such dialogue, or 'cogens,' refers to the co-generative dialogue between practitioners who plan, implement and assess student learning (Scantlebury, Gallo-Fox & Wassell, 2008). The term cogens will be defined below.

This study investigates CCT as an effective teaching approach in higher education from the perspective of lecturers, rather than students, to demonstrate how it can be adopted in a university context. It approaches CCT through a case study of two early career academics' coteaching experiences within a philosophy and ethical practice subject for 35 final-year primary teacher education students. The coordinator of the subject suggested the coteaching approach to accommodate the needs of a larger class and to generate research opportunities for the coteachers. She acted as a critical friend and as a third author of this paper. This philosophy and ethical practice subject presented a fertile opportunity for coteaching due to its reflexive subject matter. The philosophical issues discussed, such as the ethical issues in relation to the code of conduct, teacher professionalism and social justice issues, required frequent interactive classroom discussion to facilitate understanding. It was believed that having two instructors would help encourage active student group discussion and debates. A final reason was the uncertainty surrounding the future delivery of this subject. Due to the lack of space to cover core curriculum subjects, there was a plan to embed it into an Inclusive Education unit, which covered a distinctly different content area. The subject coordinator believed this was due to the increasingly pragmatic view of teaching as a technical and skills-based profession. The coordinator hoped to collect more data about the unit's value in developing preservice teacher professional identity.

Both tutors were always present in the classroom. They additionally acted as researchers who engaged in self-study to explore their coteaching approach. They modelled Schon's (1987) approach to practice through reflecting in action. The coteachers collaborated to implement innovative teaching approaches through an online teaching portfolio and the use of *Google classroom*. The study provides an in-depth overview of the coteachers' experience of CCT. It documents the gradual deepening intensity of collaboration and describes how CCT helped the coteachers enhance their teaching. The modes of data collection included weekly reflective teacher journal entries, an interview discussion with a critical peer, student surveys and other informal communication, such as notes from weekly meetings, email discussions, face to face conversations and classroom observations. The researchers framed their data analysis through Glaser and Strauss's (1967) grounded theory approach, guided by their three research questions. They aimed to explore their coteaching relationship, the benefits of coteaching and the viability of CCT an effective teaching model.

Coteaching in Higher Education

Coteaching is increasingly prevalent as teachers work collaboratively with specialist teachers or in professional teams. Modelling collaborative teaching partnerships is particularly significant to preservice teachers as they require effective models of working cooperatively with classroom practitioners. Coteachers can model the reflexive and the collaborative process through coteaching a learning sequence or activity (Crow & Smith, 2005). As preservice teachers witness the collaboration and dialogue that underpins CCT, they are given visible examples of communicating and cooperating with others. CCT is subsequently an important instructional mode to consider in higher education as contemporary learning is characterised by collaboration, cooperation and joint problem solving (Murphy & Martin, 2015). It is also a valuable teaching model for preservice teachers, who are increasingly being placed in coteaching circumstances in their in-school professional experience visits (Murphy, Scantlebury & Milne, 2015). CCT also presents a new view of the professional experience model that extends beyond the traditional master-apprentice model, in which the 'learning to teach' model is activated through teaching aside an expert teacher through a model of shared practice and responsibility. This may address the concerns raised by many pre-service teachers

about feeling isolated and unsure of their role in the classroom by repositioning them with specific skills to work with the supervising teacher. This study takes a different approach to teaching in higher education by exploring the relationship between two early career academics and their class as they engage in and model the CCT process during the academic (as opposed to the practical) component of initial teacher education.

Collaborative Coteaching (CCT)

This study explores a coteaching model that requires intense levels of collaboration. Cook and Friend (1995) outline six different arrangements, including: one teacher teaching whilst the other is observing, one teacher teaching whilst the other is assisting, both teachers teaching parallel to each other by dividing the class into two groups, two teachers dividing the content and student through station teaching, one teacher working with large groups and the other with smaller groups through alternative teaching and finally, both teachers delivering the instruction simultaneously through team teaching. In addition to the diverse possible arrangements, a coteaching relationship can evolve as teaching progresses. Coteachers may initially opt for supportive and parallel teaching approaches as it requires less coordination and collaboration (Thousand, Villa & Nevin, 2006) but may move onto collaborative coteaching (CCT) as greater trust is established over time. CCT commonly evolves through the teaching experience as trust is generated through working respectfully together. It involves the highest degree of mutual interaction within the different coteaching approaches, as practitioners diligently invest their intellect and energies to maximise their partnership to benefit themselves and their students (Kalchman & Kozoll, 2012).

CCT is grounded in shared lived experiences as coteachers occupy the same teaching space. Roth and Tobin (2002) explain how coteachers can engage in meaningful professional dialogue about common experience that enhances their practice; they propose that CCT involves creating: "shared experiences that become the ground from which understanding of praxis is developed in professional conversations" (p. 9). The term praxis refers to the insider knowledge derived from lived experience, which opposes the 'outsider perspective' of theoretical understanding (Roth & Tobin, 2004). Roth and Tobin (2002) depict CCT as the process of "being-in/with" another individual; they view learning from a phenomenological perspective of "knowing and learning in everyday praxis" and in which our bodies are open to and shaped by its social and material context (p.9).

This interrelated teaching approach relates to Freire's (1970) notion that new knowledge is created through the interaction between diverse knowledge bases, with the ". . . invention and re-invention, through the restless, impatient, continuing, hopeful inquiry men [sic] pursue in the word, with the world, and with each other" (p.58). Roth and Tobin (2002) refer to Bourdieu's term 'habitus,' to explain how every day experiences generate an implicit framework used to interpret and conceptualise the world; this framework constructs the patterns that determine our "actions, perceptions, and expectations" (p. 10). CCT hence generates opportunities for practitioners to authentically learn from each other as they unconsciously adopt the tacit habitus of their teaching partner. It further creates a shared habitus and a dynamic community of practice in which, "lived experience provides the starting points for professional interrogation and development of understanding through critical and informed analysis" (Roth & Tobin, 2002, p.45). Rogoff (1994) emphasises the cooperative nature of such learning, as learners work collaboratively within a context of shared meanings, objectives and practices to progress individual and group knowledge.

The professional dialogue generated by CCT, otherwise known as cogenerative dialogue (cogens), is grounded in practical experience (Channmugam & Gerlack, 2013).

Cogens can help coteachers to reflectively engage in teaching as praxis by allowing them to discuss and 'co-generate' their experiences. Through reflecting on their practice and their learning in situ, coteachers co-construct knowledge as they share and make visible their thinking and decision-making processes (Schon, 1987). Cogens can thus make explicit the differences in teachers' philosophies and enable teachers to critically reflect upon unchallenged assumptions regarding their practice (Carambo & Stickney, 2009). As it involves the joint construction of meaning, cogens also require coteachers to respectfully listen and learn from each other as they accept, accommodate and act on each other's views (Roth & Tobin, 2002). Finally, cogens revolve around shared objectives and outcomes, which means that coteachers can develop a collective consciousness as they share their expertise and knowledge to benefit the class (Roth & Radford, 2010). As a result, Murphy, Scantlebury and Milne (2015) refer to Vygotsky's cultural-historical theory to illustrate how the CCT relationship facilitates learning through the zone of proximal development, as teachers move from "coplanning, copractice and coevaluation" to being confident "creator[s] of new practice" (p. 285).

Living Theory Methodology and Professional Learning Communities (PLC)

Living theory methodology presents a view of educational research where practitioners engage in forms of self-study to generate educational theory that enhances the understanding and learning of individuals and their social contexts (Whitehead, 2009). Practitioners may seek to explore their own practices as they experience contradictions or a sense of dissonance in their practice. By investigating their practices and asking themselves the question, "How do I improve what I am doing?" (Whitehead, 2009, p.110), they can achieve greater congruence in their practice (McNiff & Whitehead, 2002). This study took a similar approach as the coteachers investigated their coteaching practices to uncover areas for improvement. They believed that a collaborative mode of coteaching could be an innovative teaching mode in higher education.

Through collaborative attempts to improve their practice, coteachers can establish professional learning communities (PLC). In this study, we define PLCs as a collaborative space in which teachers' collective responsibility promotes effective teaching practice and improved student outcomes. PLCs help teachers reflect, critically analyse and evaluate their practices by allowing them to work together on common goals within their coteaching partnership (DET, 2005). Wenger (1998) adopts a social theory of learning to explain how learning occurs through engaging in shared practical experience within communities of practice; this mutuality of experience can cultivate a shared identity. PLCs can hence promote the critical discussion and collaboration needed to inspire positive changes in practice (Stoll, Bolam, McMahon, Wallace & Thomas, 2006). Wenger (1998) proposes that learning and identity formation takes place in these communities through the working together on the same project and engaging in shared practices. DuFour (2004) further shares six traits of successful PLCs including: (1) a joint focus on learning; (2) collaborative relationships that are centred on common beliefs, values, and vision and engender mutual trust and respect; (3) shared inquiry into quality practice (4) translating knowledge into practice; (5) maintaining continual improvement and development; and (6) tangible impacts on practice. Coteaching embodies such a learning community by revolving around mutual respect, clear communication and mutual responsibility (Scantlebury et al., 2008).

The Challenges of Coteaching

Despite coteaching's documented advantages in the K-12 setting, teacher educators in higher education seldom model the collaborative teaching approach due to budget constraints and staff shortages (Graziano & Navarrete, 2012). Further, cost-cutting measures have led to higher education classrooms where one instructor caters for a maximum number of students (Graziano & Navarrete, 2012). Moreover, with the increase demand for scholarship, academics may feel more comfortable researching together rather than teaching with each other (Ferguson & Wilson, 2011). As a result, pre-service teachers are often unaware of coteaching's potential as a rich pedagogical tool and may be less proactive in establishing successful teaching partnerships.

Some key obstacles to coteaching include: possible conflicts in personalities and teaching approaches, the potential for power struggles and the lack of communication between coteachers (Graziano & Navarrete, 2012). More particularly, coteachers may also adopt unequal responsibility for the class due to time constraints. Time poor coteachers may rely on their partners to complete a larger bulk of the planning, implementing and evaluating of the teaching, which may cause friction (Ferguson & Wilson, 2011). They may also have little time to communicate and reflect on their practice, which can limit the effectiveness of this approach (Conderman & Johnston-Rodriguez, 2009). Finally, CCT can require more time to implement, as high level of resourcing is required for two teachers to plan and deliver instruction (Graziano & Navarrete, 2012).

Methodology

The self-study methodology was used to explore collaborative coteaching within one academic semester of a philosophical and ethical practice of teaching unit for final year Australian primary teacher education students. The subject coordinator for the unit arranged to have both tutors work together for one semester to explore coteaching's potential to generate innovative teaching practice and improved student learning outcomes. The tutors had equal power levels as they were both casual academics who had been teaching the subject separately for approximately four to five semesters. They were not well-acquainted with each other prior to this experience.

This study draws on the practices of living educational theory research to explore effective coteaching practices, which Whitehead (2009) defines as "an explanation produced by an individual for their educational influence in their own learning, in the learning of others" (p.104). The researchers attempted to generate principles of effective coteaching through investigating their own practice. The research was presented as a case study to provide an in-depth picture of the evolving nature of the coteaching relationship and CCT's effects on teaching and learning (Creswell, 2007). The coteachers acted as the researchers in this study to observe, record and experience the changes through being a part of the social world that is studied (Hammersley & Atkinson, 1995). They believed that acting as the researcher and practitioner would give them deeper insight into the impact of CCT as they could experience, reflect on, evaluate and research the coteaching process firsthand. This case study involves a variety of qualitative research tools (Winter & Munn- Giddings, 2001). The main sources of data were weekly reflective journal entries written by the coteachers and a tape-recorded interview discussion with a critical peer. The subject coordinator acted as the critical peer who conducted the interview with coteachers. Other data sources include student surveys, email communication, notes from weekly face to face meeting between both tutors and classroom observations. Using this data, the researchers sought to investigate the nature of the coteaching

partnership, as well as CCT's benefits and challenges. As the study progressed, the coteachers/researchers established three research questions, which included:
1)   What was the nature of the coteaching partnership in this study?
2)   What were the benefits of coteaching for tutors and students?
3)   What does this study reveal about the practicality of adopting coteaching in higher education?

Data Analysis

The researchers used inductive thematic analysis by coding the data from the coteachers' research journals, the interview data, face to face and email conversations, classroom observations and student surveys. The classroom observation was conducted by the coteachers, who reflected on each tutorial in their teaching journals. These journals involved the teachers freewriting about their coteaching experience. The coteachers individually coded their journal entries and classroom observations based on open coding to see what emerged from the data (Charmaz, 1995). Afterwards, they met to code the data collaboratively to see what similarities and differences emerged. They incorporated the grounded theory approach of developing "progressively more abstract conceptual categories to synthesize, to explain and to understand" the data by developing the first two research questions (Charmaz, 1995, p. 28). An interview was conducted by the subject coordinator to help the coteachers reflect on their experiences. The subject coordinator was interested in exploring CCT as an innovative and cost-effective teaching mode that would enhance the overall quality of instruction. This led to the addition of the third research question to explore the viability of CCT beyond this study. After these questions were clarified, the researchers revisited the early coding of themes from weekly emails and discussions between the coteachers so that they could determine the value of coteaching beyond their individual setting. These reflections took place via their journals, further email correspondence and face to face conversations. These entries were uploaded onto a shared online document so that they could read and reply to each other's comments. The researchers grouped repeated information into categories based on the three research questions, which included the differences between coteaching and teaching individually, its benefits and broader applicability. This data analysis approach highlights how data analysis reflects the researcher's role in interpreting participant interactions and encounters to make sense of the data (Charmaz, 1995).

Findings

This section provides an overview of key themes relating to the coteachers' experience of CCT and its applicability as an effective teaching model in higher education. The authors considered the viability of coteaching in terms of student and teacher satisfaction, as well as CCT's cost effectiveness. Researchers could identify the effectiveness of CCT in the study through positive student feedback and their own development as teachers, which they identified through their reflective journals and the interview data.

How Did the Coteaching Relationship Evolve Over Time?

It is important to note that the coteaching partnership does not remain static. Flexibility and openness to change can enable coteachers to maximise the benefits of teaching together. In

the beginning of this study, for instance, both teachers had a limited understanding of coteaching and subsequently planned and delivered the teaching separately to 'save time.' Their level of collaboration was minimal as they focused on efficiency rather than on learning from each other. They were also unfamiliar with the coteaching approach and the possibilities for collaboration. Author 2 initially mentioned feeling "a little nervous," about teaching the subject with another person after multiple experiences as the sole instructor. Author 1 also questioned how a teacher could retain their own teaching style, autonomy and presence with another person in "the driver's seat" as she asked, "How can you still be the same person or teacher if the context and perhaps role has changed? Can we still teach in a fluid way, without being disrupted and out of sync?"

To adjust to their new teaching situation, both coteachers negotiated the boundaries of their teaching role. For example, Author 2 wrote, "I asked Jo at the start how she wanted me to contribute. I didn't want her to feel that I was butting in or interrupting the flow of her lesson if I did say something, so I wanted to understand what her expectations were before we began." Author 1 responded to Author 2's comment to highlight the complexity of sharing the teaching space whilst still maintaining integrity to one's own teaching style. She wrote, "I was surprised that he asked me that, as even though we are coteaching, I thought it will only work if we are able to still be who we are. Otherwise, the coteaching would have become limiting rather than beneficial." Both comments reveal how the classroom was regarded as a shared and negotiated space that evolved dynamically.

Both instructors progressively became more interested in maximising the advantages of coteaching. Author 2 then suggested the 'intensity' of collaboration to be a potentially interesting area to explore. After the first four sessions, the coteachers decided to try alternative strategies to intensify collaboration and to explore its potential benefits. Author 1 responded to Author 2's ideas and suggested that they try co-planning and co-delivering the content to deepen their collaboration. This began the second phase of the coteaching, which was more closely aligned with CCT as it involved greater levels of collaboration at all stages.

Google docs was used as a convenient online platform to co-plan each tutorial in the second research phase. The coteachers also regularly communicated via email about potential research questions. Their online communication supplemented rather than detracted from their face to face meetings, which was evident in Author 2's reflection, "We're using technology (*Google Docs*) to help support us in the process, but it doesn't work just purely online. I think it's important to recognise that this takes place in our weekly early meetings as well – the face to face collaboration is just as important as the online interaction." In his final reflective journal entry, he commented on how increasing collaboration decreased the workload overall as they were able to draw on two sources of knowledge and expertise. Author 1 also related that she was less prone to overprepare as she needed to provide space for Author 2 to contribute to the class.

What Are the Benefits of CCT for Teachers and Students

Without intense collaboration, the coteachers believed that they could not maximise the benefits of coteaching. This took place through cogenerative dialogue about shared practice, where teachers could develop a critical and reflexive approach to teaching. Their cogenerative dialogue touched on both the similarities and differences in their practices. Discussion about similarities acted as a powerful source of affirmation. For example, Author 1 reflected on how she and Author 2, "occupied the shared space in similar ways" and how Author 2 appeared to be a "mirror to how I am as a teacher" in his teaching approach. Author 2 and Author 1

expressed feeling comfortable teaching together as they both valued dynamic and interactive environments that involved spontaneously choreographing learning activities.

Observing and engaging in cogenerative dialogue about the differences in teaching styles also enabled practitioners to learn. Author 1 wrote about observing Author 2's ability to extend student thinking through critical discussions, as she related, "I think I am too fearful about letting go of the control of space. But Author 2 does this well. He is able to step back and let students' voices direct the discussion." Author 1 revealed in the interview how she could develop her questioning skills by watching Author 2 model the process in the classroom. Author 2 equally referred to the opportunities to learn through observing how Author 1, ". . .brings in resources and, more importantly, ideas and concepts that I haven't heard of or considered, and I think that elevates the level of conversation to the academic." In the interview, he expressed how the direct modelling of practice gave him the confidence to implement activities he thought he would "never try in a million years," and he affirmed "I get it now. I have seen it happen. I can do it now. I will do it now."

Finally, coteachers engaged in cogenerative dialogue to explore new online teaching platforms such as *Google classroom*. In their weekly planning sessions, they discussed ways to experiment with *Google classroom's* questioning functions to help students to discuss and reflect on their learning. As they evaluated the benefits of this platform, they were able to extend their usages to include forms to survey students. They used *Google slides* to share materials and enable student to contribute to the resources in real time and *Google drawing* tools to create mind maps to help students to think critically about key philosophical and ethical issues. It was the first time both instructors used this online forum in their teaching. Their supportive partnership allowed them to experiment with new teaching tools to enhance their practice.

Coteaching also provided opportunities to develop greater reflexivity. For example, Author 1 considered the differences between CCT and teaching alone, such as having more time, mental space and a unique perspective on her teaching.

In the interview, Author 2 also spoke about "floating around" from group to group whilst Author 1 was leading, "to understand what [students] were understanding about the activity." He described how such 'understandings' were difficult to attain when he was caught up in the process of managing the whole class alone. Not only was Author 2 able to gauge his students' level of understanding, he felt that he was also able to see the teaching moment through his coteacher's eyes.

> *Doing things alone, preparing for classes, trying to keep students engaged is tough. Often in teaching I feel like I am sprinting short distances, running hard and fast. Having a coteacher has given me more space and time. Time to reflect, which is rare when I am teaching alone. Also, reflecting in my own head often doesn't lead anywhere. There is no fresh perspective. It has been good having someone else's views that I can learn from.*

Similar thoughts were expressed by Author 2, as he wrote about the isolation and the lack of critical feedback when teaching alone. He revealed how the coteacher's support allowed him to take risks to adopt new learning tools and strategies.

> *The real benefit that I am seeing from this coteaching with Author 1 is that I am no longer alone and being overly critical of my teaching – instead, by working together we can both develop our practice together, take risks together, and hopefully improve the learning experience for students together.*

Student feedback revealed how they enjoyed and felt supported by the CCT approach. In an informal mid-point student survey, many students used the "any other comments" space to provide feedback on this teaching mode. The positive comments reflected the coteachers' experiences of working collaboratively together. Students described how they felt that CCT

facilitated a supportive, informed and energetic learning environment. These thoughts are reflected in the student comments below.

Having two tutors in the room is amazing! The extra support makes the subject feel more enjoyable already. It is also very clear that both teachers are 'on the same page.' It makes me excited already for next week (Student A).

I have really enjoyed the tutorial today and appreciate hearing from two teachers' opinions on different topics (Student B).

I like the two-lecturer vibe. It is an energised way to teach and learn (Student C).

It is my first time to see two teachers taking turns to teach in a classroom. It can be a good case for me to rethink if it is possible for a classroom that more than 2 teachers teach at the same time but in what forms or is it suitable for any subject? (Student D)

Due to the positive nature of this experience, one student commented that all university classes should adopt the CCT model. A formal student evaluation survey at the end of the unit further revealed that Author 2 and Author 1's class ranked in the top two classes delivered by the entire Education Faculty. Finally, the tutors received an email from the Associate Dean of Teaching and Learning, commending them for their excellent teaching.

Exploring the Viability of Coteaching in Higher Education

The need to explore the practical viability of coteaching in higher education emerged through the interview. The coordinator was interested in coteaching's practical advantages and its applicability to higher education. She noted that CCT was successful in this study due to the coteachers' compatibility and their dedication to their work, which she considered to be a "lucky" turn of events. She also noted the "lack of ego" in their partnership, which may have been attributed to the fact that Author 1 and Author 2 were early career academics and casual tutors for the subject. To get a better sense of the practicality of coteaching, the coordinator asked about the weaknesses of this approach. Author 2 alluded to the initial discomfort about coteaching with Author 1 due to perceived power difference, where he had mistakenly believed her to be a permanent staff member. This, however, was a rare mention of any possible power differences as both tutors engaged in a supportive rather than a competitive role.

To explore potential challenges, the critical friend asked what they thought would happen if one coteacher did not equally contribute into the partnership. Author 2 described how an unequal partnership could possibly generate mentoring opportunities for the less experienced instructor. He reflected on how this could raise the overall teaching quality of the faculty. They also discussed the maximum number of students undertaken without compromising on learning outcomes. Although their tutorial had 37 students in total, both Author 1 and Author 2 agreed that they could even cater to double that number whilst still maintaining quality through the effective use of technology. Technology helped the coteachers cater for the needs of large class sizes by allowing students to post their ideas onto *Google classroom* through their mobile devices. *Google docs* also allowed students to contribute to the teaching materials as they were being delivered. Both Author 2 and Author 1 believed that CCT did not need to be systematically implemented, but they agreed that it needed to have a 'presence' to provide preservice teachers with a visible model of effective collaborative teaching.

Discussion

CCT generates shared experiences that enable authentic professional conversations about praxis. Crow and Smith (2005) describe the wealth of data revealed through the "reciprocal probing of each other's observations of our shared practice" (p. 500), whilst Ghaye and Ghaye (1998) discuss how reflective conversations between coteachers enable one person to take on the role of the 'teller,' whilst the other person facilitates the reflective conversation. In this way one instructor can act as a potential sounding board for the other. Crow and Smith (2005) subsequently argue the importance of collaborating with others to critically reflect on and analyse one's implicit values and beliefs about teaching and learning. They explain how joint reflections can reveal insights difficult to access when teaching and reflecting alone. Both coteachers were able to critically reflect on their teaching through observing similarities and differences in their practices. CCT also provided the support they needed to take risks in implementing innovative uses of technology.

Both authors perceived coteaching as an invaluable professional learning tool as it generated opportunities for informal mentoring. Learning through shared praxis is the basis of CCT. Roth and Tobin (2002) propose that teacher learning should be based on the 'praxeology' rather than the 'theory' of teaching, as teaching has a "temporal character" that involves a continual unfolding of experience within a highly changeable and multi-faceted context (p.2). They argue that the "declarative and procedural knowledge about teaching has a timeless character," as it does not acknowledge that teacher knowing develops from everyday praxis (p.5). Author 1 could develop her questioning skills through entering into Author 2's habitus, which shaped his questioning style. She could also learn through being 'shown' an authentic model, as opposed to being 'told' what to do. This experience affirms Roth and Tobins' (2002) assertion that 'learning to teach' involves forming new habitus by co-participating in teaching experiences with others.

CCT can subsequently cultivate quality teaching as the supportive environment can allow practitioners to take risks to implement a variety of innovative strategies to meet diverse student learning needs (Thousand, Villa & Nevin, 2007). Birrell and Bullough (2005)'s study with preservice teachers similarly found that CCT facilitated high levels of synergy and creative energy. They document how the preservice teachers experienced less stress and took greater risks by having a peer safety net. This finding was affirmed through Roth and Tobin's (2004) study on how CCT enabled practitioners to attempt tasks that they would not have approached on their own. It also connects to Vygotsky (1978) learning theory of how social interaction is a major facilitator of learning experiences. Greater emotional support is another benefit of CCT. Birrell and Bullough (2005) relate how the principals in their study noticed how CCT lessened the amount of time early career teachers spent in solitary 'survival' mode, as teaching becomes a shared and accessible process, rather than something that remains "private and introspective," lonely, individual or competitive (Chanmugam & Gerlach, 2013, p. 114). The coteachers in the study expressed similar views about the valuable support provided by a colleague who was teaching alongside them.

Lastly, the researchers questioned whether their experiences of CCT could be more broadly implemented in higher education. Here the 'data' gathered in the study focused more on the CCT method itself, rather than the development of professional disciplinary/content knowledge. Both tutors saw coteaching as an easy, enjoyable and a worthwhile process that enhanced their teaching skills. Despite the initial increase in work, the coteachers described how they could "develop a rhythm" or an efficiency that could lessen their workload over time. They acknowledged that the process would have been challenging if their teaching styles were less compatible but recognised the possibility of informal mentoring within less equal teaching partnerships. Roth and Tobin (2002) similarly relate how coteaching can act as an effective

professional development tool, where teachers learn directly from each other within the context of their own practice.

Conclusion

Due to its staffing demands, universities may dismiss CCT as a non-cost-effective approach (Graziano & Navarrete, 2012) that requires already time-poor teachers to commit to additional planning time (Ferguson & Wilson, 2011). Despite these challenges, the shared classroom space can cultivate more effective, efficient and reflective practitioners and positive learning experiences for both teachers and students. This case study demonstrates how coteachers learnt to view their practice from a 'growth orientated' perspective through engaging in co-generative and reflective dialogue from lived teaching encounters. Through a supportive and collaborative environment, both early career academics were able to experiment with new and innovative forms of teaching and acquire greater reflexivity in their practice.

Similar experiences lead Graziano and Navarrete (2012) to assert how coteaching helped them to progress from the practical applications of "how to co-teach" to "how to grow as a teacher and reflective practitioner" (p. 124) through empathetic and constructive dialogue. Roth and Tobin (2002) thus argue that teaching model presented in higher education needs to move closer to towards a coteaching model, where "an epistemology of teaching as praxis" should ground our understanding of teacher professional development. Learning to teach is an ongoing process and CCT can be a powerful tool for transformation. As teachers make their habitus visible, they can see their world through another's eyes to perceive learning possibilities that could be difficult to imagine when teaching alone.

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