Interactional Dimensions of Teacher Change

A Case Study of the Evolution of Professional and Personal Relationships

Melissa Newberry, Lucy Ordaz Sanchez, & Sarah K. Clark

Abstract

The teaching profession, at its core, is relational. Professional development of teachers is provided in many ways: one day seminars, professional learning communities, mentoring, etc. However, there has been little attention to the interaction between the teachers involved in the process and what influence this interaction has on their professional development. Using Bruner's (1996) psychocultural perspective, this case study explores the development of a knowledge community of two middle school teachers in a mentoring experience. Through an examination of the developing relationship in context, we examine the ways in which their interactions fostered change for both teachers in their professional practice, personal relationships, and the school community in which they engaged, and identify the interactional dimensions of such change. This study challenges the computational

Melissa Newberry is an associate professor in the Department of Teacher Education at Brigham Young University, Provo Utah. Lucy Ordaz Sanchez is a teacher at Dixon Middle School in Provo, Utah. Sarah K. Clark is an assistant professor in the Department of Teacher Education at Brigham Young University, Provo, Utah.
Email addresses are: melissa_newberry@byu.edu, lucyo@byu.edu, & sarah_clark@byu.edu

approach to teacher professional development and suggests that more attention to the relationship may foster long- lasting teacher growth.

Keywords: teacher change; collegial relationships; reflection; professional development

Introduction

Educators generally acknowledge that relationships are critical to teaching, yet many overlook some of the relationships most influential in their work—those with their teaching colleagues (Shapiro, 2007). Mentoring is often the means through which the new teacher learns about the school community and his or her work within it (Crasborn, Hennissen, Brouwer, Korthagen, & Bergen, 2011; Hansford, Ehrich, & Tennet, 2004; Harrison, Lawson, & Wortley, 2005). When productive, it can be an instrumental relationship that supports the new teacher in development and practice of teaching skills. However, not all mentoring relationships are equal; the selection and pairing of mentor and novice differs across individual schools and districts, and the programs implemented may not result in growth and improvement, regardless of how beneficial the material and guidance may be in theory. In 2010, researchers Musanti and Pence stated that when it comes to collaboration and change, "relationships trumped knowledge" (p. 87), and concluded that there is a need for future research to study the interactional dimensions of teacher change. Seeing this binary as quite plausible, we attempt to respond to that need by investigating the evolution of a relationship between two middle school teachers in a mentoring situation. We attempt to identify the interactional dimensions that may have influenced the change in teaching practice.

The original design and purpose of this study was to determine the strength of an intervention on teacher–student relationships when conducted by a peer rather than a researcher. Although there was noted change in teacher practice, after the first round of analysis, we were so struck by the evolution in the relationship between the two teachers that we wanted to investigate the personal and professional interactions in which the teachers participated that influenced those changes. We therefore had to step back from our original design to take on a more interpretive lens and look at the social interactions between the two teachers described, noted, or reported in the data collected and to try to make sense of their meaning for the relationship and teaching practice. First, we review the types of relationships that are typical in the teaching profession, highlighting the missing elements that make each kind of relationship less effective. Next we present the study, narrowing in on the interactions that fortified and nurtured the relationship between the two teachers. Finally, our discussion attempts to flesh out the influence those interactions, and the resultant relationship, had on the professional changes for both teachers. The research question guiding our study was, What are the interactional aspects or features of teacher professional relationships that may influence teacher change in professional development situations?

Literature Review

Most traditional professional learning communities, mentoring relationships, and teaching seminars are grounded within our understanding of how adults learn and develop professionally based on Bransford, Brown, and Cocking's (1999) *How People Learn* framework. Harris, Bransford, and Brophy (2002) articulated four overlapping lenses that are frequently used to examine the success of such adult learning interactions: (a) learner centeredness or the attention to the individual in the learning process to ensure that the intended learning is tailored to fit the specific needs of each individual (e.g., Clark, Schoepf, & Hatch, 2017); (b) assessment centeredness, which is the need to measure and assess the learning and growth of the individuals (e.g., Podhajski, Mather, Nathan, & Sammons, 2009); (c) knowledge centeredness, which ensures that the content being taught is rigorous and supported upon empirical evidence (e.g., Mather, Bos, & Babur, 2001; Moats, 1994); and (d) community centeredness or the coming together of professional communities, such as classrooms, schools, and organizations, around a common program, way of thinking, or approach (e.g., Amendum & Fitzgerald, 2013). These four lenses are predominant in examinations of professional development (PD) experiences in the research literature. This perspective stems from a computational approach or the notion that the mind is as a computer, thus requiring only input and output for effective results.

In contrast, Jerome Bruner's (1996) psychocultural theory has provided a different way of thinking about adult learning by suggesting that much more is going on within these educational and collegial interactions than simply knowledge being acquired, skills being mastered and manifested through assessment, a community of teachers working together for a common cause or program, or the specific learning needs of the adult learner being identified. This psychocultural perspective suggests that learning is situated and contextual, with knowledge and connection being established within subrelationships, and that these relational nuances often go undetected or are invisible. With the amount of money and time spent on PD activities, it becomes imperative that the relationships within these professional learning contexts be examined more intentionally. Understanding more about this subcommunity within the context of a mentor–novice teacher professional relationship will help us determine how strength, purpose, meaning, and professional growth might develop in these professional relationships in teaching.

Professional Relationships in Teaching

Teachers' professional relationships can often be difficult to navigate, with support networks frequently operating very differently depending on the goals, purposes, and construction of the support system. Hargreaves (1998) argued that teachers crave collegial closeness characterized by appreciation, mutual respect, openness, intimacy, and more, but relationships of this sort in teaching are sometimes

replaced by those that are overtly friendly but inwardly hesitant. Musanti and Pence (2010) recognized that "neither schools nor teachers are accustomed to collegial relationships embedded into their daily teaching" (p. 84). Although purported as a "people profession," many teachers feel alone in their classrooms (Little, 1990; Lortie, 1975). Some of the challenges with forming productive collegial relationships are perhaps the context and purposes for which they are created. The creation of knowledge communities (Craig, 1995) or professional learning communities that aid teachers in their PD may or may not provide emotional support. Depending on how they are formed, they can be affirming or discouraging.

Emergent knowledge communities, which are based on the association of like-minded colleagues and are generally created around story sharing, are positive and affirming, and they support the members emotionally (Craig, 1995). Other knowledge communities that are intentionally created for purposes of PD or training are often goal oriented and task driven and tend to be more directive and less supportive. The neglect of the social and emotional elements of the work of teachers leads to a loss of opportunities to form and nurture productive professional relationships, specifically, the kind of relationships that support the emotional and social as well as the professional needs of teachers. This lack of productive, supportive relationships can leave many teachers, especially novice teachers, lacking the support they need to be successful. The types of relationships that make up each knowledge community may be indicative of the strength and benefit of the knowledge community. PD in the form of professional learning communities, mentoring, and teaching seminars to date have largely focused on, and been evaluated based on, the content being taught, the assessment used to measure success, the goals of the group or community, and the number of people trained. Relationships between individual teachers that extend beyond the scope of the PD experiences or effectiveness have largely gone understudied in the research literature. Therefore a central purpose of the current article was to examine this gap in the research.

Types of Relationships

We identify three different professional relationships most often described in the research literature and briefly describe them along with the limitations within each. These types of relationships within the educational setting provide the groundwork on which we were able to build the examination of the collegial novice–mentor relationship we studied within the professional learning context.

Casual relationships. Time for teachers to socialize freely is often limited to time between classes or the lunch hour in the teachers' lounge. It may be at these times that teachers seek out emotional support. When teachers seek out colleagues to share stress stories of student behaviors as they attempt to mitigate the emotional work they perform (Kinman, Wray, & Strange, 2011; Papatraianou & Le Cornu, 2014), the sharing is usually focused on teachers' emotional needs rather

than curricular changes or classroom practice (Bell-Robertson, 2014). While these co-rumination sessions may result in an emotional release, they rarely focus on long-lasting solutions to deal with the issues that may be the source of stress. Some research has suggested that teacher collegial support is greatest when teachers go through similar processes simultaneously (Park, Oliver, Johnson, Graham, & Oppong, 2006). From this research, we learn of the need for examining a relationship that had a common professional goal in mind to support long-term growth and development.

Contrived relationships. Teachers do meet together often—in team-level meetings, staff meetings, and professional learning communities, all designed for PD of the faculty. The focus of these meetings is usually policy driven, district mandated, and school organized. These intentional knowledge communities typically have an agenda; often they are created to support current beliefs and values of a community or to realize professional goals (Craig, 1995). Because of their contrived nature and administrative focus, they often lack the emotional depth that teachers need to support the emotion work they perform daily. Within these contrived relationships, teachers may be stifled in forming deeper connections due to differences in practice, differing methodological approaches to working with students, or other professional disagreements that often prevent teachers from sharing ideas and beliefs (Keltchermans, 1996; Musanti & Pence, 2010; Shapiro, 2007). Shapiro expressed this as the tendency of teachers to "relate to one another as 'educators' rather than fellow human beings" (p. 618). The focus is strictly on the issues required to be addressed by state mandates or school administrators. Mentoring relationships can be an example of this kind of contrived relationship that focuses on the practice the novice teacher should learn while often omitting the emotional support needed. Self-reflection and critique are easier when done jointly with a trusted partner (Hudson-Ross & Graham, 2000). From this research, we learn of the importance of incorporating emotional support and connection for the relationship to have meaning for all involved.

Evaluative relationships. When the improvement of teaching is managed with a deficit approach, relationships suffer. All teachers, and especially new teachers, are under constant evaluation. Typically, new teachers have concerns over the limits of their teaching that can lead to vulnerability in mentoring situations (Keltchermans, 1996; Le Cornu, 2013; Little, 1982; Papatraianou & Le Cornu, 2014; Shapiro, 2007). They are not alone in these feelings; experienced teachers may be just as concerned with being seen as incompetent in the eyes of colleagues (Bullough & Draper, 2004). The emotion work performed to maintain an appearance of competence and avoid professional vulnerability can affect a teacher's sense of professional identity (Bullough, 2005). Rather than form close collegial friendships, teachers may instead opt to maintain "cool professionalism" (Bullough & Draper, 2004). This guarding of one's self inhibits the formation of mutually beneficial, supportive

relationships. Thus we learn of the restrictions on relationship formation within evaluative relationships and the need for an evaluation-free learning environment for trustworthy relationships and professional growth to occur.

Relationships that can be both emotionally and professionally supportive would be ideal to have among teaching colleagues. If relationships really do trump knowledge (Musanti & Pence, 2010), then schools and teacher teams would benefit greatly from finding ways to optimize opportunities to create trusting and supportive collegial relationships, for both PD and teacher emotional support. But how does a working relationship transform from one that is lacking emotional, social, or professional support to one that is supportive in all ways? In this article, we focus on the interactions between the two teachers and explore the context and personal connections that influenced them as they worked with each other. Through this case study, we hope to shed some light on the interactional dimensions of relationships that may lead to the building of relationships that can lead to sustained and meaningful changes and professional growth. By taking an interpersonal/interactional approach rather than using a computational lens, we hope to challenge the current curricular and procedural models of PD that emphasize process over people.

Methods

The teachers in this study were placed in an instrumental relationship—one created specifically for mentoring purposes. Originally designed as an intervention to improve the novice teacher's relationships with her students, both the novice and mentor were hand selected and paired for the purpose of PD of the novice teacher through nonevaluative mentoring with a colleague.

Theoretical Framework

Central to Bruner's (1996) theory of education is the idea that learning takes place between the nature of the mind and the nature of culture, and relative to that learning are nine tenets: (a) the perspectival tenet (interpretation is inherent, as are the risks of putting forth contrary interpretations), (b) the constraints tenet (we are influenced by our past ways of thinking and overcome them only when given opportunity or method), (c) the constructivist tenet (our reality is a co-construction), (d) the interactional tenet (humans are good at understanding each other and interpreting intentions based on the roles and context of the relationships, and this is what makes real communication possible within any human exchange), (e) the externalization tenet (group work solidifies the group and allows for shared and negotiated ways of thinking), (f) the instrumentalism tenet (education has implications for those who follow after), (g) the institutional tenet (when learning becomes institutionalized, it takes on problems and issues of institutions), (h) identity and self-esteem (agency and evaluation of self in constructing and guiding the self), and (i) the narrative

tenet (the sharing of stories and experiences to locate a person in his or her world and relationships). This psychocultural perspective suggests, then, that learning is situated and contextual, with knowledge and connection being established within interpersonal relationships.

Design

The design of the study was guided by the constraints, institutional, constructivist externalization, perspectival, instrumentalism, and institutional tenets. The analysis was guided by the identity and self-esteem, interactional, and narrative tenets. Initially, the first author conducted formal interviews with both teachers, regarding their previous experience with mentoring and their perspective on classroom relationships in general. This satisfied the constraints tenet. Follow-up interviews were held at the end of the semester and 1 year later. The middle school principal was interviewed poststudy for comment on the teachers' general performance. Each of these satisfied the perspectival tenet.

The tool for this study has been used in previous research (see Newberry, 2008, 2010), in which the researcher and teacher interacted, and resulted in interesting shifts in relationship dynamics between teacher and students. The goal in this study was to include teaching colleagues so that any change could be sustained within the subcommunity of teachers within the school (institutional tenet) for mentoring or an ongoing intervention (externalization tenet). Therefore, the second author, a middle school teacher, was selected to serve as the mentor, and we solicited her principal for suggestions of teachers who needed help improving their classroom relationships with their students (constraints tenet).

Participants

The first two authors of this study have a personal and professional relationship. We first met through mutual friends and then again when Lucy began her studies for a master's degree in the school of education where Melissa is an associate professor. Melissa has observed Lucy in her classroom, and many of their personal conversations often revolved around student–teacher relationships. The principal offered two names, and we selected the one with whom Lucy had no previous relationship: Tina, a second-year teacher.

Although working in the same school building, Tina and Lucy had very little interaction with each other prior to participation in this study; their classrooms were even on different floors and at opposite ends of the building. Tina was referred because she had two students removed from her class the previous year due to difficulties in managing them. With the principal's approval, Lucy approached Tina via e-mail and invited her to participate in the study. Tina, a biracial (Caucasian/Latina), married woman in her mid-20s, teaches eighth-grade health education. At the beginning of the study, she had 2 years of teaching experience—the first year

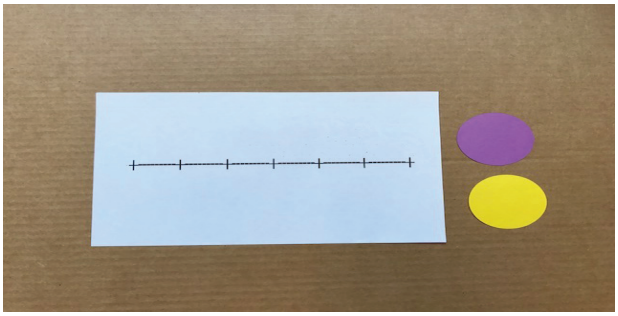
having been an internship—both at this school. Lucy is a seventh-grade foods/home economics teacher. A single Latina woman in her 30s, she immigrated to the United States, where she obtained her bachelor of arts degree in family and consumer science education and, at the time of the study, had recently completed her master of science degree in special education. Lucy had 6 years of teaching experience, all at this middle school, with the exception of half a year of student teaching. She has been continuously commended for her relationships with students.

With Lucy as the mentor and Tina as the novice teacher, Melissa's role in this study was only to conduct the pre- and poststudy interviews. The school is located in the western United States and consists of Grades 7 and 8, with approximately 822 students; about 45% of the student population is of racial minority status (majority Hispanic, 37%), and 58% qualify for free or reduced-price lunch. The school employs approximately 38–40 full-time teachers.

Procedures

The study lasted 14 weeks, in which the two teachers met after school hours every other week in mentoring meetings, for a total of seven sessions. Inspired by the externalization tenet, these meetings included work together following a specific protocol (see the appendix) to examine the relationships that Tina had with her students. The tool used to reflect on these relationships is the adapted inclusion of other in self measure (Newberry, 2008), which consists of the creation of a diagram using two circles (one representing the teacher and one the student) on a line to symbolize how emotionally/relationally close she feels to each individual student (see Figure 1). As the teacher creates each diagram, she is to verbally explain her rationale for the placement of the circles. During each meeting, Lucy read the instructions of the protocol, and then Tina, using the class roll of the class she felt was most challenging, created a diagram for each student while explaining her

Figure 1.
Examples of the materials used to create the diagrams of the teacher–student relationship.



rationale for it (perspectival tenet). Lucy had been instructed on administering the protocol, including her role to read the instructions, to answer any questions, and to ask follow-up questions as needed, but to allow Tina to lead the conversation. After reviewing the set of diagrams, Tina was to be asked to note any patterns or impressions, then together, they were to make action plans to focus on an aspect of classroom relationships to be improved, again with Tina being allowed to take the lead. In addition, after each session, the teachers recorded their experiences during the meetings in separate journals (constructivist tenet). All mentor meetings and interviews were audio-recorded and transcribed for analysis.

Data Analysis

Tina was given the transcripts of interviews and meetings to review for accuracy prior to data analysis. Initial data analysis began with Melissa and Lucy conducting independent thematic coding of all interviews and journals, looking for the changes to practice. As we began to analyze the data, we were immediately drawn to the evolution of the relationship between the two teachers and the change evidenced in their relationship (identity and self-esteem tenet). Therefore another round of analysis focused on the actions and interactions reported in interviews and journals. We identified what actions participants did in relationship as well as how they responded to those actions by the other (interactional tenet), particularly in how the other reported and described those actions (narrative tenet). We compared our coding and negotiated codes until agreement was reached. Next, we performed axial coding, categorizing the themes, identifying the context, and discussing the meaning in context. We placed each coded section into a data matrix in order of occurrence, along with the theme, quotation, and context (Miles & Huberman, 1994). The next step was to take the separated quotations and restory them into a relationship narrative (Connelly & Clandinin, 1994). Independently, we compiled case study stories (Miles & Huberman, 1994) from the information in the data matrix and then compared our stories for similarities and differences. We found that our written case stories were consistent, as both contained the same progression, highlighted the same events, and applied the same interpretation. The actions lumped into three categories of (a) relating and sharing experiences, (b) observing and listening to each other, and (c) collaborating. We noted the ways in which the teachers created the narratives regarding their interactions and located themselves in relationship, defining the relationship and its influence on their practice.

Findings and Discussion

Using Bruner's (1996) framework of the psychocultural approach to education helped to highlight the personal and professional changes for both teachers. We had anticipated change in the novice teacher's practice, as this was the purpose of

the intervention, and previous research, as well as our own experience, had shown that reflection and mentoring have potential to influence the individual who is the focus of an intervention. What we had not anticipated were the striking personal and professional effects of the collegial relationship on the experienced, highly respected teacher in the mentoring position. Changes in both relationship and professional practice continued to be evident a year after the initial study. We first present the changes we observed and how these changes related to tenets of Bruner's (1996) psychocultural theory. Next, we present and discuss what we determined to be three interactional dimensions of change that came from our analysis of the actions and interactions that transpired within the relationship. Those dimensions are vulnerability, validation, and intersubjectivity.

Changes

Both teachers experienced changes in their teaching practice and in their professional relationships along the length of the study. At the year follow-up, the relationship between the two teachers remained intact, and even strengthened, as they had paired together for out-of-state field trips and other in- and out-of-school functions.

Related to teaching practice. The changes that occurred related to each teacher's practice can be understood in terms of Bruner's tenet of identity and self-esteem. Each, because of participation in the relationship, evaluated her part in it and compared the work of the other against the work she did, using that comparison to guide her developing teaching self. For the mentor teacher, Lucy, this happened through a renewed outlook on her own classroom and her place in the school community. The interaction she had, mostly observing Tina in those mentor meetings, spurred her reflection of her own class. Lucy stated that working with Tina

> [made] me more conscious about where I would put [my own students]. Or like even when she was talking about her students I would be [thinking of my own classroom relationships], so it helped me. And it's something that I constantly want to do, you know, like, not put out circles, but always look at students and be like, "Oh how can I improve the relationship with so and so?" (interview, 5/13)

The outcome of such reflection for Lucy is unknown and outside the scope of the study, but it is a fair guess to state that reflection on one's own teaching is beneficial for practice.

Likewise, for the novice teacher, Tina, the tenet of identity and self-esteem was also apparent in her changes to practice. The design of the study required her to reflect on her classroom and create action plans to improve on it. This occurred at each mentoring meeting, along with a review of the previous meeting's plans and goals. Tina developed and acted on these plans and reported back on their success. The progress was apparent in the transformation from being one of two teachers in the school referred to participate in the study because of poor relationships with

students to a year later winning the school's Golden Apple award (an equivalent of a teacher-of-the-year award), selected by the student body. Tina's change in approach to her classroom was likely a result of the interaction and relationship with Lucy, as stated by the principal:

> Lucy personalizes her class. She's not afraid to tell stories, never in an inappropriate kind of way, but she'll share photographs from her own personal experiences—she'll share life experiences. And Tina's first year, she didn't do that . . . she was very business-oriented. And [now] she's let her guard down so to speak . . . that's what's made her have these connections with kids . . . she's helped them make a connection through her life experience. And that to me has been one of the tell-tale differences that I saw this year in Tina. . . . She still has the right boundaries, but she personalizes her lessons, and that's something that she's learned from Lucy. (interview, 4/14)

The principal attributes the changes in Tina's approach to teaching and student–teacher relationships to Lucy's influence as the mentor, although in the mentoring meetings, Lucy never gave any advice on telling stories in the classroom. In fact, only three times did Lucy ever break protocol to share personal stories from her experience. It was Tina who used her agency to really evaluate herself and also to compare her own work with that of Lucy, and directed her own change, as she felt emboldened to do so. Through the interaction in the mentor meetings, as well as afterward, the conversations provided Tina with guidance of her own choosing. She stated,

> I wanted to see what kind of teacher [Lucy] was and get advice from her and so I think it's helped because, you know a lot of times after sessions we would talk about kids and talk about how we'd dealt with it and there were a few kids I struggled with last year that she knew better than I did because she usually teaches seventh grade and I only teach eighth, so she'd had them before and she knew circumstances and she knew ways that had worked with them . . . and so we could kind of talk it over. (interview, 2/14)

Tina's taking up of some of the practices and attitudes, as well as being supported in the sharing of her own, influenced her change in practice as she learned from Lucy through simple conversation (Reis, Collins, & Berscheid, 2000). Perhaps much of this was due to the relationship that formed between them.

Related to professional relationships. In describing the relationship developed with Lucy, Tina acknowledged that they "definitely became a lot closer." Likewise, Lucy acknowledged that she had not known anything about Tina previous to the study because they "had not taken the time" to get to know each other. Bruner's (1996) narrative tenet explains the ways that the teachers negotiated their understanding of the relationship and in so doing made the experience more meaningful. For Lucy, who initially focused only on her own classroom and students, often avoiding close associations with colleagues, the experience working with Tina changed her

perspective on collegial relationships and working with her peers. Her principal reported,

> I don't know how I measure that but I sense that Lucy is far more present emotionally than—not that it was a problem before—but she's there. She's interacting with her team. I know she's developing relationships with her peers in a way that maybe had been lacking in the past. (interview, 4/14)

As Lucy observed the professional changes in Tina, both in and out of the classroom, she realized what the principal had been suggesting to her for some time about her own potentially positive influence on the school. She admitted, "I learned that . . . I could be, or I realized that I could be, more open. And I can see why the principal is constantly telling me 'I wish you could, would, be more open with other teachers'" (interview, 5/13). As she worked with Tina, she was able to relate to other teachers like her, although they did not share the same struggles professionally. She further stated, "I learned that at the least I could start a minimal friendship with the faculty . . . and [that] I can learn from others" (interview, 5/13). Changing her narrative from the independent and isolated teacher who only attended meetings and worked with peers as asked to being present in the relationship required a change in approach to professional relationships and the definition of what it means to be colleagues.

For Tina, the narrative included a redefinition of the interaction from that of a mentoring experience to that of working with a friend. She stated, "So it was nice, it was nice to just get to know [Lucy] and see how she runs her class and you know we definitely have a lot of similar ways that we agree on relationships with kids and with other teachers" (interview, 2/14). Although this comment refers to "a lot of similar ways" that they agree, Tina and Lucy did not originally express similar views regarding relationships. In fact, at the beginning of the study, they had very different approaches to building relationships with students and with colleagues. But by redefining the mentored experience as a mutually beneficial exercise, she positioned herself to be equals with Lucy, thus also aligning herself with practices and beliefs that she initially did not enact. She remarked, "It definitely helped to build a friendship [with Lucy] and realize that we could help each other out and [discuss] how we dealt with kids because our personalities are pretty similar" (interview, 2/14). Tina was aware that she was selected by the principal to participate in the study for the purpose of helping her with classroom relationships. Tina felt that the time spent together for the study helped her both personally and professionally and that she contributed as much as she had received. Labeling the work performed as done with a colleague and friend changed the way that she was able to share her thoughts and concerns about teaching (Musanti & Pence, 2010).

Two important differences between traditional PD and what occurred in this study should be noted. First, having opportunities to be professionally vulnerable, in a redefined relationship—one that was not merely casual and was also not evaluative—afforded both teachers the opportunity to see each other as human beings

and to relate to each other and others in the school as more than just individual and disconnected teachers, who alone must work out their professional issues (Shapiro, 2007). The establishment of this kind of professional relationship allowed for them to have their own narratives of the work they performed together. Second, and closely related, the work that was arranged as having a shared focus, rather than an individual focus, allowed both teachers to gain self-esteem and identity through the interaction as they guided their own PD and change. Both of these factors also contribute to emotionally close and supportive collegial relationships (Hargreaves, 1998). By being present with each other, and creating a narrative that positioned them as mutual benefactors, both teachers found ways to fit the culture to them as individuals and to fit themselves to the culture (Bruner, 1996). Although this study was originally designed as an intervention for the novice teacher, as the study progressed and the relationship evolved, it also became a renewing endeavor for the mentor.

Interactional Dimensions of Change

In our analysis of the observable and reported actions performed within the relationship, we concluded that there were three categories of actions that influenced change in the relationship and that these categories represent three interactional dimensions, each encompassing a set of features that together support the emotional, professional, and social aspects of teaching and teacher development. The dimensions are interrelated and overlap—there is no set order in which they occur. Here we outline those dimensions and the ways in which they support teaching relationships and teacher development.

Vulnerability. As an interactional dimension of change, time and space have to be given to allow vulnerability to occur. The main feature of vulnerability as a dimension of change is that of revealing the self. This is done through a process of reflecting and sharing, including behaviors and actions in which stories are *shared*, rationales are *explained*, and situations are *described* in detail. More than just a reporting of circumstances and responses, these actions are ones in which narratives are created and shared that allow the teller to reveal herself in relation to others. This process of revealing oneself through narrative initiates change. Through reflection, a process of "fitting the members and their ways of knowing to the needs of the culture" (Bruner, 1996, p. 39) begins as the self is narrated in relation to others. Reflection also allows for self- evaluation, and sharing allows the voicing of perspectives and rationales that are then open for examination. Thus the social self is supported by locating oneself in context and in position to others. Time is a requirement of vulnerability, with some of that dedicated to creating a safe environment in which to become vulnerable.

The design of the study provided the time and opportunity for the teachers to reflect and share. From the first mentor meeting to the last, the quantity and quality of the information shared changed markedly. In the first meeting, which lasted a

total of 21 minutes, Tina completed each of the diagrams but did not elaborate on any but one of the relationships with her students; the transcript of that session was only five pages long, with 10% being instructions. In contrast, by the last session, the meetings were running a lot smoother and faster, taking only 2 minutes more, but less of the time was on the directions, while the majority of time focused on discussing individual students and specific situations with them that Tina believed affected her and the classroom climate. The transcript from this session was nine pages in length. The reporting of the interaction was much more focused but also more personal. For example, Tina wrote,

> During our session, we talked about my current struggles with certain students. The struggles I am having are my own personal feelings towards a few students that I feel I just don't know well and I feel that they give me attitude or are attention seeking. As a teacher, it is your job to be the mature one and to ignore that kind of behavior but it can be hard and can affect how I feel toward the class because I feel as though those students don't want to be there or don't like me. (Journal 6, 2/13)

Here Tina's admission of doubt regarding her personal feelings about herself versus what teachers are supposed to be demonstrates her willingness to be vulnerable. Rather quickly, Tina's professional and personal vulnerability changed as the two teachers met and she found space and time in which to be vulnerable, sharing, explaining, and elaborating on her rationale. Reflection and sharing are difficult to do if one is not allowed to reveal true motives and feelings. However, because Tina was encouraged to discuss these feelings openly, she was able to make plans to work on changing them.

As Lucy observed Tina's willingness to engage, she became more supportive and interactive with her. After the completion of the study, Tina continued to come to Lucy for help, and they have planned school activities together. Lucy felt that as she became more comfortable with Tina, and as Tina came to her and asked for help, she became comfortable reciprocating. She stated, "I'm pretty sure that I'm open to asking [Tina] things, even when it comes to teaching a student or whatever" (interview, 5/13). By this statement, we see that Lucy was open to disclosing a potential need for assistance, which demonstrates the willingness she now displays to be vulnerable to other teachers. The dimension of vulnerability resolves the tension in traditional PD of assessment centeredness and evaluative relationships by eliminating the fear of judgment.

Validation. Perhaps it was Tina's vulnerability that influenced Lucy's (Reis et al., 2000), which is preceded by and supported through the interactional dimension of validation. The main feature of validation is being present—both seeing and being seen. Actions taken that demonstrate this feature are observation and listening. Corresponding to the interactional tenet of psychocultural theory, observing and listening are less about watching a performance to assess knowledge of teaching and more about being mindful and present when in conversation, observing the feel-

ings being expressed through body language and listening to the meanings behind the words. Additionally, when truly observing and listening, one might respond to the meaning discerned by withholding judgments, asking questions, and providing affirmations. These are actions that demonstrate presence in a relationship and thus offer emotional support by allowing the other to feel heard and seen. Tina reported such actions:

> I think [Lucy] kind of, like, let me think on my own. She was just kind of there to reassure that something was a good idea. I think that's mainly what she did when she would say, "yeah that's a really good idea." There was, like, one or two students, where she gave me specific ideas of things to do with them, but I think mostly she just helped with reassuring that things were either a good idea or maybe [to suggest to] try something else. (interview, 5/13)

The reassurance that Tina felt from Lucy was clearly expressed in this example. Other evidence of more subtle reassurance and support was identified in mentored meetings. Rather than interfering or disrupting Tina's thought, Lucy would offer words of acknowledgment, such as "oh?" and "uh huh" and "OK, great."

Lucy very rarely made suggestions or gave advice. She stated, "[At times] I was really tempted to just like, tell her, but then I wasn't—I didn't feel comfortable 'cause I just thought I'[d be] putting words in her mouth and I'm not supposed to do that" (interview, 5/10). Other than to ask follow-up questions, Lucy only broke protocol three times, and even on those occasions, she was offering affirmations. In one such case, Tina was describing an incident of girls fighting in the classroom, and Lucy asked if Tina had thought to log the incident, assuring Tina that she was correct in thinking the incident might escalate and suggesting that logging it would alert the administration to the situation. This process of validating Tina through offering affirmations, withholding judgments, following up with questions, or checking in on past goals allowed Tina to be seen and heard.

Concerning her own classroom, Lucy found that working with Tina helped her reconceptualize her own approach to teaching. She stated, "[Tina] had different ways of thinking, and it made me realize how I could improve or how I would do things another way" (interview, 5/13). As Lucy listened to Tina's rationales and observed her efforts, she learned to see things from Tina's viewpoint and began to consider more deeply areas where she also could improve or try new things, both in her own classroom and in the broader context of the school environment. Tina inadvertently affirmed Lucy's own practice by listening to her comments on specific students, as stated earlier, and her attempts to try out some of those practices. The reciprocal relationship of seeing–being seen affirms both parties. These acts of being present offer emotional support and build trust in the relationship.

With the interactional dimension of validation, two tensions are resolved. Along with letting go of assessment and measurement of growth, the learner is free to be open and self-reflective. In doing so, teachers move from the data-driven,

knowledge-based approach to allow for the more intuitive judgments of teaching that are often expected but rarely praised.

Intersubjectivity. Bruner (1996) defined intersubjectivity as engagement with another, while others have defined it as coming to see and understand the world similarly (e.g., Tharp, Estrada, Dalton, & Yamauchi, 2000). Regardless of which definition is preferred, the externalization tenet of learning helps to explain the strength of this interactional dimension of change. The main feature of this dimension is collaboration, in which activities are not just surface cooperation but are deepened due to the validation and vulnerability that are already present, therefore influencing a change of perspective through engagement. Change is inherent in collaboration, as the process of working toward the achievement of shared goals requires joint activity, negotiating and planning while bouncing ideas off one another to realize the shared purposes. Thus the professional self receives support in the process of making and reviewing plans and the respecting and sharing of ideas while still developing one's own professional identity and autonomy.

By the end of the study, many practices that Tina began to incorporate into her teaching that contributed to a more inviting and friendly classroom atmosphere were clearly modeled after Lucy. Tina alluded to Lucy's influence when she stated, "And then I watch people like Lucy, where a kid will tell her something, and a kid will talk to [her] forever about it, you know, and then [listening to them] makes them feel really special" (interview, 4/13). Some changes in Tina's actions and practices, though not directly attributed to the mentoring project or to her interaction with Lucy, reflected Lucy's influence on the improvement of Tina's teaching and relationships with her students. Taking up many of the teaching beliefs demonstrated by Lucy changed how Tina saw her own classroom relationships and led to barely perceptible changes, such as allowing students to lead conversations, that Tina incorporated into her classroom practice.

Although the mentoring sessions were designated as work sessions to help Tina improve, her involvement with Lucy expanded beyond those after-school sessions to observation throughout the school day. Tina came to see how Lucy ran her class, which helped Tina with her own. The engagement that took place in the mentoring sessions, along with the allowance for vulnerability and support through validation, led to coming to a change in perspective. Although Tina was being influenced by Lucy, she remained autonomous in her decision to take up new practices, which reinforced her identity as an independent and capable teacher, even though she was still working toward improvement and change.

Lucy, too, changed through engagement in the shared activity in which they planned together, after listening to Tina's struggles and goals. Lucy stated,

> I even think our friendship improved. . . . I have more respect for her . . . and so [now] I understand the way she thinks. And it's not that I always agree on the way she disciplines or does things, but I can understand where she's coming from bet-

> ter and also . . . I can see that she's very teachable, you know, like so now that I have that relationship, like, we've even planned things together. (interview, 5/13)

The change in respect toward this teaching colleague came from the many opportunities Lucy had to plan together with Tina in her work. The intersubjectivity created through the structure of the study provided opportunities not only to engage but also to come to see and empathize as she came to see things from Tina's point of view.

The working relationship between these two spilled over beyond the biweekly meetings into other activities in and out of the school. After that first semester, and continuing after that first year, Tina and Lucy began to partner on school activities, including an out-of-state trip with the students on which they spent every day together. Observing these teachers' working relationship poststudy, the principal stated,

> I still see them migrating towards each other. They have a good relationship. It's not chummy-chummy, girlfriend-girlfriend, [but] it's a very positive, productive professional relationship, and I know they interact outside [of school] at times; [and] it's one that I know others emulate—[that] they *want* to emulate. (interview, 4/14)

These two teachers had formed a knowledge community of emotional, social, and professional support that was noticed by others in the school community and by the administration. Coming to understand the other and opening up to the views they shared influenced the ways that they engaged in their community. This may be one of the most interesting ways in which traditional PD differs from what was observed in this study. Traditional PD often begins with a community focus—what is it that we want all teachers to know, believe, and do? From there teachers are trained on procedures and curriculum that are evidence based and rigorous. Finally, they are assessed, measuring for growth. In this study, the goal of shared understanding is reached, but by opposite means and in reverse order. As noted, through the interactional dimension of change of intersubjectivity, the focus on the shared work inspires mutual understanding and ways of thinking. The focus is on the individual person but a shared goal. The format of returning and reporting of the individual's part of the shared goal actually promoted self-assessment for both parties, while at the same time promoting acceptance of different ways of knowing and being, and interestingly, allowing for difference influenced change.

Conclusion

The call for a study of the interactional dimensions of teacher change led us first to scrutinize the kind of relationship that should be established prior to any hope for learning and growth to take place. Using Bruner's (1996) psychocultural approach rather than the traditional computational approach to PD was necessary to explore how and why interactions may influence the parties involved. Focusing on the relationship between the teaching colleagues formed in schools and in PD,

we constructed an instrumental relationship. We attended to the elements we believe are missing in traditional PD situations and incorporated both emotional and professional support. In doing so, we can see that by eliminating any assessment or evaluations and by providing structure and time to work on common professional goals, we offered opportunities for the teachers to work together in structured situations that also supported the relationship. As a result, both the relationship and the PD grew in ways that benefited each of the teachers as well as their students and the larger school community. This is evidence of another of Bruner's tenets, known as the instrumental tenet, suggesting that education has implications for those who follow after.

This mentoring relationship was created in ways that led to meaningful reflection and progress, which ultimately led to impacts beyond the two teachers on their students, the principal, and other teachers noticing the effects of the mentoring relationship. These findings highlight the gap in the literature regarding interpersonal collegial relationships in PD, which have several implications for teacher teaming and the design of PD. These findings also suggest that taking a different approach to PD, one that is more about the social experience of learning rather than purely the cognitive approach, can yield both personal and professional growth that extends beyond classroom teaching.

We argue for an understanding that the personal relationship must be established before the professional one is influenced. In our analysis of this particular relationship dyad, we have come to agree with Musanti and Pence (2010) that relationships may in fact trump knowledge. It was not until these two teachers had a personal relationship that either really cared what the other did professionally. But once they had opportunities to be vulnerable with each other, validate each other's work and teacher identity, and experience intersubjectivity, the professional practice changed. Establishing the personal relationship influenced the professional one.

Each of the three interactional dimensions presented here represents collections of activities that communicate subtle messages of support. In our attempt to answer the question posed earlier, we came to realize the importance of emotional, social, and professional support for teacher development at any stage in the career. Each of these dimensions—vulnerability, validation, and intersubjectivity—allows both parties to reveal the self in a safe space, be seen and heard for who they are, and collaborate with others in meaningful ways. This all boils down to acceptance and belonging. For teachers, who strive in their daily work to accept and support their students, perhaps such feelings of personal and professional acceptance and belonging are a challenge in the ever-critical eyes of school administration, government oversight, and public opinion. In the process of attempting to meet the demands of outside entities, traditional PD tends to overlook the human element in teaching with and relating to other teachers.

The dimensions of vulnerability, validation, and intersubjectivity are concepts with which teachers are intimately familiar as they help their own students learn

and achieve. As the one in the position of knowing, the teacher is sensitive to the difficulty students have with putting themselves in situations where scrutiny is likely to occur. Teachers are also very keen to give validation to their students in the form of encouraging feedback to support risk taking. Many teachers are also well aware that students come with their own ideas and are not likely to be easily swayed from those ideas unless they can be engaged in joint activity, where learning is a shared goal between teacher and student. Why, then, is it surprising that PD would require the same relationship and support expected in everyday classrooms for teachers to change and grow?

We need to come to view the expectations of PD differently than we do currently. Rather than mass trainings or inorganic pairing of hierarchal dyads to transmit knowledge and skill, administrators might consider the needs and personal attributes of the staff and create opportunities for teachers to engage in relationships and activities that allow for vulnerability, provide validation, and support intersubjectivity. We argue theoretically for a shift in approach to PD—from a computational approach to a social interaction or psychocultural approach. We suggest the following questions to consider: What would PD look like if we were to really focus on the individual and allow that to influence the school rather than focusing on the whole staff, hoping that the group approach will somehow influence the individual? What would it mean for PD to begin to focus on improving relationships among colleagues and let ideas and beliefs from those relationships naturally emerge rather than starting with ideas and beliefs in the hope that teachers will take them up? These are questions for further research as we focus on improving professional learning environments for all teachers—whether they are experienced or beginning teachers.

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Appendix

Step 1: Create Diagrams

1. Place a stack of unmarked circles and lined sheets in front of the teacher, along with a roll of tape.

2. Read the following instructions to the teacher before she begins to create diagrams: The question of overlapping circles has been used in many studies of relationships. The purpose of our project is to understand what your relationship is like with each of your students. Place the circle representing yourself on the line, and then place the circle representing the student on the line relevant to how connected you feel your relationship is with that student. For example, circle placement may range from touching or overlapping in the case of close relationships or anywhere from opposite ends of the continuum for less close relationships. Feel free to comment on the relationship, your rationale for the choice of placement, and/or what meaning it represents as you complete this task.

3. Give the teacher one marked circle from the student stack—state the name of the student out loud (for recording purposes) as you hand it to her.

4. Once she has created the diagram and discussed the relationship, collect the diagram and place it face down off to the side (to assure that each diagram is an individual judgment).

5. Continue with Steps 1 and 2 until all students have been accounted for.

Step 2: Discussion

Once all diagrams are complete, turn them over and group them according to distance between circles, closest to most distant (see attached photo).

Ask if there are any adjustments she would like to make.

Ask the teacher to comment on what she sees (patterns, general observations, etc.).

Step 3: Planning

Together, create an action plan to focus on a specific student(s) in the coming weeks:

Review plans from the previous session.

Record plans for review during the next session.

Paperwork/reporting:

Collect all diagrams and place them in an envelope. Mark with session number and date.

Download the audio file onto CD.

Step 4: Reflection

Both teacher and mentor will journal about the experience of the session (any aspect—of working with you, reflecting on relationships, planning, etc.).

The same process will be repeated each meeting (although you may omit reading the instructions word for word at subsequent meetings).