

Warts and All: Ethical Dilemmas in Implementing the Coteaching Model

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Abstract: This paper examines the ethical dilemmas that the researchers encountered between their philosophical perspectives and those of their colleagues from the field. We found that ethical issues emerged on three levels: during our enactment of the coteaching model, in our research endeavors on coteaching, and in discussing findings. Rather than reaching specific conclusions, this paper addresses the issues and their complexities. It is our intention that this metalogue will promote dialogue among teacher educators who plan to incorporate coteaching into existing traditional pre-service programs.

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1. Introduction

This paper describes the ethical dilemmas we encountered when implementing coteaching in a secondary science education program in cooperation with highly experienced but philosophically different colleagues in the field. While this dilemma is common with coteaching, the critical question is more global: how can one advocate new approaches to teaching and teacher education and simultaneously work productively with people in the field who have different philosophical perspectives? Many reform initiatives in education fail because of different philosophical alignments between university personnel and practitioners in the field are not addressed (SPILLANE, 2000; SPILLANE & CALLAHAN,

2000). One purpose of this paper is to promote dialogue among coteaching advocates about the issues we confronted in this study. [1]

1.1 Coteaching

Coteaching is an innovative approach for teachers, experienced and beginning, to critically analyze their teaching. Described as "teaching at the elbow of another" (ROTH & TOBIN, 2002) it involves all participants within the praxis of teaching in classroom and conversational settings (ROTH, TOBIN, & ZIMMERMAN, 2002; TOBIN & ROTH, 2002). In our teacher education program, interns (student teachers) cotaught with cooperating teachers and other interns during a semester-long student teaching experience. [2]

Coteaching as the model for student teaching involves multiple stakeholders—the coteachers, the students, administrators, parents/guardians and the university personnel (faculty and student teaching supervisors). Each stakeholder may have different conceptions of good teaching, and how coteaching should unfold in praxis and practice. As we implemented coteaching we struggled with ethical dilemmas associated with stakeholders' different interpretations of coteaching that evolved when working with "colleagues in the disciplines and schools" (NATIONAL COUNCIL OF ACCREDITATION FOR TEACHER EDUCATION, 2002). Through metalogue we explore the ethical dilemmas that arose during the enactment of coteaching, our research on coteaching, and our group's discussion of this research. After an initial description of metalogue we present a tale from the field (VAN MANNEN, 1988) to provide readers with a contextual understanding of our experience. The ethical dilemmas that arose in our work are then discussed in the ensuing metalogue. [3]

1.2 Metalogue: A method for analyzing experiences

We use metalogue as a forum to examine what was learned and to use this new knowledge as a resource because it enables us to maintain our individual voices and perspectives (ROTH & TOBIN, 2004). Our varied positions in the project provide us with different vantage points and questions. Maintaining the multiplicity of voices is integral to the process of metalogue (ROTH, MCROBBIE, & LUCAS, 1998; ROTH & TOBIN, 2004), as is the process of collective remembering (ROTH & TOBIN, 2004) where

different participants in a teaching/learning situation get together to describe and explain events in which they have participated. ... From this perspective, remembering is a social act, a way of doing something in the present by invoking the past in an appropriate and skilled manner. (ROTH & TOBIN, 2004, ¶25) [4]

Initially, as an implementation study of the coteaching model of student teaching, our central focus was on the teaching interns, their coteaching experiences, and the ways that the model unfolded in the suburban, high school setting. Most stakeholders accepted coteaching, its theoretical foundations, and the implications that the model had for praxis. While clinical supervisors were central

stakeholders in the student teaching process, we originally viewed them as peripheral research participants. However, over time it became apparent that individuals had different interpretations of coteaching based upon their various views about teaching and the process of learning to teach. Initially we were not aware of the implications of these disparate stances, yet as the study evolved issues began to emerge. In our discussions about coteaching and reflection on praxis, we began to question how these varied viewpoints shaped the learning contexts for the interns. Also, we became increasingly aware that while clinical supervisors existed on the periphery of our study, they played integral roles in shaping the contexts of the interns' learning. At the end of the first semester of coteaching, we discussed our ethical concerns about the peripheral research roles occupied by university supervisors through emails and conversations. These interactions and reflections serve as the basis for this paper. [5]

Within our metalogue we present a tale of the field. This form of collective remembering provides a composite picture of interns, cooperating teachers, and university supervisors from our study. The tale of the field presents an amalgam of our different constructions of the experience, brings the story together, and provides a context for the reader; yet we deconstruct it through the metalogue. Each of us views the ethical dilemmas through different lenses—that of program administrator, researcher, or intern and as such had different constructions. Although we asked different questions throughout the study, we struggled with similar issues. In the tale that follows we represent ourselves and our roles in the project by describing our experiences, yet we have created composite caricatures of participants to provide anonymity and to adhere to an ethic of care with respect to those who were involved with coteaching but not in the research (GUBA & LINCOLN, 1989). [6]

2. Collective Remembering: Our Tale from the Field

The actors (in order of appearance):

Narrator – An amalgam of author perspectives

Kate – Program administrator

Pam – High school science department chair and coteacher

Sheila and Sam – Clinical supervisors

Jennifer and Beth – Program researchers

Matt – Teaching intern; joined research group after graduating from the program [7]

Setting the stage:

Narrator: As coordinator of the science teaching education program, Kate had sole responsibility for the administration and teaching requirements for the secondary science education program. She introduced coteaching as the model for student teaching. Kate and Pam cotaught the university science methods course. Pam offered her school, Biden High School, as a coteaching site. Pam

and Kate met with Biden High's administrators and science faculty to explain coteaching and to recruit cooperating teachers. Several science teachers volunteered in part, because coteaching allowed them to retain responsibility for their classes. In the more traditional student teaching model, over a fifteen-week practicum, cooperating teachers gradually relinquished their teaching responsibilities for a majority of their classes to a student teacher. [8]

Student teaching supervision at State University is performed by adjunct faculty members. Typically, supervisors are retired teachers, retired school administrators, or experienced teachers who prefer part-time employment. Adjunct faculty members are paid on one-semester contracts, receive especially low wages in academe and do not have the benefits and privileges associated with full-time employment at a university. [9]

Sheila and Sam were the two adjunct faculty who supervised the high school science interns. Sheila taught high school science for seven years. She left the full-time teaching before the current reforms that introduced standards-based teaching, high stakes testing, and teacher accountability into schools. Sam is a recently retired high school science teacher, who had been involved with writing the state's science standards and the professional development programs around inquiry-based learning. Sheila and Sam are dedicated university supervisors who enjoyed working with the interns. In addition to conducting regular classroom observations, they participated in the seminar discussions on the teaching and learning of science. Sheila and Sam were slightly skeptical about coteaching, but realized that although Kate framed the introduction of coteaching as an option and asked for their input, she had already decided that the program would move to coteaching. The supervisors were correct. [10]

Biden High School became a site for coteaching and Kate had received a grant to study its effectiveness. As program coordinator and the university faculty member responsible for student teaching, Kate had power over the interns' grades and the institutional recommendation for teaching. Jennifer and Beth served as the primary researchers and conducted interviews throughout the study. The interns, including Matt, were interviewed several times throughout their coteaching experience. Kate did not know the content or context of the interviews until after the interns' graduation. [11]

3. Ethical Dilemmas: Opting Out, Incongruent Philosophies and Excluding Stakeholders

Narrator: Over the course of the semester, three ethical dilemmas emerged in connection with our implementation of coteaching. First, we found that some of the study's participants, including cooperating teachers, interns and supervisors, did not agree with the coteaching's philosophy. Some participants chose not to enact coteaching, which became a second dilemma. Finally, issues emerged when we, as researchers, critically discussed these issues without including the stakeholders. In this section we illustrate the intricacies of each dilemma as a preface to the metalogue that ensues. [12]

3.1 Dilemma 1: Colliding philosophies

Narrator: As the semester unfolded it became apparent that the participants had different interpretations of what the model should look like. These issues appear to have stemmed from different philosophies of teaching and learning. Typically these occurrences went unmentioned in seminar discussions, interviews or debriefing sessions. When problems were discussed, the coteachers involved identified a lack of communication about individual views regarding the planning and implementing of curriculum. Matt recollected this disconnect with one of his cooperating teachers in a journal entry. [13]

Matt: "My student teachers," was a phrase I recall Rosie applying to me and the other interns. This phrase conveyed a sense that she had some form of ownership of the interns in her classroom. In response, I remember thinking that she wasn't the only teacher with whom I was coteaching. Before starting student teaching, I had become accustomed to perceiving myself, and my fellow student teachers, as interns. Personally, I felt that the term portrayed us as more than just students learning how to teach. Clearly, the latter was exactly what this experience was intended to do. I believe that coteaching allowed me to better hone the techniques and methods I will use as a beginning teacher by sharing the responsibilities and decision making of each course with my coteachers. Most importantly, the coteaching environment provided the opportunity for reflection on my teaching practice. [14]

At times I felt as though Rosie was taking charge of the coplanning sessions and also directing the way a lesson would be taught. For example, during one of our course units, she came to our planning sessions with a written copy of how the material of the unit would be divided up over the course of each week. As I reflect on this I realize that we were not collaboratively planning the unit, but rather that the planning was being directed by one person—our cooperating teacher. [15]

I'm not sure why I didn't raise my concerns with Rosie. I assume that part of my decision not to challenge her suggestions was because I respected her as both my cooperating teacher and a teacher. However, my lack of voice in this situation did not allow for my opinions to be acknowledged, and decreased my share of responsibility for the lessons being planned. Thus, the question still remains: did my silence inhibit learning opportunities for everyone partaking in the teaching of the course? Clearly, there was a lack of communication between my fellow interns, Rosie, and myself during certain planning sessions. (Matt, *Coteaching Journal*, Spring 2004) [16]

Narrator: The acknowledged disconnect between Matt and Rosie identifies a situation in which a coteaching pair struggled with the collaborative nature of coteaching. In this instance it appears that Matt and Rosie's disconnect revolved around issues of control and the types of capital each stakeholder acquired and used within the classroom setting. [17]

Over time it became clear that Sheila, one of the supervisors, was also uncomfortable with the coteaching model. Kate had made the decision to implement coteaching despite Sheila's reservations. Sheila was reluctant to participate in either the weekly seminar or the research. But she was cautious about critiquing coteaching. Sheila mentioned that "Kate was the boss," and seemed to take this arrangement quite seriously. She enjoyed her involvement with the program and did not want to jeopardize her employment. Sheila had been a highly successful science teacher in a well-regarded school district, and worked hard to help the interns acquire certain teaching skills, consistent with her philosophy. Her conception of successful teaching practices emphasized strong classroom management with the teacher as the focal point of instruction. She did not value science teaching that included inquiry activities, group work, or non-lecture approaches. Inevitably, conflicts arose for the interns during the semester between Sheila's philosophy of teaching, coteaching and the instructional practices promoted by Kate, the program administrator and methods course professor. [18]

3.2 Dilemma 2: Opting out

Narrator: While most coteachers enjoyed teaching and learning together and acknowledged the benefits of coteaching for both themselves and for the students, several issues unfolded as the semester progressed. One pair of coteachers preferred a traditional model of student teaching because they believed that teaching alone would better prepare the intern for the real world of teaching. When Kate, Jennifer, or Beth were off-site, the coteachers quietly closed the door and the intern assumed all the responsibility for the class. These coteachers struggled to shift into coteaching mode when Kate, Jennifer or Beth entered the room. Sheila agreed with their approach and did not suggest that the pair coteach, nor did she inform Kate of the arrangement. [19]

3.3 Dilemma 3: Not including all stakeholders in the conversation

Narrator: After the coteaching semester was over, Kate, Jennifer, Beth, and Matt began to reflect on the experiences of the semester. Through conversations, the dilemmas experienced in practice became explicit and they began to plan how to deal with these issues in the next year of coteaching. However, in doing so another ethical dilemma emerged. Conversations about various stakeholders were occurring without opportunity for those participants to represent their voices. While the researchers were guided by a research ethic of care, they were finding that this framework itself was being challenged in the conversations that were occurring. How should they address these issues with Sheila and Sam, people who were already skeptical of the role of research in education? Was it right to even talk about these participants considering that they were peripheral to the initial frame of research design despite the fact that it was becoming clear that they were important participants in the implementation of the model. Recognizing this dilemma the researchers even questioned the ethics of embarking on this paper. [20]

4. Metalogue

The following metalogue uses the salient emergent themes to broaden the discussion of issues surrounding varied philosophical stances on teaching and learning to teach. Then using an analytical lens we explore issues of capital (BOURDIEU, 1986), agency (SEWELL, 1992), and dilemmas around research and the ethic of care (GUBA & LINCOLN, 1989). [21]

4.1 Dueling philosophies

Jennifer: While in the field, Beth and I became aware of Sheila's resistance to coteaching. Early in the research on coteaching, Beth and I began asking each other questions about Sheila's acceptance of the model. We felt that when she was in the coteaching classrooms her emphasis differed from the goals of the program. She supervised the interns through her stance of traditional teaching practice and her beliefs about learning to teach rather than learning through praxis and at the elbow of others. We became concerned that the theoretical tenets of coteaching were not being valued and reinforced when she was working with the interns. At one point Beth asked, "If she's not comfortable with the model, how can she objectively look at a class and say, 'That is effective teaching'?" Kate, as program administrator, had a different insight into the situation. [22]

Kate: I can understand the supervisors' criticisms and concerns that the interns would not gain enough teaching experience through coteaching. But another challenge we face with the supervisors comes from the changes that have occurred in science teaching since they (the supervisors) taught high school. Sheila and Sam have many years of teaching experience, knowledge of working with peers and students, enacting curriculum and assessments and interacting with parents. In the past, I have acknowledged that Sam and Sheila's beliefs about the characteristics of good teaching, such as effective management of students and administration of class time, are also characteristics that many school administrators expect from teachers. I have lacked courage to challenge Sam and Sheila's definitions of good teaching because if they decided to stop supervising the program's interns, I am not certain I would find other supervisors with their teaching background and content knowledge. Supervisors are not well compensated for their work and it is unusual to have supervisors with high school science teaching experience. [23]

Matt: To build on Kate's comments, the supervisors did represent a critical eye. As interns we, needed to recognize that not everyone would accept coteaching as an effective way to learn how to teach. It is a good experience to have that criticism. It was just hard for me personally, because my supervisor never really supported coteaching and I could tell. I felt disconnected when we would meet for our debriefing after Sheila would observe one of my lessons. I do feel that Sheila provided insightful feedback. Typically, she would review the lesson using the standardized observation form in a stepwise manner. It just seemed that the majority of points she noted were aspects concerning classroom management,

such as movement about the room, intonation of voice, etc. I still feel that these were important aspects of the lessons, but I was also looking for some feedback about my teaching. Did my students get the lesson? Were my methods effective or correct? I felt completely confident answering these questions myself, and was getting feedback from each of my cooperating teachers, but I was also looking for that outside approval. Sheila acknowledged that Kate and Pam had decided to use the model before they spoke with her. Thus, the possibility for a disconnection between her ideas and the model exists, as well as between her practices and those participating in the cotaught classrooms: interns, cooperating teachers, and professionals. [24]

Jennifer: As the semester passed I began to wonder if the interns noticed what I saw as mixed messages between Kate, Sheila and Sam. I had no idea if this was something that they sensed in the feedback that they received or if it was not an issue. If indeed the interns noticed these differences, I wondered: was this an issue of concern? Were they feeling pulled in their practice by having to meet the expectations of two different philosophical stances, and if this was the case, was it problematic? Matt has indicated that this was something that he noticed. [25]

Narrator: When we first began our metalogue, we asked whether the differing philosophical stances about teaching and learning to teach affected the interns' conceptions of teaching. As our analysis evolved we realized that some stakeholders' differing perceptions impacted coteaching, the emergent teaching practices, how participants framed their conceptions about what it means to teach, and the resultant research. Furthermore, the interns were aware of the tensions. Interns received mixed messages about teaching and the coteaching of some pairs was inhibited. Using the metalogue, we began to look under these surface issues to try to understand how and why these complications had occurred so that we could better understand the issues. We used the theoretical lenses of agency, capital, and ethic of care to help us to unpack these events. [26]

4.2 Issues of capital

Beth: Using BOURDIEU's (1986) concept of *social capital* provides a lens to examine the issues mentioned above. Social capital is a resource that is produced by social relationships and can be used to "improve the social positions of the actors in a variety of different fields" (SIISIINEN, 2000, p.12). Social capital can be transformed into symbolic capital, which is recognized by others as status. In our situation, Kate had a lot of symbolic capital in Sheila's eyes based on her position as the Program Coordinator and her membership in academia as an associate professor at State University. Also, Kate, Sheila and Sam had built a significant amount of social capital with each other over several years of collaboration. [27]

However, Jennifer and I had very little social or symbolic capital with Sheila and Sam. We had not met them prior to beginning the coteaching study and only engaged in limited conversations with them at the Biden High. Jennifer and I were newcomers to the project, with little background in science education and limited

knowledge of the science teacher preparation program at State University. Thus, in addition to our negligible social capital, we did not have any status or symbolic capital with Sheila and Sam. Ultimately, our lack of social and symbolic capital with the clinical supervisors impacted our agency insofar as our ability to access resources—that is, their knowledge and experiences—throughout the study. [28]

Kate: As program coordinator, I select the adjunct faculty; thus I have a large amount of power over their employment. Although I know it is difficult to find people with their teaching experience and expertise, Sam and Sheila felt insecure about the continuation of their adjunct positions. Adjunct faculty have little to no symbolic capital within the university structure. [29]

Jennifer: Despite conversations about confidentiality Sheila was extremely hesitant to talk to me about coteaching. Partially I felt that because of our limited relationship she was unsure of my role and did not trust that our conversations would not compromise her position as clinical faculty. [30]

Kate: On several occasions I told Sheila that we were interested in her input on the model. She identified some problems she saw with the interns' implementation of coteaching. First, she pointed out that one of the interns often sat at a desk grading papers during class and ignored instances of student misbehavior. Based on her comments, we found some video clips of the interns' coteaching. In seminar we showed the video and posed the question, "Is this coteaching?" Sheila never focused on the cooperating teachers' role in coteaching, only on the interns. However, Pam was a participant in the conversation and she also saw that the chemistry interns were not engaging fully in coteaching. She admitted that because the interns had not assumed co-responsibility, she intentionally was not coteaching with them. During this conversation, Sheila also voiced her concerns about coteaching. [31]

Beth: By acknowledging Sheila's concerns about whether or not we were effectively enacting the model we built some capital with Sheila. Sheila's comments enabled us to address the issues that we (Jen, Kate and I) continually discussed throughout the semester. We were trying to understand whether they were enacting coteaching in ways that validated the reasons that Kate had chosen to use the model, such as enhancing the interns' reflective practices, and increasing resources for all participants. [32]

4.3 The ethics of care

Kate: The supervisors play a critical role in the advising of the interns, however, they receive a small remuneration for their time and expertise. Also, cooperating teachers are paid a nominal amount—less than \$100—for their time and expertise when supervising interns. The involvement with interns is viewed as a service to the profession. Also, my actions showed Sheila and Sam that I did not value their perspectives on coteaching when I did not include them in the early decision-making process to use the model. Additionally, I neglected to include financial remuneration for their time and involvement with the research in my

grant budget. In my previous interactions, they had indicated a lack of respect towards educational research, so I did not consider involving them in the study. Although this may not have eliminated our ethical dilemma, it was short sighted of me not to consider how their roles could impact the research. Although their roles were peripheral, their responsibilities in assisting interns during the semester were central. [33]

My short-sightedness caused problems for both Jennifer and Beth. We decided that because of the power I had over the intern's grades and teaching endorsement, Jennifer and Beth would conduct the interviews with the interns and I would not be involved in the data collection during student teaching. This also meant that when Jennifer and Beth uncovered problems with Sam and Shelia's supervisory roles through the research, they had ethical conflicts in what they should do with this data. [34]

Jennifer: There were a number of times when I struggled with my role as a confidential set of eyes and ears. While not serving in an official capacity as a supervisor, I often found myself fulfilling that role informally. I talked with coteachers about their practice, worked in coteaching classrooms, and participated in weekly seminars. This is reflective of the inherent nature of coteaching, which involves all participants in the praxis of teaching and learning (ROTH, TOBIN, & ZIMMERMANN, 2002). Although I had initially seen my role as a neutral and confidential party, I quickly realized that there were times when my concerns about the teaching interns' learning opportunities took precedent. As I reflect on the issues I raised, my concerns were around what occurred between a teaching intern and either a supervisor or a cooperating teacher. In each situation my decision to say something was driven by my concern for intern learning. I asked, was it okay that the supervisors had a different teaching philosophy than those emphasized by the program? In another instance, I commented on how a coteaching pairs' strained rapport impacted their ability to work together. Finally, I asked whether we should be concerned that a teaching intern and his cooperating teacher decided that a traditional student teaching experience would be more prudent for them. These comments were driven by the acknowledgment that the interns would only experience coteaching (student teaching) once in their careers. It was my role as researcher that provided me with access to learn about these situations as they were occurring, and a goal of our research was to use ongoing data collection to inform the implementation and development of the coteaching model. Yet, by involving Kate, the program administrator, was I breaching confidence, or supporting future intern learning? While my actions were initiated out of concern for the interns, I did not think about how I could potentially have negatively impacted the supervisors and the cooperating teachers for the long-term. I failed to act with an ethics of care for all of the program stakeholders. [35]

Beth: A salient issue, especially for other researchers who attempt to tackle this type of catalytic work, is whether colleagues in practice should be involved in our conversations about research. This dovetails nicely with the ethic of care that we discussed previously. What ethical considerations do those of us on the inside of

the researchers' circle have to consult an individual "on the fringe" when writing about him or her? This is a difficult question, especially when the possibility exists for the individual to get offended and ask that we not write about a given topic. In our case, we spoke often about the philosophical alignment needed for those involved with the coteaching model, or rather, what happened when one individual in the group outwardly opposed the idea. However, this individual was not a part of our conversations, and few measures were taken to talk to her about it. [36]

Kate: I find it problematic that we engaged in the ideas for this paper without the supervisors' input. I struggle with respecting Sam and Sheila's contribution to the interns' education, while being frustrated with their stance on education research and their role in that research when it focuses on the improving the science teacher education program. Also, I respect their teacher knowledge and their right not to engage in the research process. I never discussed their potential roles in my research agenda when I asked if they would consider supervising student teachers. If they chose not to supervise interns, then I would need to find other colleagues from the world of practice or assume the sole responsibility for the interns' supervision. If I were placed in that position it would drastically truncate my agency with respect to conducting research. Moreover, I would not have the time to visit the interns on a regular basis and fulfill the other responsibilities of my position. [37]

Jennifer: Bringing these issues to light and discussing them as a group, is an important activity despite the fact that it exposed the study's hidden warts. Researcher reflexivity is an essential part of any critical ethnography (QUANTZ, 1992). Doing so however is risky. It opens up vulnerability to criticism—an issue that QUANTZ argues is typical of critical ethnographies where researchers openly discuss their reflexive practice. Yet, by examining these dilemmas working to improve our research we were able to improve on the implementation of the co-teaching model and better support the program participants in the second year of the project. To not take on this task would pose an ethical dilemma in itself. [38]

5. Coda

Narrator: In this paper we illustrated ethical issues that arose on three levels: between participants during our enactment of the coteaching model, in our research endeavors on coteaching, and in discussing our findings. Rather than arriving at specific conclusions, this section discusses the way this work has informed our practice and addresses further questions that have emerged, many of which should be considered by other teacher educators who plan to incorporate coteaching into existing, traditional pre-service programs. [39]

First, our project involved multiple participants with varying degrees of engagement in the research we conducted. The interns were aware of their dual positionality as practicing teachers *and* as research participants; however, initially we did not realize that clinical supervisors would become an important part of the research. We would argue that investigators need to extensively consider the

implications of research for those on the fringe—in our case, colleagues from the world of practice. In our research, the individuals on the fringe impacted the ways we were able to implement the coteaching model as they had divergent views about teaching and how one learns to teach. During our data collection and analysis phases, we confronted issues as we wondered the extent to which we could describe our experiences working with them. This became a double-bind as many of the interesting findings in our study featured narratives and ethnographic vignettes involving those on the fringe—however, ethically, could we portray these individuals negatively? What would be the implications of featuring their actions, or interactions in which they were involved, as the focus of our findings? [40]

As Kate mentioned in the metalogue, a considerable issue arose when we discussed the topic of this paper. As researchers, were we ethically bound to discuss these issues as we were writing them with the individuals located on the periphery of the study? All of us agreed that this could potentially be a difficult issue to broach, since readers might interpret the paper as a description of a few coteaching critics who served mainly to disparage our efforts. In actuality, our intent was to share with readers our struggles in trying to fulfill two contradictory roles: as analytical researchers who wanted to know more about the implications of coteaching and as caring, friends, guides and colleagues, who wanted everyone involved in our innovative project to feel comfortable and validated when they expressed their thoughts, views and ideas. However, can we ever expect all participants in a project to be likeminded in philosophy and committed to the objectives of our research? In many ways, this seems impossible. Yet, we must continue to work with an ethic of care, and consider how our work affects all participants—including our colleagues on the fringe. [41]

Besides raising questions and forcing us to examine our research design, this work has helped us to identify areas for improving future research on the implementation of the coteaching model at our university. First of all we now utilize a communities of practice theoretical framework (LAVE & WENGER, 1991; WENGER, 1998) for our research that identifies and values the contributions of all participants in the learning community. As a result we have opened the lens of our study to include all coteaching participants, therefore there are no longer any participants located on the periphery of the study. Now each participant is interviewed, asked for evaluative feedback about the program, and ongoing data collection focuses on the way each participant impacts the learning of another. Additionally, at the end of each semester participant interviews and two special debriefing sessions with the supervisors and with Pam the research site's department chair are utilized as mechanisms for incorporating all participant voices in the process of examining both the program and on-going research endeavors. [42]

Additionally, philosophical differences are acknowledged as a part of ongoing coteaching practice. Discussions occur during seminars to highlight different perspectives and ways of viewing practice. We have found that publicly acknowledging alternative perspectives forces participants to examine their views about teaching. When conflicts do arise, individuals are encouraged and

supported in their effort to speak with coteachers about concerns and to address these differences through cogenerative dialogues. In the second year of research, the cooperating teachers highlighted multiple perspectives and different ways of thinking about teaching as one of the strengths of the model because it provided them with new ideas and opportunities to extend their practice (GALLO-FOX & SCANTLEBURY, 2006). Furthermore in their close-out interviews, interns explained that through coteaching they had gained valuable experience working with colleagues who were philosophically different from themselves— an experience that they believed would help them work in new settings with colleagues who potentially may view the world of teaching in different ways. [43]

Finally, as researchers we are more acutely aware of our positionality within the research and increasingly reflexive in our work. We continue to work within a research ethic of care and pay careful attention to issues of power and our roles within the coteaching community of practice. We hope that our discussion helps others anticipate some of the potential dilemmas in implementing teaching innovations and provides researchers support as they examine the ethical dilemmas in their own work. [44]

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