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Negotiating Power, Identity and Mutuality: Graduate Students in Relation with Faculty, Administrators and Each Other

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NEGOTIATING POWER, IDENTITY AND MUTUALITY: GRADUATE STUDENTS IN RELATION WITH FACULTY, ADMINISTRATORS AND EACH OTHER

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Submitted in Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy
Language, Literacy and Sociocultural Studies

The University of New Mexico
Albuquerque, New Mexico

May 2009

DEDICATION

In memoriam, Jane Halquist, 1942-2008.

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NEGOTIATING POWER, IDENTITY AND MUTUALITY: GRADUATE STUDENTS IN RELATION WITH FACULTY, ADMINISTRATORS AND EACH OTHER

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ABSTRACT

While the collaborative practices of classroom teachers, teacher educators and preservice teachers have been well documented, less is known about the collaborative experiences of graduate students. The purpose of this qualitative study was to (a) describe and systematically analyze the collaborative and shared experiences of four graduate students who worked together for two and one-half years as part of a technology professional development project, (b) describe, through the voice of the graduate students, learning experiences that ran parallel to their formal doctoral education, and (c) demonstrate ways to link practitioner research and critical incidents.

Through the study, I explored aspects of four graduate students' relational practices, and the mutuality that was fostered through the sustained interactions with each other and through their work with project faculty and administrators. Data collection included (a) focus group interviews, (b) individual interviews, (c) personal correspondence, and (d) project data and artifacts.

The findings reveal that the graduate students' relational practices comprised a series of physical/environmental and relational tools, which enabled them to shape a set of relational beliefs and values and create a structure of professional intimacy. This level of professional intimacy in turn created a structure and support that enabled the graduate students to access a parallel curriculum of graduate school.

Further, the systematic analysis and rendering of two critical incidents reveal the nuances, complexities, and boundaries of the graduate students' relationships working with the project's administrators, teacher education faculty and each other. The analysis also illuminated how the graduate students individually and collectively negotiated aspects of identity, mutuality, positionality, institutional hierarchy, and power.

Combined, the findings indicate possibilities within graduate education related to (a) relational practices, (b) collaboration, and (c) mentoring. The findings also demonstrate the inherent potential of blending practitioner research and critical incidents, specifically, how the collective analysis of a critical incident in a focus group setting provided a framework through which the participants could collectively describe and analyze the complexities, perspectives and multiple layers of meaning present in their graduate school experiences.

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INTRODUCTION

Can you recall an experience that was truly transformative, an experience that had enormous consequences for personal change and development? Perhaps an experience that was particularly productive, or radical or cathartic? An experience that forever changed your life, sent you on a new direction, down a less traversed path? An experience whose effects you were not fully aware of at the time? It is only after the experience and through reflection that you begin to see the impact or the results of the experience.

For me, my work as a tech guide was one such experience. From January 2000 to May 2002, I worked closely with four other graduate students—initially, Cristina, Lisa, Allison and Joel, and then later, Cristina, Lisa, Anthony and Bobby—for Project Tech Quest (all names are pseudonyms), a technology professional development initiative at a large university in the southwest. As tech guides, we were part of our college of education's Preparing Tomorrow's Teachers to use Technology (PT3) professional development team. Each of us assisted and supported five faculty members in integrating technology into their pre-service teacher education courses. During the first year and a half of the project, we met with the faculty members weekly in one-on-one office sessions to learn specific pieces of software and increase their personal computing skills. In addition, we collaboratively planned technology integration activities, which we led in the faculty members' methods classes. Our roles during the last year of the project evolved; we continued to collaboratively plan the technology integration activities but it was the faculty members who, with our support, led the activities in the methods classes.

Throughout the last two years of the project Cristina, Lisa, Anthony, Bobby and I also worked in collaboration with one another. This collaboration was particularly strong among Cristina, Anthony, Bobby and myself; we shared an office, had classes together, co-planned the monthly professional development workshops, team-taught a beginning level computer education course and traveled to several national conferences where we presented our research on faculty technology professional development.

It was only toward the end of the two and one half years and through reflection that I began to recognize the significance of this experience. Being a tech guide had been a rich and rewarding endeavor; I had opportunities to expand my understanding and use of technology both personally and professionally, as well as opportunities to grow as a teacher educator. Before beginning Project Tech Quest my interests in technology, technology education and teacher preparation were not so clearly defined. My participation with the project marked a turning point in my career and in my future work in teacher education. I realized that my transformation throughout this experience was directly linked to the work I had done with the faculty. But perhaps more significant was my relationship with Cristina, Anthony and Bobby: our interactions played an equal, if not greater, role in my transformation. Through the course of our work together, we came to rely on each other's strengths while building expertise with various pieces of software, developing strategies for technology integration, and coping with unpredictable faculty.

During the last few months of Project Tech Quest I became curious to learn more about Cristina, Anthony and Bobby's experiences. What had this technology professional development experience been like for them? How would they describe our work together? How did they view our shared experiences with faculty and project

administrators? This questioning led Cristina, Anthony, Bobby and me to begin to more closely examine what happened during the course of our work together, and in turn, led me to conceptualize our collaborative endeavors and our shared experiences as the focus of my dissertation research.

In October 2002 and March 2003, I conducted a pilot study, which consisted of two focus group interviews with Cristina, Anthony and Bobby; the first centered on aspects of our collaboration, the second on an incident from our work together. Conducting the two focus group interviews heightened my curiosity to learn more about how we, as a group, made meaning of our shared experiences, and in turn, laid the foundation for my dissertation study.

For the dissertation study, I built upon the pilot study data (two focus group interviews) by engaging Cristina, Anthony and Bobby in a third focus group interview in May 2004 where we discussed a second critical incident from our work together. In the second and third focus group interviews, the four of us used a series of probing questions to investigate a specific event or incident that occurred during our work together with the project. Involving Cristina, Anthony and Bobby in a process of shared meaning making revealed some of the complex dimensions and nuances of our collaborative experiences and our interactions with project administrators and faculty.

In addition, I conducted individual interviews with Dr. Borg, the project's faculty development coordinator, Cristina, Anthony and Bobby as well as follow up correspondence with each person. The data from the individual interviews and personal correspondence were then combined with the focus group data and archival data to illuminate aspects of Cristina, Anthony, Bobby and my shared experiences.

During the first focus group interview, Cristina, when discussing our collaborative efforts, observed that "in some ways we fit" (FG Interview, 10/31/02, p. 4), I was intrigued by this description and it became the basis for further exploration. In what ways did we fit? What conditions supported and sustained our fit? When didn't we fit? I explored these questions, and others, through the dissertation's larger research question: *How do graduate students involved in a technology professional development project make meaning of their collaborative and shared experiences?* A subsidiary question: *How do the graduate students' interactions impact their personal and professional development?* was also explored in hopes of revealing learning experiences that ran parallel to our formal doctoral education.

All three focus group interviews provided opportunities for the four of us to discuss details and aspects of our relationships with each other, the Project Tech Quest administrators, and the faculty with whom we worked. Through the analysis of two critical incidents—*Elizabeth's Announcement* and *A Faculty Member's Comment*—we explored issues related to positionality, identity, power and relationships. What follows, then, is a discussion of how Cristina, Anthony, Bobby and I individually and collectively negotiated these issues and the tensions inherent in our work. The discussion also centers on aspects of our relational practice and the mutuality that was fostered through our sustained interactions both with each other and through our work with the project faculty.

An Overview of the Dissertation

I have divided this dissertation into seven chapters, each with its own focus and content. In Chapter 1, I discuss the purpose of the study, the goals of the research, and the literature related to the various research questions.

In Chapter 2, I discuss the methods I used to conduct the dissertation study. I detail practitioner research and the use of critical incidents, and the data collection process. I also present the questions used in the analysis of the two critical incidents and describe the process of rendering each incident critical.

Relational cultural theory is the focus of Chapter 3. In this chapter, I present aspects of the theory and its application to my research, and discuss notions of power-over, mutuality and growth in relationship.

Chapter 4 describes aspects of Cristina, Anthony, Bobby and my work together. I present the themes related to our collaborative process and relational practices. I also describe the impact our collaboration had on our personal and professional development.

Chapter 5 focuses on the first critical incident, *Elizabeth's Announcement*. In this chapter, I analyze an announcement Elizabeth, the project coordinator of Project Tech Quest, made regarding a faculty professional development workshop. I discuss the ripple effects of the announcement as well as aspects of our relationship with Elizabeth.

The second critical incident, *A Faculty Member's Comment* is discussed in Chapter 6. Here, I analyze a faculty member's comment regarding her tech guide's performance, discuss Cristina, Anthony, Bobby and my positionality as graduate students, and examine our patterns of interactions with the Project Tech Quest faculty.

In Chapter 7, I detail the contributions of the research focusing on aspects of relational cultural theory and mutuality in conjunction with education. I also discuss implications of the research including possibilities surrounding the use of the critical incident method. I conclude by offering recommendations for future research.

CHAPTER I: THE STUDY

Purpose of the Study

When asked to describe their personal journeys as graduate students, participants in Nyquist et al.'s (1999) study responded with drawings and stories filled with threatening cliffs, precipices, chasms, traps, impossible passages and "elements of uncertainty, self-doubt, insecurity, personal embarrassment, feelings of isolation, and hopelessness" (p. 19). What most concerned the researchers was the absence in most pictures of guides, safety nets, ropes or other means of assistance. Most notable, was the fact that an overwhelming majority of participants' comments spoke of the isolation they felt as they progressed through their programs.

My own graduate student experience, as described in the introduction, runs counter to those of the graduate students in Nyquist et al.'s study; however, it makes me wonder: Is graduate school expected to be a solo, Herculean rite of passage where there is little space for collaboration? In fact, the collaborative experiences between classroom teachers (Engeström, 1994; Grumet, 1989; Hobson, 1996; Miller, 1990); teacher educators and preservice teachers (Levin & Rock, 2003); teachers and preservice teachers (Levin & Rock, 2003); researchers and teachers (Cochran-Smith & Lytle, 1999; Craig, 2003; Florio-Ruane, 1991; Porter, 1990); teacher educators (Anson & Rutz, 1998; Bray, Lee, Smith & Yorks, 2000; Bruffee, 1999; Kluth & Straut, 2003; Nason, 1997); or as a device to promote professional development (Hargreaves, 1995; Musanti, 2001) have been well documented. Yet, what do we know about the collaborative experiences of graduate students? And more specifically, what does it mean for graduate students to work together collaboratively?

Anderson (1996) observed that doctoral students in the fields of chemistry, civil engineering, microbiology and sociology who enter highly collaborative departments can expect not only the short-term benefit of a better work environment, but also the long-term advantage of better preparation for research. Similarly, in his study of international graduate teaching assistants at an American university, Kilburg (1992) found that providing support systems of reciprocity, mutuality, parity and cultural sensitivity, through peer collaborative mentoring gave the students an opportunity to develop a sustained learning community. Zhao and his colleagues (1998) examined the experiences of doctoral students from two traditionally separate cultures—technology sophisticated experts or "techies" and teachers—and found that the two groups were able to come together to form a new culture where the students were able to interact, challenge and learn from each other.

Davis, Bagley and Ishikawa (2000) acknowledged that collaborative activities within graduate student professional development programs can be efficient and effective learning opportunities where graduate students can explore instructional issues and obtain or practice teaching skills and share creativity, scholarship, leadership and workload. Collaboration in this context, according to the authors, also "encourages a culture of talking about teaching, where group interaction and feedback help overcome the common academic culture of 'closed door teaching'" (p. 36).

Our collaborative and shared experiences as tech guides are similar to those described by Davis and his colleagues, experiences that, I believe, complemented, enhanced and expanded our doctoral program coursework. Throughout our work together, Christina, Anthony, Bobby and I engaged in an ongoing, informal type of

learning experience that included developing new understandings of technology, technology education and teacher education. These learning experiences ran parallel to our formal doctoral education and for me were unique and deeply significant in my development as a graduate student and teacher educator.

Consequently, I was interested in placing Cristina, Anthony, Bobby and my collaborative and shared experiences in the broader context of graduate education (Henstrand, 1993). In most settings, doctoral students are capable and knowledgeable people (Golde, 2000). However, within the context of the university, they are, according to Golde (2000) rendered "relatively voiceless, stemming from their powerless, dependent position" (p. 203). Further, Golde, drawing on LeCompte (quoted in Golde, 2000, p. 203) posits, doctoral students meet the criteria of people "who have not been heard because their points of view are believed to be unimportant or difficult to access by those in power." Therefore, following Golde, I argue, graduate students' experience, especially their collaborative experiences with other graduate students, their experiences and interactions with faculty, and their interpretations of program characteristics and departmental relationships are important and worthwhile sources of data.

The goals of this study were (a) to describe and systematically analyze the collaborative and shared experiences of four graduate students working within a technology professional development project; (b) to describe, through the voices of graduate students, a learning experience that ran parallel to our formal doctoral education thereby providing a different vantage point of graduate education; and (c) to describe ways to link two forms of qualitative inquiry—critical incidents and practitioner research—in order to examine lived experiences.

Background to the Questions

In recent years, higher education, particularly graduate education, has become the focus of intense study and educational reform. In 1993, The Association of American Colleges and Universities and the Council for Graduate Schools initiated the Preparing Future Faculty (PFF) program to improve the way graduate students prepared for an academic career (Gaff & Pruitt-Logan, 1998). Based on the premise that graduate education can and should familiarize students aspiring to academic careers, PFF involves preparation for teaching and research as well as for academic citizenship. The program, financed primarily by the Pew Charitable Trusts, the National Science Foundation and the Atlantic Philanthropies, has developed new models of doctoral preparation within the academic disciplines of biology, chemistry, communication, computer science, English, history, mathematics, physics, political science, psychology and sociology (Gaff & Pruitt-Logan, 1998). Other national initiatives have followed suit: Re-envisioning the Ph.D., The Responsive Ph.D., and The Carnegie Initiative on the Doctorate; each program aimed at addressing the concerns of various stakeholders in doctoral education as well as enriching and invigorating the education of doctoral students (Nyquist, 2002).

The PFF program has spawned a series of occasional papers and companion studies designed to assess the experiences of graduate students (Applegate, 2002; Gaff, 2002; Gaff & Pruitt-Logan, 1998). Golde and Dore (2001) conducted a national survey of the experiences of doctoral students in eleven arts and sciences disciplines in twenty-seven institutions and discovered a three-way mismatch between the traditional purposes of doctoral education, doctoral student aspirations and reality. The researchers determined that "students are not well prepared to assume the faculty positions that are

available, nor do they have a clear concept of their suitability for work outside of research" (p. 5). Further, Golde and Dore advocate that doctoral programs become more transparent and provide useful information to students.

In addition to the studies of graduate students' experiences in doctoral programs, studies have been conducted in other areas of graduate education, particularly in the areas of institutional practices and policies that contribute to doctoral student retention (Dorn & Papalewis, 1997) and attrition (Golde, 2000; Lovitts, 2001; Lovitts & Nelson, 2001; Tinto, 1993).

The Socialization of Graduate Students

Graduate education has been described as a process of becoming socialized into an ultimate professional role (Anson & Rutz, 1998; Antony, 2002; Baird, 1990; Reybold, 2003; Tierney, 1997). Tinto (1993) describes the process as integration into two parallel systems: the academic and the social. "Academic integration" for doctoral students refers to becoming part of the work world of the discipline and the department: taking courses, developing aptitude with fundamental theory and research skills, participating in colloquia, and writing papers for presentation and publication (Golde, 2000). "Social integration" involves the process of making friends and becoming part of the department, and for some, the university-wide community: attending social events, taking part in student organizations, and interacting informally with faculty (Golde, 2000).

Tinto (1993) suggests that the academic and social integration processes are largely intertwined for doctoral students, especially in the later stages of the program, when a student's social and work worlds are often virtually inseparable. In Tinto's words:

> Social membership within one's program becomes part and parcel of academic memberships, and social interaction with one's peers and faculty become closely linked not only to one's intellectual development, but also to the development of important skills required for doctoral completion. (p. 232)

Faculty members serve as the primary agents of socialization and integration (Golde, 2000). Nonetheless, peers are influential (Baird, 1990, Boyle & Boyce, 1998) particularly as a source of tacit knowledge—what courses to take, who to turn to for help—that students must obtain in order to survive and thrive in the culture of their department (Kleinman, 1983).

Collegiality and Collaboration among Graduate Students

In their study of doctoral departments, Boyle and Boice (1998) found one of the ways exemplary departments distinguish themselves is through their ability to foster collegiality among first-year students. According to the researchers, placing first-year doctoral students in a communal office provides an environment where students can informally socialize, have lunch together, and interact over homework problems and course requirements; experiences that aid students' social integration into their new department.

Environments that foster collegiality among first-year students may also encourage interaction between first-year and advanced graduate students by assigning each incoming student to an advanced student (Boyle & Boice, 1998). In this dynamic, advanced students help new students "navigate the bureaucratic process of registration,

serve as informal advisors for course decisions and provide emotional and social support for what may prove the most taxing year of graduate school" (Boyle & Boice, 1998, p. 89). These collegial relationships, according to Boyle and Boice (1998), often evolve into "informal mentoring roles and aid students in choosing advisors and deciding on research and writing projects" (p. 89).

Collegiality alone does not yield collaboration. Yet, environments that encourage collegiality and promote socialization and interaction between doctoral students may establish contexts where students can learn with and from one another (Bruffee, 1999), which in turn may lead to collaboration. For example, in her graduate level research course, Nason (1997) examined her group's collaborative approach to learning ethnographic research methods. During the five-week summer course, the participants capitalized on each other's strengths and empathized with each other's weaknesses. According to Nason, "by *doing* ethnography together, we evolved into a community of learners who changed the way we thought about learning, teaching and research" (p. 94). [emphasis in original]

John-Steiner (2000) defines collaboration as the "interdependence of thinkers in the co-construction of knowledge" (p. 3); a notion supported by a community of scholars who view thinking and learning as a social process. From this social-cultural perspective, collaborative practices involve opportunities for collective thinking, reflection about practice, shared critique and supported change (John-Steiner, 2000). For John-Steiner, "a joint, passionate interest in a new problem, art form, or social challenge is crucial to collaborative success" (p. 189). Through collaboration, "we can transcend the constraints

of biology, of time, of habit, and achieve a fuller self, beyond the limitations and the talents of isolated individuals" (p. 188).

Graduate students involved in the Program in College Teaching and the TA Consultant Program, two graduate student professional development programs at the University of California, Davis, have collaborated to develop and present campus-wide workshops and presentations, to conduct survey and interview research and to author publications in teaching related journals. William Davis and his colleagues (2000) at UC Davis, define collaboration in this context as team projects focused on skills or issues in higher education in which peers share creativity, scholarship, leaderships and workload" (p. 33). The authors acknowledge that collaboration allows graduate students to obtain a greater amount and diversity of information and to attempt larger, more complex activities because it provides a mechanism for allocating tasks while still allowing individuals to reap the benefits of the whole. Graduate students who engage in these volunteer collaborative enterprises explore instructional issues and obtain or practice teaching skills in ways that individuals would seldom take on.

With the exception of Nason (1997) and Davis et al. (2000), much of the literature on graduate students in collaboration focuses on the collaborative relationship between graduate students and their professors, usually framing the enterprise as beneficial to both parties (Anderson, 1996; Anson & Rutz, 1998; Golde and Dore, 2001; Lovitts, 2001).

Graduate Students as Technology Mentors to Faculty

Several universities participating in the Preparing Tomorrow's Teachers to Use Technology (PT3) initiative utilized graduate students as technology mentors to college

of education faculty (Koehler, Mishra, Hershey & Peruski, 2004; Leh, 2005; Otero et al., 2005; Thompson, Chuang & Sahin, 2007). Other institutions, not part of the PT3 initiative, have also tapped graduate students as mentors to faculty as a means to improve technology integration in teacher education (Eichelberger & Fulford, 2001; Smith, 2000). A common and perhaps most effective component among these programs was the one-on-one faculty assistance by graduate students. In these mentoring relationships, graduate students provided knowledge, skills and technical support to address faculty members' individual technology needs and concerns. Faculty members gained confidence in technology use and integration, and graduate students improved their hardware and software skills as well as their pedagogical abilities.

Chuag and Schmidt (2007) observe that effective technology mentoring between graduate students and faculty members has the potential to break down the traditional hierarchical structure to move participants toward a relationship through which learning is socially constructed and mutually beneficial. The result: learning communities of support, collaboration and communication for both the graduate student mentors and the faculty mentees.

Similarly, Smith (2000), in his work with special education graduate student mentors, recognized that the graduate students and their corresponding faculty members developed relationships that went beyond technology mentoring. Graduate students reported personal and professional development as they gained important information, assistance, support and guidance from the various faculty members with whom they worked. Smith concluded that graduate student mentors represent "a viable means to

support ongoing efforts to assist teacher education faculty members' use of technology in the higher education environment" (p. 178).

Regardless of the context, then, creating opportunities where graduate students serve as technology mentors to faculty holds the potential to positively impact both the students and faculty. As I will highlight in the subsequent chapters, it was through our work as tech guides that Cristina, Anthony, Bobby and I had opportunities to become socialized into the workings of the academy, engage in meaningful collaboration, and grow individually and collectively in our use of technology.

In the next chapter, I turn to discuss the dissertation's overall design and methodology.

CHAPTER II: METHOD

Overall Design

In this study, I combined practitioner research and critical incidents—in order to examine the questions: *How do graduate students involved in a technology professional development project make meaning of their collaborative and shared experiences?* and *How do the graduate students' interactions impact their personal and professional development?*

I employed a case study design in order to gain an in-depth understanding of Cristina, Anthony, Bobby and my collaborative and shared experiences. "Insights gleaned from case studies," according to Merriam (2001), "can directly influence policy, practice and future research" (p. 19). For Merriam (2001), "the interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation" (p. 19). Typically, methods for case study research include a combination of observation, interview and archival collection. Within the context of this study, I combined focus group interview data with individual interview data, personal correspondence, and additional project data in order to describe Cristina, Anthony, Bobby and my collaborative and shared experiences with each other and with the project's administrators and faculty with whom we worked.

Practitioner Research

Practitioner research is one among several strands of teacher research that has experienced popularity throughout the last century (Drennon & Cervero, 2002). Anderson, Herr and Nihlen (1994) provide a working definition of practitioner research

as "research that is 'insider' research done by practitioners…using their own site… as the focus of their study" (p. 2). The authors point out that practitioner research is a reflective process, "different from isolated, spontaneous reflection in that it is deliberately and systematically undertaken, and generally requires that some form of evidence be presented to support assertions" (p. 2). Moreover, the authors argue that this form of research is "best done in collaboration with others who have a stake in the problem under investigation" (p. 2).

Additionally, Anderson (2002) observes, "practitioner research exists on a continuum from more social science-oriented forms, including action research (using both qualitative and quantitative methods) to more humanities-oriented forms of narrative research drawing on personal and professional experience" (p. 23). My experiences as a tech guide, as noted earlier, were significant and marked a turning point in my career in teacher education. As a result, I was motivated to research the tech guides' professional experiences more fully and viewed my research as encompassing elements of what Anderson describes as the humanities-oriented form of narrative research that draws from professional experience.

Within the context of my dissertation research, I am an "insider:" I have first-hand knowledge of the day-to-day responsibilities of the tech guides. I possess knowledge that is "deeper, more nuanced, and more visceral" (Anderson, 2002, p. 23) than that of an outside researcher. My two and one half year involvement with Project Tech Quest coupled with my tacit, insider knowledge provides access to the "hidden transcripts" (Scott, 1990) of the tech guide experience. That is to say, I am aware of the complexities and multiple dimensions of the role: the relationships, interactions and tensions. As an

insider with access to the hidden transcripts, I have the ability to offer an "experience-near" (Geertz, 1983) perspective of the tech guide experience.

In addition, I have well-established relationships with Cristina, Anthony and Bobby. As tech guides we shared an office and worked closely, almost daily, on different aspects of Project Tech Quest. As graduate students we shared research interests, had classes together and team taught an introductory computer course. And while these well-established relationships create a level of trust between the participants and myself (the researcher), they also warrant special criteria in order to establish trustworthiness or validity of the study (Anderson, 2002; Anderson & Herr, 1999). I will return to the issue of validity and discuss the criteria in more detail later in this chapter.

The Use of Critical Incidents

In the literature, the term "critical incident" has been defined in a variety of ways: an everyday event that stands out (Martin, 1996); a challenge that offers no preferred solution (Learning and Teaching Centre, n.d.a.); vivid happenings that are considered significant or memorable (Brookfield, 1995; Woods, 1993); a problematic situation that presents itself as a unique case and promotes reflection (Schön, 1987); or "highly charged moments and episodes that have enormous consequences for personal change and development" (Sikes, Measor & Woods, 1985, p. 432).

For my purposes, Tripp's (1993) definition and approach are most useful. Writing in his book, *Critical Incidents in Teaching: Developing Professional Judgment*, Tripp states:

> Critical incidents are not 'things' which exist independently of an observer and are awaiting discovery like gold nuggets or desert islands, but like all

> data, critical incidents are created. Incidents happen, but critical incidents are produced by the way we look at a situation. (p. 8)

As a result, our interpretation of the significance of an event makes it critical. To consider something as a critical incident requires a value judgment. The basis of that judgment, according to Tripp (1993) is the "significance we attach to the meaning of the incident" (p. 8). In order to turn an event into a critical incident, we do more than simply categorize or label it. We must ask what happened, what allowed or caused it to happen and what did it mean? In doing so, we begin to investigate some of the underlying structures that produce that kind of incident.

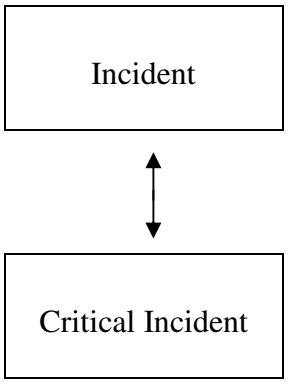
To illustrate this process, I turn to an example from Tripp (1993) entitled "Permission". "Mary raised her hand. After about a minute her teacher noticed and asked her what she wanted. Mary asked if she could sharpen her pencil" (p. 25). This is a description of what happened. It is not an explanation, as it falls short of telling why this exchange took place at all. We can explain it by saying, it is the way children are supposed to ask the teacher if they can do something. We can explain its significance by stating, Mary is conforming to the rule. However, we remain at the concrete level of the particular incident. To render this a critical incident we have to say what the incident meant, which requires us to move out of the immediate context in which the incident occurred. For instance, according to Tripp, one might see Mary raising her hand to ask to sharpen her pencil as meaning she is not allowed to decide such matters for herself, which in turn is indicative of the power structure of the classroom making Mary dependent upon the teacher's rather than her own judgment and authority. Tripp posits "Mary's classroom is contextualized by the school system which is contextualized within

the local district which is contextualized within the wider national society" (p. 25). At each of these levels, the significance of the original incident—Mary raising her hand—becomes more general. The result, then, according to Tripp is that "schools teach children to accept and depend on the authority of the state rather than on themselves and their own initiative" (p. 25).

The event of Mary raising her hand is not "critical" in and of itself. To be critical, the event had to be shown to have a more general meaning and to indicate something else of importance in a broader context. Thus, critical incidents are not simply observed; they are literally created (see Figure 3.1).

Figure 3.1

The Making of a Critical Incident



Describe incident
Suggest explanation and meaning within the immediate context

Find a more general meaning and classification/significance of the Incident

Source: Adapted from Tripp (1993).

Further, Tripp emphasizes that, in large part, the majority of critical incidents are not at all dramatic or obvious. In fact, according to Tripp, critical incidents are "mostly straightforward accounts of very commonplace events that occur in routine professional practice which are critical in the rather different sense that they are indicative of

underlying trends, motives and structures" (pp. 24-25). It is only through analysis, as in the case of Mary, that these rather typical incidents are rendered critical.

Mixing Critical Incidents and Practitioner Research

While educational researchers have analyzed critical incidents to improve teaching practices (Brookfield, 1995; Martin, 1996; Symth, 1991; Learning and Teaching Centre, n.d.a.; Thiel, 1999; Tripp, 1993) examine conundrums (Sikes, Measor & Woods, 1985; Woods, 1993) and explore cultures within schools (Angelides, 1999), several teacher educators have combined critical incidents methodology with the self-study and action research traditions of practitioner research to inform their classroom practice, model the research process for their students, and understand incidents within the university environment. Preskill (1997), for example, asked graduate students in a program evaluation course to reflect on their reactions to, and learning from the course by responding to a set of critical incidents evaluative questions (a variation of Brookfield's [1995] critical incidents questionnaire). According to Preskill, "the use of critical incidents may be a particularly appropriate method for evaluating instructors who wish to model experiential learning and encourage reflective practice in their classroom or training environments" (p. 66).

In order to chart her personal development as a reflective practitioner, Kosnik (2001), drawing heavily on Schön's (1983) theory of reflective practice, analyzed seven critical incidents from her work in restructuring a one-year, post-baccalaureate teacher education program. For Kosnik, critical incidents were seen as situations that were more than an isolated instance and had significant implications. The self-study allowed her to

explore and better understand herself and the implications of coordinating an inquiry-oriented teacher education program.

Herr (2005) used her insider knowledge as a participant observer to analyze the critical incident of a university administrator mandating mediation as a way to resolve faculty discord. Herr suggests that the "analysis of critical incidents invites a probing into workplace norms that help construct institutional realities, and can stimulate reflection on institutional practices, exposing underlying motives and structures" (p. 24).

As these teacher educators have shown, blending critical incidents methodology with practitioner research provides a framework for description and analysis, and yields an understanding of the complexities and multiple layers of interactions present in various contexts within institutions of higher education.

Moving From Theory to Practice

Earlier I presented Tripp's (1993) notion that it is our interpretation of the significance of an event that makes it critical. This interpretation, or process of diagnosis, requires a value judgment by asking what happened, what allowed or caused the event to happen, and what it meant. Other researchers have employed similar means to interpret critical incidents. For example, in her study of Cyprus schools, Angelides (2001) used a series of questions as an interpretive tool to analyze critical incidents in order to understand the cultures of three primary schools and "go deeper into the taken-for-granted norms" (p. 436) of the teachers and students. The questions, adapted from Smyth (1991), acted as a device to probe "into a critical incident in order to find what was really learned from that account" (Angelides, 2001, p. 436).

As noted previously, my research attempts to answer the questions: *How do graduate students involved in a technology professional development project make meaning of their collaborative and shared experiences?* and *How do the graduate students' interactions impact their personal and professional development?* Mixing critical incidents with elements of practitioner research allowed me to explore the complexities of Cristina's, Anthony's, Bobby's and my experiences and to capture a richer, more detailed rendering of these experiences. Drawing on Tripp, Angelides and others, I developed a series of probing questions (see Table 3.1) that Cristina, Anthony, Bobby and I used to analyze the incidents we identified as significant.

Table 3.1

Probing Questions for Interrogating a Critical Incident

1. Whose interests are served or denied by the actions of the critical incident?
2. What conditions sustain and preserve this action?
3. What power relationships between the faculty, administrators and graduate students are being expressed?
4. What structural, organizational, and cultural factors are likely to prevent faculty, administrators and graduate students from engaging in alternative ways?

Source: Adapted from Angelides (2001), Symth (1991) and Tripp (1993).

From Tripp's (1993) perspective, critical incidents should critique the way things normally operate. The probing questions listed above provided a point of departure to explore the underlying structures of our collaborative endeavors and interactions with Project Tech Quest administrators and faculty. Conceptually, the use of critical incidents,

specifically the probing questions, allowed for a deeper investigation of our practices, interactions and experiences. Engaging in this way allowed us to critically question our practices and experiences.

Methodology, according to Wolcott (2001), refers to "underlying principles of inquiry rather than to specific techniques" (p. 93). In this respect, the underlying principles of my research involved a critical, scholarly analysis of Cristina, Anthony, Bobby and my collaborative experiences and relational practices. Given my research questions, the use of critical incidents provided a clean, effective approach through which to gather, analyze and interpret the data.

Denzin and Lincoln (2000) posit "qualitative researchers deploy a wide range of interconnected interpretive practices, hoping always to get a better understanding of the matter at hand" (pp. 3-4). In this chapter I have detailed at length the specific methodology for two reasons. First, the use of critical incidents, as researchers before me have shown, blends well, even, dare I say, naturally, with practitioner research. Second, blending critical incidents with practitioner research allowed for a "probing of workplace norms" (Herr, 2005), an "investigation of taken-for-granted norms and assumptions" (Angelides, 2001) and enabled me to draw upon my insider knowledge to render a more detailed and expansive portrait of Cristina, Anthony, Bobby and my experiences with Project Tech Quest.

Brainstorming Incidents

In September 2002, Cristina, Bobby and I brainstormed a list of episodes or incidents we felt were significant from our work together during the project. Our initial list included the following incidents:

"The Weakest Link" comment, National Educational Computing Conference (NECC), Chicago

Lisa's interaction with her own faculty and her relationship with Cristina's faculty

Bobby and Anthony join Project Tech Quest

Joel working "behind the scenes," his relationship with Anthony, and his treatment of Cristina

Move into Room 118 of the Center for Technology in Education

New Project Coordinator joins Project Tech Quest

Design, redesign of format for faculty professional development workshops

iMovie workshop

Photoshop workshop, which at first the tech guides were not invited to attend

Bernie Dodge WebQuest workshop

Dr. Borg's energy/attitude during the spring 2002

Writing Group—"The Paper" goes to Ireland

Redesign of interview questions

Writing collaboration between Lisa, Cristina, Bobby and Don

The Log/Reporting Templates

Faculty member's visit to the Tech Guide Office

Faculty member's hallway comments to Cristina

8:00a.m. phone call

We later shared this list with Anthony, who agreed it accurately represented significant incidents from our work together. Organizing this list chronologically (see Table 3.2) offered an opportunity to view the interconnectedness of several incidents. For example, the appointment of Elizabeth, as the new project coordinator in January 2001 triggered a series of incidents during the spring semester, among them, a change in the faculty professional development workshops. And while it is not uncommon for a new coordinator to make adjustments or changes in organizational procedures or protocols, such efforts can have significant impact on other individuals.

Several incidents from our initial list—Lisa's (the fifth tech guide) interaction with her own faculty and her relationships with Cristina's faculty; Joel (one of the

original tech guides who later left the project) working "behind the scenes," his relationship with Anthony and his treatment of Cristina—do not appear in Table 3.2 as they were continuously evolving throughout the life of the project, and thus defy categorization by semester. In contrast, the incident of the log/reporting templates appears three times. The incident occurred initially during spring 2001 in relationship to the new coordinator, again during fall 2001, and then a third time during spring 2002.

During the brainstorming, Bobby asked, "Are we focusing on incidents or events for us as individuals or us as a group of tech guides?" His question reinforced my earlier belief that in addition to our shared, social experiences, we each had personal incidents that resonated and perhaps in some ways shaped our individual tech guide experiences. In fact, several incidents from our initial list—"The Weakest Link" comment; Lisa's relationship with her faculty; the 8:00a.m. phone call; and a faculty member's hallway comments to Cristina—relate to the experiences of individual tech guides. While the main focus of the research centers on incidents inclusive of Cristina, Anthony, Bobby and me—*Elizabeth's Announcement* and *A Faculty Member's Comment*—I do explore aspects of the these additional incidents in chapters 5 and 6.

According to Tripp (1993), "incidents only become critical because someone sees them as such" (p. 27). Together, Cristina, Anthony, Bobby and I determined that the incidents of Elizabeth's comment regarding the iMovie workshop and a faculty member's visit to the tech guide office encapsulated multiple areas of interactions with the Project Tech Quest administrators and faculty as well as with each other. And as a result, would be made critical through a discussion of the probing questions (see Table 3.1) during the focus group interviews.

Table 3.2

Chronological Order of Incidents from Project Tech Quest†

Semester	Incident
Fall 2000	Bobby and Anthony join project in early August 2000
	Move into Room 118 of the Center for Technology in Education, September 2000
	Faculty member's hallway comments to Cristina, September 2000
Spring 2001	New Project Coordinator joins project in January 2001
	Redesign of the format for faculty professional development workshops
	Photoshop workshop, March 2001
	iMovie workshop, April 2001*
	The Log/Reporting Templates
Summer 2001	Dr. Borg's "The Weakest Link" comment, NECC, Chicago, June 2001
Fall 2001	Bernie Dodge WebQuest workshop, September 2001
	Faculty member's visit to the Tech Guide Office, October 2001*
	Redesign of interview questions
	The Log/Reporting Templates
Spring 2002	Dr. Borg's energy/attitude during the spring 2002
	Writing Group—"The Paper" goes to Ireland
	Writing collaboration between Lisa, Cristina, Bobby and Don, March 2002
	8:00a.m. phone call, March 2002
	The Log/Reporting Templates

†Brainstormed by Cristina, Bobby, Don and later confirmed by Anthony (September 18, 2002)

*Incidents made critical during the second and third focus group interviews

Participants

The study participants were Cristina, Anthony, Bobby and me. I have integrated more complete descriptions of Cristina's, Anthony's, Bobby's and my backgrounds into the narrative of chapter 4 but by way of introduction: During the study, the four of us were full time graduate students in education at a large research university in the southwest. Cristina, an Argentine female, and I, a white male, were in our late 30s, Bobby, a white male, was in his early 30s and Anthony, a white male, was in his early 50s. Cristina grew up in Argentina and had been in the United States less than a year before beginning her graduate work. Originally from the Texas, Anthony had spent the majority of his life in the southwest. Bobby grew up in California and had lived in Germany and Ecuador before moving to the southwest to pursue graduate school. I grew up in Pennsylvania and had lived in the southwest for eleven years before entering graduate school. We were all from middle class backgrounds.

Our backgrounds and areas of expertise in education were diverse and wide ranging: Cristina had a background in special education, Anthony had experience in science and technology education, Bobby had experiences working with English language learners and I had a background in early childhood education. As tech guides, we devoted 20 hours a week to Project Tech Quest, our College of Education's technology professional development project.

Data Sources and Data Collection

The three focus group interviews I conducted with Cristina, Anthony, and Bobby during October 2002, March 2003 and May 2004 served as the ***primary data source*** for

this research. The focus group sessions were audio taped and transcribed verbatim. Each focus group lasted approximately 90 minutes. In the first focus group interview, I used a series of open-ended questions to engage Cristina, Anthony and Bobby in a discussion of our collaborative endeavors and shared experiences. For example, what made our work so successful? What happened in our community of learning that was significant? Or I'm wondering how you would describe our work together if you were describing it to someone who wasn't familiar with Project Tech Quest? The open-end questions provided flexibility within the interview, invited each participant to contribute his or her understanding of our experiences and created a space for us to reflect and think together about the impact of certain situations and events. One person's response was at times confirmed, elaborated upon or met with a counter explanation or perspective.

Throughout the interview, I, at times asked follow up questions to clarify, initiate or, at times, redirect the discussion. For example, using prompts such as "in what way?" or "talk a little bit more about…." all the while remaining mindful to follow Cristina's, Anthony's and/or Bobby's lead. During the second and third focus group interviews, I again used open-ended questions to initiate the conversation of the incident and then introduced the probing questions (see Table 3.1) to invite a collected critique of each incident.

The collection of data took place through a series of stages, which are summarized in Table 3.3. (See Appendix A for a timeline of the focus groups interviews, individual interviews, and personal correspondence data collection process.)

Table 3.3

Stages of Data Collection

Stage	Data/Timeline	Purpose
One	Brainstorm initial list of incidents—September 18, 2002	Identification of incidents from Project Tech Quest
	First Focus Group Interview—October 31, 2002	Discussion of our collaborative processes
	Second Focus Group Interview—March 24, 2003	Discussion of Incident One—*Elizabeth's Announcement*
	Interview with Dr. Borg—March 27, 2003	Discussion of Project Tech Quest
Two	Third Focus Group Interview—May 28, 2004	Discussion of Incident Two—*A Faculty Member's Comment* and revisit Incident One using probing questions (Table 3.1)
Three	Individual Interviews and Personal Correspondence Review of additional project data—November and December 2003, January 2004, June 2005, June and July 2006, June and July 2007	Clarification and triangulation and rendering of critical incidents and chapter on collaborative process
Four	Periodic member checking as chapters were completed—July 2005, January, July, and October 2006, February 2007	Member check the rendering and analysis of the two critical incidents and chapter on our collaborative process

Stage 1 included a series of data collection activities: the development of the initial list of incidents Cristina, Anthony, Bobby and I identified as significant, the two focus group interviews conducted as part of a pilot study and an interview with Dr. Borg, the faculty development coordinator for Project Tech Quest.

In **Stage 2**, I conducted a third focus group interview where Cristina, Anthony, Bobby and I discussed the incident of a faculty member's visit to the tech guide office when she made a comment regarding her tech guide's performance. In this interview, I

introduced the probing questions (see Table 3.1) and we engaged in a discussion of this incident as well as a discussion of *Elizabeth's Announcement*. We used the probing questions to interrogate, analyze and render each incident critical.

Stage 3 focused primarily on the exploration of ***additional project data sources.*** As a government funded initiative, Project Tech Quest, produced a plethora of data, some pieces more appropriate to my research than others. The following data sources provided useful, relevant information and served as entry points into further exploration of our tech guide experiences.

- A thirty minute video taped discussion during the October 2001 site visit where the tech guides reflect on their experiences with the project;
- Christina, Bobby and Anthony's individual tech guide journals from August 2000 through April 2002;
- My tech guide journal from August 2000 through April 2002;
- Project Tech Quest grant proposal and six-month report;
- Sixteen audio tapes of weekly tech guide meetings recorded between October 2001 and May 2002; and
- Field notes from my participation in and observations of weekly tech guide meetings from August 2000 through May 2002.

Further, these data sources offered insights into our processes of interaction over the course of our two years together.

I transcribed the October 2001 video taped discussion between the tech guides and the outside Project Tech Quest evaluators. I listened to each of the sixteen audio

tapes from our Thursday morning tech guides' meetings, transcribing all information relevant to our collaborative experiences. I catalogued the tapes by date and topics discussed during the meeting (See Appendix B for summary of the content of each meeting.)

Mining the additional data sources—the audio transcripts, journal entries and field notes—involved a recursive process of reading, rereading, comparing and contrasting the additional data with the data gathered through the focus group interviews. Used in this way, the additional data sources served as a foundation for contextual description and as a method of triangulation in the rendering the two critical incidents and in discussion of Cristina, Anthony, Bobby and my collaborative process and relational practices. This stage also involved the collection of data through individual interviews with Cristina, Anthony and Bobby.

In **Stage Four,** I conducted periodic member checking with the other tech guides in order to check my rendering and analysis of the two critical incidents and the chapter on our collaborative process. (See Appendix C for summary of the Cristina, Anthony and Bobby's comments.) Due to work obligations, Anthony's responses were minimal, however, he did confirm that I had captured the essence of our experiences and represented his thoughts and experiences accurately. Cristina and Bobby also felt that I had captured the essence of our experiences fully; aspects of their feedback are integrated into the final representations of Chapters 4, 5 and 6.

Data Analysis

According to Merriam (2001), "conveying an understanding of the case is the paramount consideration in analyzing the data in a case study" (p. 193). In this study, I approached data analysis from a qualitative, inductive perspective.

The analysis I used to create Chapter 4, *In Some Ways We Fit*, involved a reading and rereading of the transcripts from all three focus group interviews to chunk the data according to topic, for example, interactions with each other, interactions with faculty. I then read and reread the individual chunks, this time coding the data and noting patterns, a process that led me to create categories, for example, lowering the boundaries of self, and finally the themes—our physical/environmental and relational tools, our shared relational beliefs and values, and the structure of professional intimacy that enable our work as tech guides and graduate students. In this chapter I used excerpts from the three focus group interviews, individual interviews, personal communication, additional project data and related literature to offer the most comprehensive analysis and interpretation of our collaborative experiences and relational practices.

The use of the probing questions in Table 3.1 created a framework through which to analyze the critical incidents presented in Chapter 5, *Elizabeth's Announcement*, and Chapter 6, *A Faculty Member's Comment*. As discussed earlier, I used the questions during the third focus group interview to engage Cristina, Anthony and Bobby in a collaborative analysis of our experiences with Elizabeth and the faculty member. However, while rendering the incidents, I did not limit myself to only what was discussed during the third focus group. Instead, I drew upon our conversations across all three focus group interviews and returned to several of the categories created during the initial phases

of analysis. I also used additional project data and personal communication, and literature to support my analysis. For example, in the section Elizabeth's Missteps under the structural and organization factors in Chapter 5, I draw on personal communication from Bobby and excerpts from the second and third focus groups to complete the analysis. (See Appendix D for a list of themes, data sources and literature used in Chapters 4, 5 and 6.)

W. H. Auden is attributed with the phrase, "Writers write what they know, but they don't know what they know until they begin." Similarly, Richardson (2000) describes writing as a method of inquiry, as a process of discovery, as a means of analysis. She employs writing as a way to make sense of thinking; I, too, view writing as a way to make meaning of my thinking, my experiences. For Richardson (1997), "there is no such thing as 'getting it right'; only 'getting it' differently contoured and nuanced" (p. 36).

Rendering each incident critical offered me, and in turn Cristina, Anthony and Bobby, opportunities to understand the complexities and nuances of our tech guide experiences more fully. My hope, then, is when taken together, the renderings reveal a contoured, in depth, nuanced picture—an understanding—of Cristina's, Anthony's, Bobby's and my experiences.

My Positionality as Researcher

In qualitative research, the role of the researcher as primary data collection instrument necessitates the identification of assumptions, personal values and biases at the beginning of the study (Creswell, 1994). And as Clough (1995) reminds us

> We do not come innocent to a task or a situation of events; rather we willfully situate those events not merely in the institutional meanings, which our profession provides but also, and in the same moment, we constitute them as expressions of ourselves. Inevitably, the traces of our own psychic and social history drive us. (p. 138)

As I stated in the introduction, my experiences as a tech guide have had a strong and lasting impact on my career path in higher education; how I perceive and use technology in my personal and professional lives; and how I view collaboration as a tool in my own work and the environments that I create in my classroom. I value collaborative experiences and strive to make them part of the learning experiences I participate in, both as a student and as an educator.

I approached this research study through what Connelly and Clandinin (1990) describe as multiple "I's." That is to say from the perspectives of a white, middle class male graduate student, a tech guide, a researcher and a research participant. Each "I" offered a different lens through which to view and come to know the data. Throughout the study, I reflected on my experiences as a graduate student, and my work in collaboration with Cristina, Anthony and Bobby. And I made our shared experiences an object for critical examination. These multiple "I's" impact—for better or worse—how I viewed, interpreted and ultimately represented the data.

Criteria For Validity and Trustworthiness

As a researcher exploring my own practice, I drew upon my wealth of insider, tacit tech guide knowledge throughout the research process. And while this knowledge

offers flexibility and insight not found in other forms of inquiry (Lincoln & Guba, 1985), it did not give me "privileged access to the truth" (Anderson & Herr, 1999, p. 15). Therefore, it was necessary to incorporate elements of rigor, which demonstrate and insure validity, into the data collection and analysis processes. Through their continued work with practitioner research, Anderson and Herr (1999) have identified criteria to test the validity of practitioner research: criteria that includes outcome, process, democratic, catalytic, and dialogic validity.

Outcome validity "acknowledges the fact that rigorous practitioner research, rather than simply solving a problem, forces the researcher to reframe the problem in a more complex way, often leading to a new set of questions/problems" (Anderson & Herr, 1999, p. 16). My conceptualization of this study has evolved over the last four years. What began initially as an exploratory study of one tech guide's "mentoring" relationships with his faculty shifted to focus on Cristina's, Anthony's, Bobby's and my collaborative interactions and our shared experiences with the Project Tech Quest faculty and administrators, and how these interactions impacted our personal and professional development. This sustained engagement in the research process afforded me opportunities to refine the scope and focus of study, clarify my research questions, and deepen my interest in learning more about how Cristina, Anthony and Bobby make meaning of our collaborative experiences and our interactions with project faculty and administrators.

Process validity asks to "what extent problems are framed and solved in a manner that permits ongoing learning of the individual or system" (p. 16). Anderson and Herr posit that "[i]n this sense, outcome validity is dependent on process validity in that if the

process is superficial or flawed, the outcome will reflect this" (p. 16). Further, Anderson and Herr question to what extent the "findings" are the result of a series of reflective cycles that include the ongoing problematization of the practices under study. The authors recommend a process of "looping back to re-examine underlying assumptions" (p. 16) and the use of "multiple perspectives to guard against viewing events in a simplistic or self-serving way" (p. 16). As I moved through the data collection and analysis processes, I attempted to remain cognizant of the perceptions of all participants incorporating their voices into the analysis. I also was careful not to romanticize our experiences or fall into sentimentality.

Democratic validity refers to "the extent to which research is done in collaboration with all parties who have a stake in the problem under investigation" (p. 16). As discussed previously, the primary data source for this study consisted of three focus group interviews between Cristina, Anthony, Bobby and me. Examining our shared experiences through focus group interviews allowed us to engage in a form of collaborative inquiry (Ainscow, 1999) in order to examine institutional politics, generate meaning and give voice to our collaborative and shared experiences.

Catalytic validity offers all those involved in the research an opportunity to deepen their understanding of the social reality under study (Anderson & Herr, 1999). I believe engaging Cristina, Anthony and Bobby in this systematic joint inquiry provided an opportunity for each of us to deepen our understanding of our experiences as tech guides with Project Tech Quest and the impact and significance this had on our graduate education.

Dialogic validity suggests in order to reach "goodness-of-fit" the research be monitored through a form of peer review (Anderson & Herr, 1999). Some practitioner researchers suggest this be accomplished through the use of critical and reflective dialogues with a critical friend. I reached dialogic validity through ongoing conversations with multiple *Critical Friends* and with the use of *Member Checks* with Cristina, Anthony and Bobby as the various chapters were completed. (See Appendix E for summary of dialogues with my critical friends and Appendix C for a summary of the member checking process.) My conversations with critical friends were particularly helpful in that they afforded multiple, ongoing opportunities for me to articulate my tentative understandings both in written and verbal forms, which in turn pushed my thinking and clarified my understandings.

In addition to incorporating the validity criteria proposed by Anderson and Herr, I employed other compatible qualitative research criteria to establish elements of trustworthiness (Lincoln & Guba, 1985). For example, in order to achieve ***Neutrality*** or establish ***Confirmability***, I documented my "biases" and beliefs in a *Reflexive Journal*. The use of member checking to "confirm" my rendering of the critical incidents also strengthens the study's neutrality.

In the rendering of each critical incident as well as in the discussion of Cristina's, Anthony's, Bobby's and my collaborative process, I used elements of *Thick Description* (Geertz, 1973) such as detail, context, social interaction and emotion to illustrate the context and meaning of our experiences as tech guides and graduate students. Documentation of the focus group interviews, discussions with critical friends and entries

in the reflexive journal combined to create an *Audit Trail*, strengthening the study's ***Consistency*** or ***Dependability***.

Limitations of the Study

In this study, I analyzed data from a limited and purposeful sample of four graduate students; therefore, the research does not allow for generalizability. However, my use of thick description provides for the possibility of transfer to the readers' experience. As John-Steiner (2000) observes, while the idea of the solitary thinker may still appeal to "those molded by the Western belief in individualism" (p. 3), there is a different reality in place: one where "generative ideas emerge from joint thinking, from significant conversations and from sustained shared struggles to achieve new insights by partners in thought" (p. 3).

A second limitation of the study is its context—a faculty technology professional development project. While this specific and narrow context creates an opportunity to look closely at the subtle and nuanced process of graduate students working with each other and with college of education faculty, it also limits generalizability.

CHAPTER III: RELATIONAL CULTURAL THEORY

In chapters 4, 5 and 6, I integrate literature and theories related to identity (Gee, 2001), collaboration (John-Steiner, 2000; Scharge, 1995), organizational intelligence (Perkins, 2003), and other topics, to support my analysis and interpretation of Cristina's, Anthony's, Bobby's and my experiences, our actions and the actions of administrators and faculty with whom we worked.

In this chapter, I focus briefly, but exclusively on the concept of relational cultural theory (Jordan, Kaplan, Miller, Stiver & Surrey, 1991) and several researchers and theorists (Bergman, 1991; Fletcher, 2001; Jordan and Hartling, 2002; Miller & Fletcher, 1999) who work from this perspective. This deliberate action is done for several reasons. First, the theory is significant to and supportive of the dissertation study and provides an appropriate lens through which to view Cristina's, Anthony's, Bobby's and my interactions with each other and those with whom we worked. Grounding in this perspective will, I believe, enable the reader to make connections and begin to understand some of the complexities associated with Cristina's, Anthony's, Bobby's and my relationships. Second, as a researcher, I hope to enhance the literature related to aspects of relational cultural theory by moving the theory into wider educational contexts. Expanding and applying the theory's underlying principles to the social and learning environments of education will build on the work of relational theorists and contribute to the body of relational cultural theory literature.

Relational Cultural Theory

Miller and her colleagues at the Stone Center at Wellesley College have been instrumental in developing Stone Center relational cultural theory, an alternative theory about human growth, development and effectiveness. Stone Center relational cultural theory was developed "by listening for and to the experience of women" (Fletcher, 2001, p. 30). According to Fletcher (2001), "it is a theory that positions itself as an alternative to the masculine bias in mainstream theories of psychological, intellectual, and moral growth that underlie many societal structures" (p. 31). The theory suggests that even though the prevailing models of adult growth and achievement are based on characteristics such as separation, individualism, and independence, there does exist an alternative model, called "growth-in-connection," that is rooted in characteristics of connection, interdependence and collectivity (Jordan, Kaplan, Miller, Stiver & Surrey, 1991). Relational cultural theory is based on the premise that human growth and development is primarily relational and occurs in connection with others (Fletcher, 2001; Miller & Fletcher, 1999).

A central tenet of relational cultural theory is that growth does not occur in just *any* relationship but only through a specific kind of relational interaction (Fletcher, 2001) [emphasis in original]. This interaction, according to Miller and Fletcher (1999), is a process

> that moves from *mutual authenticity*: where each person (or group of people) brings her authentic self to the interaction, to *mutual empathy* where each person can hold onto self but also experience the other's

> reality and finally to *mutual empowerment*, where each is in some way influenced or affected by the other so that something new is created. (p. 6)

Fletcher (2001) recognizes that "mutual empowerment activities require an ability to operate in an environment of 'fluid expertise,' where power and expertise shifts from one party to another, not only over time but in the course of one interaction" (p. 64). This ability is aided by two skills: empowering others and being empowered. Empowering others, according to Fletcher (2001), is the "ability to share one's own reality, skill and knowledge in ways that make it accessible to others" (p. 64). Fletcher defines being empowered as "an ability and willingness to step away from the expert role in order to learn from or be influenced by the other" (p. 64).

Further, Fletcher (2001) posits, the Stone Center model "identifies the conditions necessary to achieve "growth-in-connection" and the five positive outcomes associated with that growth" (p. 32). The five positive outcomes or "good things" include:

1. Each person feels a greater sense of "zest"—vitality, energy, aliveness; there is a sense of connection with another person(s).
2. Each person has empowered action to act right in the immediate relationship.
3. Each person has increased self-esteem or sense of worth.
4. Each person has new knowledge; each person has made a step toward a fuller and more accurate picture of herself and of the other person.
5. Each person has a desire for more connection. Each person has the active, outgoing feeling of caring about another person because that person is so valued. It leads to the desire for more and fuller connection with that person and also to a concern for that person's well being. (Miller, 1986; Miller & Fletcher, 2001)

Again, the distinguishing feature in each of the conditions and in each of the outcomes is mutuality (Miller & Fletcher, 1999). It is mutuality, then, that determines if

an interaction has met the criteria for "growth-in-connection". It is not enough if just one party to the relational interaction achieves the five good things; both have to achieve them for it to be classified as "growth-in-connection". When this process occurs, it creates a joining together in a particular form of relationality that is the central source of growth (Miller & Fletcher, 1999).

According to Jordan and Hartling (2002), while relational cultural theory "was initially developed to understand women's psychological experiences, it is increasingly being used to gain a better understanding of all human experience, including men's experience" (p. 2). In his work with individuals and couples, Bergman (1991) has found that it is "possible for men to participate in non-self-centered, mutual relationships, and grow in connection" (p. 10). An essential element is the creative spirit—a genderless spirit—one that is collaborative, co-creative, at work together.

Relational Practice

Relational practice refers to putting the relational cultural theory of growth into practice, and is, according to Fletcher (2001), a way of working that "reflects a relational logic of effectiveness and requires a number of relational skills such as empathy, mutuality, reciprocity, and a sensitivity to emotional contexts" (p. 84). Through her study of six female design engineers, Fletcher (2001), uncovered four types of relational practice:

Preserving: Preserving the project through task accomplishment;

Mutual Empowering: Empowering others to enhance project effectiveness;

Self-Achieving: Empowering self to achieve project goals; and

Creating Team: Creating and sustaining group life in the service of project goals. (p. 48)

Each type of relational practice embodies specific behaviors, skills and beliefs, and has intended effects on the project or task. Regardless of the context, relational practice is conscious, deliberate, intentional action motivated by the belief that this way of working is better for a project or more effective in accomplishing a task (Fletcher, 2001).

Applying the principles of relational practice to organizational life can, according to Miller and Fletcher (1999), help challenge the "current individualistic logics of effectiveness that underlie most organizational theory and practice" (p. 5). They argue that "mutuality is the real source of a relational challenge to organizational norms" (p. 6) because one "cannot talk about mutuality without talking about power" (p. 6). This dialogue raises power as an issue to deal with in theorizing relational practice at work because mutuality depends on concepts of "power-with" and organizational structures are, in large part, based on concepts of "power-over" (Miller & Fletcher, 1999) or domination. According to Miller (2003), the concept of power-over can be applied to structures or situations where one group or person has more privileges, resources and more capacity to force or control others. Miller believes, "structural power reinforced by power-over practices obstructs growth and constructive change" (p. 5). The way to prevent or reduce power-over practices is, according to Miller (2003), "to increase in each person's power in the relationship" (p. 6). "Power-with" or "power-in-connection" implies a reframing of the power issue with movement toward mutual empowerment, mutuality and ultimately, equality (Miller, 2003).

Fletcher (2001) reminds us, "it is important to remember the political implications of relational behavior within current organizational power structures" (p. 127). Because as she observed in study of female design engineers, the very behaviors—relational skills and practices—that organizations say they need and the very behaviors the female engineers embodied, "got disappeared" (p. 91) because they collided with many of the norms of the organizational work culture. For example, despite the rhetoric about collaboration and teamwork, Fletcher (2001) found a work culture where "individual heroism" was highly prized; "if there is only one right way, and discovering it makes you the winner, then building on others' ideas is likely to be considered inappropriate, or a sign that you have nothing new to add" (pp. 102-103).

Fletcher recognized three separate ways relational practice "gets disappeared": the misattribution of motive, the limits of language and the social construction of gender. Combined these three ways create, what Fletcher calls, a "disappearing dynamic" where "an activity springing from a relational belief system 'gets disappeared' as relational practice (something new) and get constructed as something familiar (e.g., personal style, a natural expression of gender, private-sphere behavior inappropriate to the public sphere)" (p. 110). One way to interrupt the disappearing dynamic is, according to Fletcher (2001), to engage in an act of resistance "to the way in which these ways of organizing create, re-create and maintain an unquestioned acceptance of the separation of the public and private spheres of life and the gender/power structure that depends on this separation" (p. 112).

I return to explore aspects of relational cultural theory and Miller (2003) and Fletcher's (2001) work in the next three chapters when discussing aspects of Cristina,

Anthony, Bobby and my work with each other and also our interactions with Project Tech Quest administrators and faculty. In the next chapter, I discuss the themes related to Cristina, Anthony, Bobby and my relational practice.

CHAPTER IV: IN SOME WAYS WE FIT

The process of constructing knowledge through social interactions has been well documented and is supported by a large body of research literature (e.g., Bruffee, 1999; Lave & Wenger, 1991; Rogoff, 1990; Wenger, 1998; Wertsch, 1985; Vygotsky, 1978). In our work as tech guides and as graduate students, Cristina, Anthony, Bobby and I constructed meaning through a variety of social interactions and activities centered on shared tasks or problems, often engaging in a process of learning from and with one another. This reciprocal process, built on trust, collegiality and complementarity, was fluid and dynamic and enabled each of us to expand our knowledge of technology, technology integration and technology professional development as well as to strengthen our understanding of issues and concepts related to our graduate courses.

The three focus group interviews gave Cristina, Anthony, Bobby and me opportunities to consider the learning and growth that resulted from our sustained interactions and collaborative endeavors, and the conditions that facilitated our collaborative process. Further, the interviews provided opportunities for the four of us to reflect on and make meaning of the significance of our environment, and the personal and professional relationships we established with each other and those with whom we worked (See Table 4.1 for a partial list of Project Tech Quest personnel).

In this chapter, I present several themes, as understood from the three focus group interviews and the individual interviews, which surrounded Cristina, Anthony, Bobby and my relationship with Lisa (the fifth tech guide). I also discuss our various collaborative tools, our shared relational beliefs and values, aspects of our collaborative

process, and our personal and professional development. Taken together, these various themes illustrate the nature of Cristina, Anthony, Bobby, and my relational practices (See Figure 4.1), how we achieved "growth-in-connection" (Fletcher, 2001) and ways in which we fit.

Throughout this chapter, I use Cristina's, Anthony's, and Bobby's voices, along with my own to illuminate the various themes. In order to provide context and to enhance the themes, I include the voice of Dr. Borg, the faculty development coordinator, and draw on excerpts from Cristina and my tech guide journals and other archival data.

Table 4.1

Project Tech Quest Personnel
Partial List

Person	Role	Rank	Time with Project
Allison	Tech Guide	Graduate Student	January 2000—June 2000
Anthony*	Tech Guide	Graduate Student	August 2000—May 2002
Bobby*	Tech Guide	Graduate Student	August 2000—May 2002
Cristina*	Tech Guide	Graduate Student	January 2000—August 2002
Don*	Tech Guide	Graduate Student	January 2000—May 2002
Dr. Borg	Faculty Development Coordinator	Assistant Professor	August 1999—August 2002
Elizabeth	Project Coordinator	Staff	January 2001—August 2002
Joel	Tech Guide LAN Administrator	Graduate Student Staff	January 2000—June 2000 June 2000—June 2001
Lisa	Tech Guide	Graduate Student	January 2000—August 2002
Project Director	Project Director	Professor	August 1999—August 2002
Tom	Project Coordinator	Staff	May 2000—August 2000

* Study Participant

To situate our work as tech guides in the larger context of Project Tech Quest, I begin with a brief history of the project prior to Anthony and Bobby's arrival. I then

explore the impact of Anthony and Bobby's presence and highlight aspects of Cristina's, Anthony's, Bobby's and my interactions with Lisa, before turning to discuss the various themes related to our relational practices.

A Bit of History

Spring 2000: The Beginnings

Dr. Borg, the faculty development coordinator for Project Tech Quest and an assistant professor of educational technology, conceptualized the tech guides as a group of graduate students who had K-12 classroom teaching experience and were not necessarily "techies." She wanted graduate students who had experience working collaboratively and who could handle the task of working with college faculty in a mentoring relationship; skills and experience in collaboration were paramount while technology skills were seen as secondary.

Through an interview process in November 1999, Dr. Borg selected five tech guides: Allison, Cristina, Lisa, Joel and me. We began our work together during the spring 2000 semester, a process and period Cristina characterized as challenging: "We were these five people hired for different reasons coming together to do something that nobody really knew what it was about, not even Dr. Borg. She had an idea, but to tell you the truth, we started pretty weak" (FG Interview, 10/31/02, p. 17). Perhaps it was this uncertainty and tentativeness that led to a lack of community and solidarity in terms of Allison, Cristina, Lisa, Joel and my work together as a group.

As tech guides, we shared the responsibility of preparing and presenting the faculty technology professional development workshops. However, our planning was

isolated, fragmented and lacked a coherent structure. For example, Allison and I would plan and present a workshop on the HyperStudio software while Cristina, Lisa and Joel would plan and present their workshop on the same topic, with virtually no commonalities between the two. Our collaboration was sporadic, uneven at best. Joel was teaching full time at a local middle school and as a result was unavailable to meet with the rest of us during the day. In an effort to build personal computing skills with various pieces of software and develop a sense of collaboration, we agreed to meet Wednesday evenings.

One Wednesday evening, the five of us gathered to develop and improve our skills working with ClarisWorks databases. Cristina and I lacked any familiarity with the software while Joel, Lisa and Allison each had differing ideas about how we should approach the software and how it might be modeled for faculty. After two hours little was accomplished; it was a frustrating night for all. There was an underlying tension between some of the tech guides; unspoken yet palpable. As a group, we lacked a connection, a unity, and after only a few sessions, our weekly Wednesday evening meeting became a thing of the past.

We were each left to fend for ourselves. Allison and Lisa quickly forged a strong alliance, and it was during this time that Cristina and I seemed to connect. One catalyst, which served to strengthen our relationship, was our desire to improve our limited personal technology skills. We would spend hours, sometimes late into the night, preparing, even cramming, for a workshop we would give the next day. We often drew on Joel's extensive knowledge of technology and his background in technology education to support our learning.

All five of us were finding our way, however tentatively, increasing our personal computing skills as well as those of our faculty members. But it was not surprising, given the group dynamic and Dr. Borg's limited guidance, that at the end of spring semester both Allison and Joel left Project Tech Quest to pursue other opportunities within the university.

Summer 2000: Anthony and Bobby's Arrival

That summer, Cristina was working with the university's Bilingual Summer Institute when she met Bobby, a newly arrived doctoral student from California. Cristina observed that Bobby, with his background in technology, "had the potential to become one of the tech guides" (FG Interview, 10/31/02, p. 15) and mentioned the possibility to him. Initially, Bobby "was a little bit intimidated" (FG Interview, 10/31/02, p. 15) by the idea of with working faculty, but he eventually accepted Dr. Borg's offer. Bobby had an undergraduate degree in environmental studies and a master's degree in ESL/bilingual education and had taught English courses in both Germany and Ecuador. He worked briefly at several computer companies in Silicon Valley before coming to the university. Bobby was pursuing a Ph.D. in Language, Literacy and Sociocultural Studies during his work with the project.

Anthony, selected as one of the original five tech guides during the fall of 1999, decided to forgo the position in order to become a corporate trainer at the university's hospital. But after eight months, he realized the job was not an ideal match to his interests or his abilities. According to Anthony, "It was good to go there because it made me realize that my strengths and my gifts are really working with pre-service and in-

service teachers in how to use technology in the classroom" (Interview, 03/12/02, p. 28). This realization corresponded with Allison's departure and as a result, Anthony joined the project during the summer of 2000. He came to the project with a background in science and technology education, professional development and teacher training. As a veteran middle school science and technology educator, Anthony had worked with several local, state and national science and technology initiatives. He also had experience teaching the college of education's stand-alone technology integration course for pre-service teachers. He had a master's degree with an emphasis in the integration of technology into K-12 settings. During his work with Project Tech Quest, Anthony was pursuing a Ph.D. in Multicultural Teacher Education.

A native of Argentina, Cristina had extensive experience training teachers through a national program with the ministry of education in Buenos Aires. Prior to her work with the ministry of education, Cristina taught philosophy and psychology at the high school level. She has a specialization in learning difficulties and worked first as a public school special education teacher and then later was in private practice for four years before coming to the United States to pursue a Ph.D. in Educational Thought and Sociocultural Studies.

Lisa had extensive experience as an upper elementary science and technology educator and as a supervisor of student teachers. In addition, she taught methods courses in social studies and science education at the university. Throughout the project, Lisa was pursuing a Ph.D. in Organizational Learning and Instructional Technologies.

I brought my background in early childhood education and the arts to the project. I worked as a graphic designer for three years before obtaining licensure in elementary

education. After eight years with seven- and eight-year-olds, I returned to the university to complete a master's degree in elementary education and a Ph.D. in Language, Literacy and Sociocultural Studies.

Anthony, Bobby, Cristina, Lisa, and I each had personal traits, unique areas of expertise, and experiences in educational settings that contributed to our abilities to work with different content area faculty, and design and teach technology integration strategies in the various methods courses. Anthony and Bobby complemented and expanded Cristina, Lisa and my abilities with technology. In Cristina's words:

> When Anthony and Bobby came in it was a big change because they were both strong in different aspects of technology and in some ways we fit. I think we rebuilt from there, having the space, having the new people, having more tools. (FG Interview, 10/31/02, p. 19)

For me, Anthony and Bobby's presence created a different energy, vitality and ultimately a synergy that was not present during the spring semester. Similarly, Cristina felt their arrival "broke that weird dynamic that we had with the other people [Allison and Joel]" (FG Interview 10/31/02, p. 7). It was evident, through their words and actions, that Anthony and Bobby were committed to working collaboratively while expanding their understandings of technology integration.

Lisa: A Group of One

During the fall semester, Cristina, Lisa, Anthony, Bobby and I would sometimes work in groups of two or three with individual faculty members to teach or assist with a technology integration activity in a methods class. These tech guide pairings would be

created informally, occasionally by who was available, but most often they were based on our areas of interest and expertise.

Typically, we would have at least one planning meeting with the faculty member to generate ideas and strategies before teaching or assisting with the class activity. Cristina's journal entry from late September 2000 described the tension that resulted from a planning meeting between her, Lisa and a faculty member: "I don't like Lisa's style—she's bossy, intrusive. She doesn't realize boundaries, takes over people's work….I'm afraid of doing something with her. I'm afraid our relationship might crash" (Journal entry, 09/25/00). Later in the entry Cristina does credit Lisa for suggesting an idea during the meeting, writing, "she did me a favor suggesting something I hadn't thought about. I give her credit for that" (Journal entry, 09/25/00).

However, this "overstepping of boundaries," like the "claiming of space," and "closing herself off, " strategies that I will discuss later, became a theme, a pattern Bobby referred to as a "negative example of collaboration," which strained Lisa's personal and professional relationships with Cristina, Anthony, Bobby and me. The five of us continued to plan and conduct the faculty professional development workshops and carry out the day-to-day operations of the project together, but a stronger synergy was solidifying among Cristina, Anthony, Bobby and me.

Bobby felt that Cristina, Anthony and I were "a little more willing to share things" (FG Interview, 10/31/02, p. 5). He categorized the collaborative process that the four of us used as one of "getting on the same page" (FG Interview, 10/31/02, p. 21), a process that involved periods of talking and brainstorming together about possibilities related to what ever we were working on whether it was a flyer, a Web page or an agenda

for a workshop. A process echoed in John-Steiner's (2000) words when she states "the co-construction of ideas is helped by a listening ear" (p. 127). From a social-cultural perspective, collaborative practices involve opportunities for collective thinking, reflection about practice, shared critique and supported change (John-Steiner, 2000).

Minnis (quoted in John-Steiner, 2000) asserts that in order to fully engage in the collaborative process, individuals need to lower "the boundaries of the self" (p. 190). For John-Steiner (2000) this means, "partners need to listen carefully to each other, to hear their words echoed through those of the collaborator and to hear the words of the other with a special attentiveness" (p. 190).

Bobby contrasted our process of working together to Lisa's when he stated, "the four of us would talk about things before we did them and that was definitely not the way Lisa worked. We said, 'This is not what we want to be. This is not how we work'" (FG Interview, 10/31/02, p. 21). We experienced Lisa as very task orientated, more self reliant, individualistic, and less group oriented: characteristics less conducive to collaboration or relational interactions (Miller & Fletcher, 1999). For Cristina, it was what she perceived as Lisa's failure to acknowledge a group dynamic that impacted her ability to "fit" effectively within the group of five. In Cristina's words, "When you are in a group you need to generate consensus and she didn't work like that. Her style was more, 'Tell me what to do and I will do it'" (FG Interview, 10/31/02, p. 22). Anthony echoed Cristina's sentiment, stating, "It took us awhile to figure that out, but I think the four of us came to the realization of how she was very good at the task oriented things that most of us didn't like to do" (FG Interview, 10/31/02, p. 22).

Does collaboration come down to personality? Is one type of personality more inclined to collaborate than another? Hall (1977) argues that people have a natural drive to collaborate. And according to Schrage (1995), while personality "is *a* factor in determining the collaborative relationship, it is not *the* factor" (p. 36) [emphasis in original]. If a challenge warrants it, people will want to collaborate to meet it. For him, "collaboration is as much the offspring of necessity as desire" (p. 37). Further Schrage contends, "collaboration exists precisely because the collaborators believe they need the other to get the job done" (p. 60). And he suggests, "There is little turf warfare in the successful collaboration precisely because the collaborators are supposed to create collective solutions to problems" (p. 161).

But Schrage (1995) also suggests that at times individuals outside a group can play a crucial catalytic role in helping the group achieve successful outcomes. For Bobby, it was Lisa and her interpersonal skills and work habits that acted as such a catalyst. According to Bobby, Lisa was "very instrumental in the way that she forced the four of us to come together in the ways that we did" (FG Interview, 10/31/02, p. 21).

I perceived that Lisa's actions and approach to collaboration did, at times, create points of friction and served as a catalyst that brought Cristina, Anthony, Bobby and me even closer. We experienced Lisa's claiming versus sharing of space and tasks and what we perceived as her limited ability to "lower her boundaries" as significantly impacting, even restricting, her collaborative relationships with us. This splintering of the group resulted in a phenomenon Dr. Borg would later refer to as "a group of one and a group of four" (Interview, 03/27/03, p. 5).

In the remaining pages of this chapter and the two chapters that follow, our experiences, interactions, and relationships with Lisa will be referenced; however, my focus will center on aspects of Cristina, Anthony, Bobby and my shared experiences, our interpersonal relationships, collaborative partnerships and relational practices.

Our Collaborative Tools

Schrage (1995) defines collaborative tools as those elements that enable the process of co-creation, i.e., collaboration. They are visual and conversational stimuli, a medium of expression that "help get the job done" (p. 91). Several tools or elements contributed to and supported Cristina's, Anthony's, Bobby's and my abilities to engage in our relational practices and collaborative enterprises, and helped us complete our work as tech guides and graduate students. Some tools were provided through the physical environment while others were created or enacted through our sustained relational interactions. Regardless of the type, these different elements combined to sustain our collaborative endeavors and support our development.

Below I explore these various physical and relational tools and their impact on our abilities and interactions.

Physical Tools

Room 118: The Tech Guide Office

A few days into the fall 2000 semester, Lisa, Cristina, Bobby, Anthony and I climbed the stairs from our basement office in the Education Building, carrying what few

technology guide possessions we had, and moved into Room 118, our new and permanent office in the Center for Technology in Education. This office, our third since the project started, had bluish gray carpet, natural light, chairs on rollers, and most importantly, four large modular desks each with a computer. Our first two basement offices, prior to Anthony and Bobby's arrival, had been significantly under resourced in terms of technology. The first had neither a phone nor a computer; the second, just a phone. This limited access to technology and the bleak basement environment contributed significantly to the lack of group solidarity during the first semester of the project.

Behind the scenes Dr. Borg had been "pushing the project director to house the tech guides in the newly completed Center for Technology in Education" (Interview, 03/27/03, p. 6), and due to timing—a room available and no project coordinator—we were given space. Originally, the Center's administrators told us that we would be sharing the office with a sixth person (the as yet unhired project coordinator?) and should leave a desk and a computer for her, but after a few days and no one showing up, Cristina, Lisa, Anthony and Bobby each took up residency at one of the desks. I positioned myself at the larger of the room's two tables. Bobby and I would later alternate use of the computer at his desk. Our office was next to the Faculty Development Lab, a small rectangular room with twelve computers, so we were never in want of a computer.

Bobby defined our move into the Center as "a serendipitous occasion when everything changed" (FG Interview, 10/31/02, p. 2). According to Bobby, "Anthony and I weren't invading your space, space that [Cristina, Lisa and Don] had set up. We were

all negotiating for the same thing. I think we did it quite easily without conflict. That really helped get us off on the right footing" (FG Interview, 10/31/02, p. 2). Within a few days, however, Bobby began noticing ways in which Lisa was defining her space—arranging her hand-made baskets, and other objects and materials. To Bobby, Lisa was "grabbing things she wanted" and to him her actions indicated that "there was kind of a strict delineation of space" and she was "closing herself off" (FG Interview, 10/31/02, p. 5) from the group. This "closing off" would manifest itself in various ways as our work together continued.

Cristina interpreted our move as significant in several respects: it marked a moving up—both literately and figuratively—that served as a recognition or validation that "we were doing something that in some way was working because if not, they would not have given us the space" (FG Interview, 10/31/02, p. 6). She viewed Room 118 "as sort of a conquest in the sense that before that we didn't have a real space. We had a space, but it was a very empty space in terms of equipment or accessibility" (FG Interview, 10/31/02, p. 6).

Fuoss (1998) contends, "space is not merely a container in which human action transpires, but instead simultaneously a product and producer of action" (p. 109). A notion mirrored in Anthony's recognition that Room 118 "gave us power" (FG Interview, 03/24/03, p. 9) and visibility within the project and within the Center for Technology in Education. He saw our move as having a "very positive impact on the success of the grant" (FG Interview, 10/31/02, p. 16) in that the office helped bridge our communication with faculty. "The faculty were so much more comfortable calling and coming by there. The office really opened up that relationship" (FG Interview, 03/24/03, p. 11). In fact,

during the first six months of the project, no faculty members ever called or ventured down the steps to our offices in the basement of the Education Building even though their offices were located just a short walk away in the faculty office building.

In addition to our tech guide office and the faculty development lab, the Center for Technology in Education housed four computer labs, two classrooms, a resource room and the offices of the Center's administrators. In retrospect, Bobby saw our move and thus our proximity to the Center's resources as playing an important role in our work together. As he observed:

> If we were working on something, which we often did, we could say, 'O.K., let's split up' and we spread out between rooms. Or even if we weren't working on something, someone would come from another computer and say, 'Look what I just did or look what I just found.' It was very conducive to have the tools with the space and the people. (FG Interview, 10/31/02, p. 19)

As Schrage (1995) suggests, "collaboration begins with a problem to be solved or an opportunity to be addressed, but the act of collaboration begins within a shared space" (p. 223). Room 118 served as a shared space, with multiple physical collaborative tools—phones, computers and other hardware, various pieces of software—and in turn made us more visible and accessible to the college of education faculty and the administrators of the Center for Technology in Education. Anthony and Bobby would later speculate that the "real reason" we were placed in Room 118 was "so they [the project administrators] could keep an eye on us," a notion that, while intriguing, was not shared by Cristina or me.

Space and Time

Our "official" tech guide duties of working one-on-one with our five faculty, co-planning workshops, preparing materials for workshops and reading discussions, leading or facilitating technology integration activities required twenty hours a week. But often Cristina, Anthony, Bobby and I used the office as a place to read, research, write, or hang out between classes or while not "on the clock." Initially, Lisa also used the office in this way; however, during the second year of the project, she became a supervisor of student teachers. This additional role and its added responsibilities, coupled with her doctoral course work, created more demands and less flexibility. Lisa still continued to fulfill her tech guide responsibilities, but her presence in the office was limited.

Often during our overlapping, unstructured, off the clock but in the office time, Cristina, Anthony, Bobby and I would engage in substantive conversations related to class assignments or share spontaneous discoveries found in an article, a book or on the Internet. Threads of these initial conversations might be explored further over lunch or coffee, or resurface a day or two later after one of us had spent time exploring an idea or concept in greater detail. By using the office space in this way, Cristina, Anthony, Bobby and I created opportunities where our learning could continue to evolve.

Earlier, I highlighted how Bobby valued the fact that together, the four of us took the time to plan, explore ideas, and consider possibilities. Regardless if we were on or off the clock, our methodology was thoughtful, purposeful, managed and unhurried; making or taking time became an integral part of our creative and meaning making processes. Doing so enabled the four of us to achieve a heightened, or at least more interesting, sense of creativity and deeper levels of understanding.

In the relational tools section below, I return to the notion of conversation and the role it played in supporting our endeavors.

Relational Tools

I begin this section with a discussion of how Anthony, in his position as the more experienced other, overtly and subtly mentored Cristina, Bobby and me. Later in this chapter, I return to the notion of peer mentoring and highlight several ways in which Anthony benefited from his interactions with Cristina, Bobby and me.

Anthony as the More Experienced Other

During the first fall semester, Cristina, Lisa, Bobby and I were in the beginning stages of our doctoral studies while Anthony was in his last. Over the course of our two years together, we had the opportunity to watch Anthony navigate the multiple steps necessary to obtain a Ph.D.—from the comprehensive examination to the dissertation defense. Throughout his journey, Anthony would often share strategies on how to survive the institutional culture of the university or offer advice on coursework and professors—who to take, who to avoid. According to Anthony, "I tried to really illuminate what I was going through. I felt that it was important because I was a little further along that I talk about that process. I thought it would be good for you all" (FG Interview, 10/31/02, p. 33).

In their review of graduate education, Boyle and Boice (1998) found one way that exemplary departments distinguish themselves is through their ability to foster collegiality among first-year doctoral students. This may include mentoring, establishing

professional relationships with faculty, or encouraging interaction between first-year and advanced graduate students.

It was beneficial, even educational, that Cristina, Bobby and I were less advanced in our graduate careers than Anthony. Witnessing his process and progress provided the three of us with opportunities to engage in a process that Mullen (2006) describes as "observational learning" where we transformed our passive observations of Anthony into active engagement by informing our choice making and future practices related to our own graduate work.

In addition to learning through our observations of Anthony, Cristina believed that we benefited from his knowledge of our university's bureaucracy. In her words, "Anthony, brought up issues that were important, in terms of whether a graduate student could work three quarter time or how little room we had to negotiate things in the university. I think it was a good balance because I wouldn't have known" (FG Interview, 03/24/03, p. 4).

As I indicated in the opening pages of this chapter, Anthony's association with the university began several years before his work with Project Tech Quest. These earlier experiences and their related interpersonal relationships in some ways shaped, effected and informed his perceptions of both the institution and the people associated with it, especially several administrators of the Tech Center, one of whom was the director of Project Tech Quest.

Bobby valued Anthony's work history with the university and his ability to raise our "consciousness." For example, when Anthony suggested that "they were really f___ing with us" (FG Interview, 03/24/03, p. 4) in reference to a discussion whether or

not to support our travel to a national conference to present our research related to faculty technology professional development. Here, the "they" Anthony is referring to are the project director and coordinator.

Cristina, Bobby and I also respected Anthony's expertise related to technology integration and professional development and we often drew upon his knowledge while designing the faculty workshops or crafting an integrated technology lesson. His mentoring and guidance in these contexts offered multiple opportunities through which Cristina, Bobby and I could refine our practices related to technology integration and professional development.

In many ways, then, Anthony's presence as a more experienced colleague provided several unintended and serendipitous positive outcomes for Cristina, Bobby and me, outcomes Dr. Borg could not have anticipated when conceiving the tech guide role or while selecting the participants.

Shared Power with Dr. Borg

Beginning in the fall of 2000, Dr. Borg received a course release to devote more time and energy to Project Tech Quest, an important ingredient missing from the previous spring semester. As Dr. Borg recalled:

> I could see from the experience the spring before that I needed to have more of a presence to help the group congeal and go in that direction. It probably would have happened without so much of my presence just because of the personalities, but I could see that we needed to have more time as a group for planning. (Interview, 03/27/03, p. 6)

The composition of the group changed from the spring—Allison, Cristina, Don, Joel and Lisa to the fall—Anthony, Bobby, Cristina, Don, and Lisa—however, Dr. Borg's presence did not go unnoticed by Bobby, who observed, that she "was really reformulating the tech guide role with us [Anthony and Bobby] coming in because it didn't seem like it was so clearly defined" (FG Interview, 10/31/02, p. 12). Cristina characterized Dr. Borg's stance during the fall semester as one that involved active listening and support. "She was always listening, she always gave us a lot of room to talk, which for me was very important. It gave us credibility. We knew what we were doing and she trusted what we were saying" (FG Interview, 10/31/02, p. 30). Further Cristina observed:

> She shared that power with us. She allowed us to have a role in saying, 'O.K., what is it that the faculty need? What works better for this group of faculty? How can we involve them in the workshops? How can we make them come? (FG Interview, 10/31/02, p. 30)

Bobby perceived that Dr. Borg took quite a risk giving us as much power as she did in planning the faculty professional development workshops. "We could have made her just look awful. If we had screwed things up, that would have reflected so poorly on her. We didn't, which was great" (FG Interview, 10/31/02, p. 31). In fact, Dr. Borg often commented on how our preparation for the workshops "made her look so good."

In many of her interactions with us, Dr. Borg engaged in a "power with" (Miller & Fletcher, 1999; Woehrle, 1992) dynamic where she shared information, responsibilities and decision making and trusted and drew upon our areas of expertise. In addition, she invited us to voice our ideas and gave us space to find our way. She saw

Cristina, Lisa, Anthony, Bobby and my work with the project as an opportunity for us to not only broaden our skills with technology but also a chance to develop as academics. She hoped that our work with individual faculty would help each of us gain an "insider's view of what it was like to be a faculty person" (Interview, 03/27/03, p. 4) and inform our decisions about pursuing work in the academy.

Our day-to-day interactions with project faculty and administrators did in fact offer multiple opportunities for a behind-the-scenes look at life in the academy. For example, my interactions with faculty gave me a first-hand look into what several early childhood teachers educators do, the challenges they face, the commitment and investment of time and energy necessary to engage in ongoing professional development, and perhaps most importantly, the limited “payoff” participation in such activities holds in decisions related to tenure and promotion.

I will explore notions related to faculty identity and the parallel curriculum of graduate school more fully in Chapter 6 when discussing the critical incident related to a faculty member’s comment.

Conversations in Community

Throughout the life of the project, Thursday mornings were reserved for tech guide meetings where Cristina, Lisa, Anthony, Bobby and I would meet with Dr. Borg to discuss our work with faculty, vent our frustrations, share our good fortune, celebrate our successes. At times our talks centered on planning the agenda for an upcoming workshop, scheduling issues or housekeeping related to grant-related data collection. Other times, our talks would turn to discussions of how to motivate faculty to participate

more fully in the project's activities—attending the book group discussions or workshops or scheduling a weekly meeting with their tech guide.

Shor and Freire (quoted in Brody, Witherell, Donald & Lundblad, 1987) believe that "dialogue is the moment where humans meet to reflect on their reality as they make it and remake it. It is the quintessential human act, the social moment wherein we establish ties, and where we have authentic recognition of the other (pp. 98-99). Similarly, Olson (1997) suggests that a "conversation is not a process of telling what we know in a definitive sense, rather a collaborative endeavor where each participant brings meaning and questions to the conversation" (p. 22). Anthony highlighted this aspect of our process, saying, "the four of us would think about things in different ways, but yet we could talk about them and learn from each other, and go, 'Oh, wow, I hadn't thought about it in the way. Yeah, that's a great idea.'" (Interview, 09/02/02, p. 3).

Cristina, Anthony, Bobby and my "conversations in community" (Craig, 1995, p. 138) with Dr. Borg on Thursday mornings and with each other in our day-to-day interactions in the tech guide office provided "a safe space on the professional knowledge landscape" (Craig, 1995, p. 137) where together we could explore our tentative understandings, make suggestions, create new individual and shared knowledge, engage in joint problem solving, debate possibilities and raise issues of concern. Further, our sustained interactions and conversations provided a "continuity of reflection" (Craig, 1995) for our work, allowing us to deepen our understandings of technology integration and faculty professional development.

Our weekly tech guide meetings remained a safe space where we could openly express our concerns about the project until the new project coordinator's arrival in January 2001, a topic I will explore further in the next chapter.

Our Shared Relational Values and Beliefs

Much of the literature related to small group dynamics, communication and interactions stresses the importance of helping group members agree upon rules and develop shared values and beliefs, norms and goals (See, e.g., Bormann & Bormann, 1996; Shulman, 1996; Verderber & Verderber, 1989). During our work together, Cristina, Anthony, Bobby and I never engaged in a "norming session" to articulate rules or name our beliefs. It wasn't necessary, our ways of interacting didn't require it. We valued and believed in similar guiding principles, unspoken yet embodied. I have, in earlier pages of this chapter, highlighted how Cristina, Bobby and I valued Anthony's graduate school experiences and his knowledge of technology professional development, how all four of us recognized and valued the process of "getting on the same page" to use Bobby's words (FG Interview, 10/31/02, p. 21), and how we valued conversation as an integral part of our process. Below I discuss other additional values.

Trusting the Others: Lowering the Boundaries of Self

Cristina, Anthony, Bobby and I were motivated and committed to building a sustained system of support that would enable us to be successful in a variety of contexts. Each of us realized early on that it was okay to acknowledge when we did not know

something; the environment was safe and trusting enough to support honest and open dialogue. In Cristina's words:

> I think that we got the idea that we needed to work together because not everybody knew exactly everything. I had the feeling that as we were there, we could say, 'Can you help me with this or can you do this with me?' Sort of generating some collaboration. (FG Interview, 10/31/02, p. 20)

The most important elements in a collaborative enterprise, according to Schrage (1995), are that the collaborators "possess a modicum of mutual trust, the belief that they are each adding value, and a genuine desire to solve the problem at hand or create something new" (p. 36). Similarly, Perkins (2003) acknowledges trust as one of the building blocks of communities of practice, teams and all types of organizations. When we trust people, Perkins contends, "we rely on judgments of both capability and commitment—the capability to come through and the commitment to do so" (p. 187). People use intuition, contextual clues and evidence from past experience to arrive at this dual judgment.

In Cristina's words, "I think you rely on people. You trust them if you need some help if you needed to learn something. If I didn't know something….I would go to any of you" (FG Interview, 03/24/03, p. 49). It was the possibility of trust, then, that was important to Cristina: "to collaborate you need to trust the other. You need to know it's reliable, that if you have a bad day, it's not going to affect the partnership. It can be recovered." (FG Interview, 03/24/03, p. 54).

Anthony saw comfort as the first step toward establishing trust. "I think if you are comfortable, it's easy to trust, so that level of comfort is important" (FG Interview, 03/24/03, p. 54). I agree with both Cristina and Anthony's observations. I, too, would turn to Anthony, Bobby or Cristina if I had questions about software, or needed help with a lesson for a faculty member's class. A level of comfort and trust existed between the four of us; we shared a similar approach to problem solving. I sensed that they were willing to brainstorm ideas, or provide assistance and support. And as Schrage (1995) suggests, "We don't just collaborate with people, we also collaborate with the patterns and symbols people create" (p. 34).

Respecting Our Complementarity

Almost immediately, Cristina, Anthony, Bobby and I formed a close-knit group where our strengths and weakness were freely shared. Cristina recognized that an integral part of our process was our ability to perceive and honor what each individual had to offer—her approach to pedagogy, Anthony's understanding of professional development, Bobby's abilities and skills with trouble shooting and problem solving, and my aesthetic and graphic design skills.

Further, Cristina believed our range of abilities spoke of "complementarity:" the four of us worked well together because "we complemented each other" (FG Interview, 10/31/02, p. 24). Complementarity collaboration, according to John-Steiner (2000), is characterized by complementary expertise, disciplinary knowledge, roles and temperament where participants negotiate their goals and strive for a common vision.

Further, John-Steiner and her colleagues argue:

> The principals in a true collaboration represent complementary domains of expertise. As collaborators, they not only plan, decide and act jointly, they also *think together*, combining independent conceptual schemes to create original frameworks. Also, in a true collaboration, there is a commitment to shared resources, power, and talent: no individual's point of view dominates, authority for decisions and actions resides in the group, and work products reflect a blending of all participants' contributions. (Minnis, John-Steiner & Weber, 1994, p. C-2) [emphasis in original]

Similarly, Rogoff (1990) asserts, "Understanding happens *between* people; it can't be attributed to one individual or the other" (p. 67) [emphasis in original]. For Goldstein (1999), "The very notion of *co-construction* of mind implies a high degree of interpersonal connection between the individuals working together in the process" (p. 648) [emphasis in original].

Bobby perceived that the four of us had a "kind of an understanding of each other at the beginning" (FG Interview, 10/31/02, p. 23). In his words, "I felt like this was a good group of people, the four of us. And then from there, our strengths and weaknesses were all so unique, it was like this circle that had four pieces that really fit. Maybe, it's an oval, not exactly a perfect circle" (FG Interview, 10/31/02, p. 23). Bobby's notion of "fit" mirrors Cristina's description mentioned earlier in relation to Anthony and Bobby's arrival to the project. Our various individual backgrounds, interests and experiences aided our ability to come together to support our collective efforts.

Cristina recognized that our complementarity yielded an interaction, or a way of being, that was "like a couple" (FG Interview, 10/31/02, p. 24). This seems an apt analogy for our shared experiences and understandings because as Schrage (1995) points out, "a couple creates a world of intimacy and shared secrets to which only they are privy. The relationship deepens as life is experienced as a couple rather than as just a pair of individuals" (p. 36). Cristina, Anthony, Bobby and I certainly envisioned our work as tech guides as more than a collection of individuals. In fact, our pluralistic way of thinking about our work created an overlap between the individual and the group (Agnew et al., 1998). In Bobby's words:

> Almost every way I look at it I see group: group design, group everything, just "we", it was always "we" it was never "I"….I always think of it as we did this, always working together, everything we did, even when we designed something. (FG Interview, 10/31/02, p. 28)

Bobby continued his explanation, using me as an example:

> When you weren't there, it was "O.K., let's leave this piece for Don, let's see what Don thinks." It was never "Don's not here so we'll just do it without him"….we really wanted your input and I think you wanted to be a part of it as well. We had that feeling, that understanding immediately. (FG Interview, 10/31/02, p. 28)

Bobby's descriptions illustrate Perkin's (2003) notion that "true collaboration occurs when people strive together toward the same outcome in ways that directly share the work, thinking and responsibility" (p. 155).

Anthony, who is in a tenure-track position at another university, echoed Bobby's notion of "we" when relating how he describes his tech guide experiences to his current colleagues, "Even the way I talk about it now, it is still a 'we' thing, it is not a 'me' thing even here" (FG Interview, 10/31/02, p. 30).

Our "we" -ness manifested itself quickly and was supported by our modes of interaction, our sense of shared interdependence and our shared vision for our work together. We recognized the ways in which the diversity of our backgrounds, experiences, and modes of thinking strengthened and sustained our daily interactions, but we also knew that our whole was greater than the sum of our individual parts. We recognized that whatever we did was not because of us as individuals, but because of us as a group (Josselson, 1992).

Anthony believed "we became a very strong group that sort of took ownership of Project Tech Quest and developed a group vision and a plan of how we needed to make that happen. It was a very strong bond," (FG Interview, 10/31/02, p. 44). I will return to explore this notion of ownership more fully in the next chapter.

A "strong bond" often exists between people who have a shared history, experience, memory or vision. Through our sustained work together, Cristina, Anthony, Bobby and I established a cohesiveness and synergy and "a strong bond" that was clearly not present during the first semester of the project. Enacting our unspoken, yet shared, values contributed to our synergy and energized and invigorated the four of us. It was this dynamic, I believe, that enabled us to move forward in a way that was genuinely and mutually supportive for each of us.

Our Structure of Professional Intimacy

Fitzgerald and her colleagues (2002) use the term "professional intimacy" to describe their community where they can talk, care and speak about teaching and their teaching lives and share their struggles. In this community they do not have to censor ideas or topics, or posture for validation as they might do in other contexts. Cristina, Anthony, Bobby and my physical and relational tools, coupled with our shared beliefs and values, created a structure of professional intimacy through which we could nurture a social support system, engage in fluid and dynamic interactions, develop our identities, construct new knowledge and skills, and ultimately participate in an enhanced graduate school experience.

Fostering a Social Support System

Bateson (1989) believes individuals grow "through a multiplicity of forms of friendship and collegiality" (p. 94). For Bobby, our interactions offered both collegiality and a sense of community, elements he found lacking within the context of our university's college of education. In his words:

> I think that the university could be pretty cold; for graduate students it could be extremely cold. There were a lot of people who just came in for one class, didn't care about socializing, about really what was going on in the community. I honestly don't think I would have stayed in this program if I hadn't been involved with the project. It was a social outlet. I don't think other graduate students had this experience. I really appreciated it as

> a social outlet and a place where we were all able to trust each other. (FG Interview, 10/31/02, p. 32)

Bobby's words reveal his recognition that the job was more than a job. For him, our work together had become a social support system to sustain his participation in graduate school. For him, our work together countered that feeling of isolation and uncertainty that many of the graduate students in Nyquist et al.'s (1999) study experienced. In addition to providing the emotional support of friendship, our interactions formed a type of interpersonal scaffolding, which augmented and facilitated Bobby's abilities to complete his graduate course work.

Cristina felt similarly to Bobby. For her, "the environment was supportive" (FG Interview, 10/31/02, p. 32). Together, Bobby and Cristina's words capture the substantive and emotional support a concentrated, sustained peer group can provide (Baird, 1990). While I may not have articulated it at the time, I believe we shared Cristina and Bobby's view that our work together offered a social support system, which invigorated and sustained us throughout our graduate school experience.

Certainly our shared space of Room 118 contributed to our sense of community, but we also built collegial practices into our daily interactions, which, in turn, offered opportunities to recognize and then value each other's knowledge and experience related to issues other than technology. Anthony, for example, admired Cristina's ability to offer a "very grounding" perspective on situations. He recalled that during moments when he was "really upset," Cristina "always had a very good perspective to make me stop and think, 'Oh, yeah this is really not that big of a deal. Just let it go.' And I really appreciated that" (FG Interview, 03/24/03, p. 4). Bobby, too, appreciated Cristina's

ability to take a "totally different view on a situation and calm us down at times" (FG Interview, 10/31/02, p. 46). In his words, "When it came to Elizabeth, the project coordinator, or pressures from above, Cristina was always very good in helping us deal with it and look at it from her perspective saying, 'Look, it's not that bad, look at what we have'" (FG Interview, 10/31/02, p. 46).

As we shall see in the next two chapters, Anthony, Bobby and I grew to appreciate the intellectual and emotional support Cristina's "voice of reason" provided during moments of tension with project administrators and faculty.

Mutuality

According to Fletcher (2001), growth-fostering interactions are characterized by mutual empathy and mutual empowerment, where participants "recognize vulnerability as part of the human condition, approach the interaction expecting to grow from it and feel a responsibility to contribute to the growth of the other" (p. 31). Further, Fletcher indicates that "the ability to develop relationally requires certain strengths: empathy, vulnerability, the ability to experience and express emotion, the ability to participate in the development of another, and an expectation that relational interactions can yield mutual growth" (p. 31); a characteristic articulated by Anthony when he described our work together as a reciprocal process. For him, our work was "a mutually beneficial relationship, almost simultaneously and mutually beneficial. It was happening all at the same time but we, I, learned a lot. I was learning from everyone and that was really exciting" (FG Interview, 10/31/02, p. 24).

Anthony went on to say that his learning "wasn't just professional, it was also personal. It was about being a person" (FG Interview, 10/31/02, p. 24). His words here and earlier in his acknowledgement of Cristina's grounding perspective, signify how our interactions moved beyond just learning technology skills and effective pedagogy. His words capture the movement among our personal, social, and professional selves that was inherent in our work as tech guides and graduate students. Similarly to Bobby, Anthony recognized that what had started out simply as a job had transformed into something much more significant, much more personal.

Fluidity

As Cristina indicated earlier, the fact that we recognized and valued our complementarity enabled the four of us to create various configurations and combinations in order to accomplish different tasks. This arranging and rearranging of individuals and relationships and the shifting roles involved a relaxed intensity that required little extra effort on our part (Schrage, 1995). Anthony, always the science teacher, described our relationships as "an ever changing amoeba that looked different on different days and different several times during a day" (Interview, 04/29/02, p. 3). This image richly captures our multiple, ongoing arrangements and the ease with which they evolved. For example, Cristina and Bobby created a Web page for two of her faculty. Anthony, Bobby and I often discussed teaching strategies for our undergraduate technology integration course. For one of my early childhood faculty, Bobby and I created a Web page on Web searching strategies, which we both used later in our own

courses. And the four of us would often come together to brainstorm strategies for a workshop or conference presentation.

For Bobby, “fluidity was key” to our success in these various contexts (FG Interview, 10/31/02, p. 23), a sentiment echoed by Cristina when she said, “it was the fluidity that enabled us to quickly recognize what each other’s strengths were and really understand who would do well at doing different things. A lot of times we almost didn't have to talk about it” (FG Interview, 10/31/02, p. 23). Certainly, Cristina, Anthony, Bobby and my proclivity to “lower the boundaries of self” facilitated our abilities to come together in the different configurations and draw upon each other’s skill sets in the ways that we did. Further, Cristina’s recognition that, at times, our process lacked a verbal component highlights our individual ability to anticipate and then provide the necessary skills to help the group, or another, accomplish the task at hand.

Mentoring Ourselves: The Group as Mentor

John-Steiner (2000) believes, "building a resilient sense of identity is aided by a self that is stretched and strengthened in partnership" (p. 127). As Cristina, Anthony, Bobby and I each grew more confident in our individual abilities with technology, our relationships with each other transformed and we created multiple opportunities to collaboratively expand our thinking and our abilities. Cristina highlighted this process and our ongoing reflective practice (Schön, 1983) when she noted:

> We were learning about technology to figure out how to work with the faculty, how to involve them and how to make that work for us, too, so that we would feel comfortable with what we were doing. We were also

> aware of how are we going to do this. What are we trying to do? Why? (FG Interview, 10/31/02, p. 29)

This cyclical nature of reflection enabled the four of us to foster new ways of framing, reframing, and responding to situations. A process Cristina described as proactive and autonomous. From her perspective:

> We were also pushing ourselves in the sense of not doing things because we had to, or someone was telling us to, but we were convinced that we were really doing it in a way that it was supposed to be done. (FG Interview, 10/31/02, p. 29)

Bobby agreed with Cristina, stating:

> I think that is really important. It was that figuring out, that challenge that we were always up to. We always pushed ourselves….If we felt we had the workshops more or less figured out and we knew what we were doing, we were trying to figure out how to publish. We were trying to figure out how to present better. We were trying to figure out how to use Hyper Researcher. (FG Interview, 10/31/02, p. 29)

Bobby's last comment reveals how collaborative support can contribute to risk taking (John-Steiner, 2000). Through our daily interactions we created a place of mentoring (Shank, 2002) for ourselves. Our collective energies combined to create a power of the group, which, in turn, provided a power within (Tisdell, 2001) attitude where we could gain mastery of skills, push ourselves to explore new ideas and pursue other possibilities related to our development as academics.

In the introduction to this dissertation, I wrote of how transformative my experiences as a tech guide had been. Cristina described her experience identically: for her, being a tech guide was "transforming, there is no doubt about that" (FG Interview, 10/31/02, p. 42). This was based on a combination of reasons, not all related to technology. She observed:

> I think what Bobby was saying about the support system, the fact that we were learning different things as we were going about technology—how to deal with the institution, how to deal with the faculty, how to deal with power, how to create collaboration and to try to fight for the article that never came out. Because being in a group allowed me to better understand what was supposed to happen in my Ph.D. work and opened a lot of possibilities. I can look at my vitae now and see all of the presentations we did, those projects within the project. I think it's fantastic. (FG Interview, 10/31/02, p. 42).

Cristina, Anthony, Bobby and my processes of "pushing ourselves" and subsequently taking risks, a notion explored in the next two chapters, were supported by our individual areas of expertise and fostered and sustained by our trust in one another, our sense of mutual empowerment and interdependence, and our sincere motivation to expand our abilities along with those of our collaborators.

Informal Professional Development

Our mutual respect for one another's abilities and our various areas of expertise facilitated a process of learning Anthony referred to as "informal professional

development," learning events that were unplanned, unscheduled but very much centered on the development of skills or conceptual understanding. Anthony, in his work as a middle school science teacher, facilitated this process of learning among his colleagues as a way to "informally" share ideas and build skills.

Most often our informal professional development related to technology: a tutorial on a specific piece of software; brainstorming design ideas for a flyer or a semester calendar of events; the creation of a web page. Other times the events were related to our graduate course work: discussions of concepts relating to qualitative research, data analysis, theoretical framework, media literacy. It was not uncommon, given the design of Room 118—desks and tables along the periphery with a large open space in the middle—for a conversation or an activity to start between two people and conclude with all four of us or at least whoever else was in the room. Regardless of the content and the participants, our process of informal professional development involved an authentic sharing of ideas and strategies that were mutually beneficial to each of us.

Cristina highlighted the value of this type of peer mentoring during our discussion with two outside project evaluators who were visiting campus to review the work of the project, by stating,

> We had many opportunities for learning that weren't formal or developed around a workshop topic, but that came through the project. A faculty member called with a problem or we tried to figure out how to use the voice recognition software, all of these opened opportunities for powerful learning for our professional development" (Roundtable Discussion, Collaborative Exchange, 10/30/01)

Just-in-Time Learning

Similar to informal professional development, just-in-time learning, common to technology use where a new skill is learned and used immediately in context (McKenzie, 2002), draws on Vygotsky's (1978) notion of a zone of proximal development; a process of working in partnership with a more knowledgeable peer, who scaffolds a less knowledgeable peer in the acquisition of new knowledge or a new skill.

Cristina and I frequently used this form of learning during the spring semester prior to Anthony and Bobby's arrival to build our personal technology skills. However, beginning in the fall and continuing throughout the remainder of the project, all five tech guides, at various times, employed this type of learning. Often my just-in-time learning centered on learning the features of a piece of software prior to teaching it in a faculty member's class. A journal entry from February 2002 outlined my process of learning Netscape Composer just hours before using it in an early childhood professor's evening class and demonstrates the relationship between informal professional development and just-in-time learning.

> I had a just-in-time session with Bobby regarding possible sequence of activities for [an early childhood professor's] class. He suggested using [a faculty member's] tutorial to help guide students through the process of building their pages. We visited [a faculty member's] page and viewed some of her students' examples and discussed having students look at pages for ideas—color schemes and design possibilities, what works and doesn't.

> We created a mock page to use as an example. Reviewed sequence of steps to publish page through university's system, copied handout.
>
> Cristina came in and offered advice as well, suggested using [a faculty member's] page. Both Cristina and Bobby agreed one, two-hour session was not enough time to have students create pages and then publish. They suggested adding a follow up session. (Don's Tech Guide Journal, 02/07/02)

Within the context of our work, just-in-time learning was often reciprocal in that it offered the more knowledgeable peer an opportunity to strengthen his or her individual skills while teaching and supporting, i.e., scaffolding, the less knowledgeable or experienced peer.

Relational Practices Expand Possibilities

Cristina, Anthony, Bobby and my relational practices and our work as tech guides generated numerous serendipitous benefits: some educational, some financial, all valuable in our development as teachers and future academics. As our confidence in our abilities grew, we expanded our possibilities. Some opportunities we generated or initiated through our professional intimacy and included all four of us or some combination thereof. Others opportunities were a direct result of our profile with the project or from our previous accomplishments and enabled us to work with individuals outside the project.

Scholarly Endeavors

During the spring 2001 semester, Dr. Borg initiated a writing group with the five of us. Interestingly enough, our first efforts to write together resulted in a less than satisfactory experience—too many editors, too few writers. We eventually found a rhythm and after almost eleven months we submitted a paper, only to be rejected. During the spring 2002 semester, Anthony was in the throes of his dissertation, but Dr. Borg, Cristina, Lisa, Bobby and I made a second attempt at writing collaboratively. This time our efforts were more successful resulting in a paper that Dr. Borg submitted, without our knowledge, to an international technology conference; an action in sharp contrast to her earlier "power with" stance. The paper was accepted and published in the conference proceedings and is now "a line on the vitae" as Anthony would say. But Cristina, Lisa, Bobby and I were frustrated by the way it came about: our writing efforts had been usurped. And yet, we never engaged Dr. Borg in a conversation about the motivation behind her action. Perhaps, in part, because we feared some type of immediate retribution or more importantly, some retaliation after our work with the project had concluded but while our doctoral work in the department continued. At the time, we did not anticipate that Dr. Borg would leave the university within a few months.

Throughout our work with the Project Tech Quest, Cristina, Anthony, Bobby and I had opportunities to present our research related to faculty technology professional development at several national conferences including the National Educational Computing Conference (NECC), the American Educational Research Association (AERA) Annual Meeting and the American Association Curriculum Teacher Education (AACTE) Conference. These experiences, often initiated by one of us and then supported

by the others and Dr. Borg, proved beneficial as they enabled us to develop and expand as scholars and academics through participation in the larger discourses related to research, technology professional development and teacher education.

Academic Pursuits

During the spring 2001, Cristina, Bobby and I team taught several sections of a six-week, one credit undergraduate course designed to introduce undergraduate students to basic software applications. Team teaching the course provided another context where we could draw on each other's strengths and knowledge, and created a support system, which made our novice experience teaching a university technology course manageable, instructive and enjoyable.

In the summer of 2001, Anthony, Bobby and I, along with Joel—an original tech guide who was now working as a local area network (LAN) technology administrator for the College of Education—and two Project Tech Quest faculty members participated in a technology initiative sponsored by the Intel Corporation. The following fall, Bobby and I joined Joel, Anthony and one faculty member, as instructors of the stand-alone technology integration course for all teacher candidates at the university. Anthony, Bobby and I would often spend time discussing different teaching strategies for the course. We continued teaching the course for several semesters, even after our work with Project Tech Quest finished.

For a number of summers, Cristina and Bobby served as technology instructors for the university's Bilingual Summer Institute where they helped classroom teachers

gain skills in integrating technology into the curriculum by developing WebQuests to use in their classrooms.

These additional activities within different contexts and environments—both formal and informal—generated new opportunities for shared understandings (Schrage, 1995) and were deeply stimulating and satisfying both personally and professionally. The four of us gained new skills related to technology, writing, presenting and teaching. But perhaps most important was how these experiences combined to helped Cristina, Anthony, Bobby and me grow as future academics. Anthony recognized the impact our work together had on his professional development when he stated, "I don't think I would be where I am today if I hadn't spent this time working with the other tech guides in Project Tech Quest" (Interview, 09/02/02, p. 5).

Discussion and Conclusion

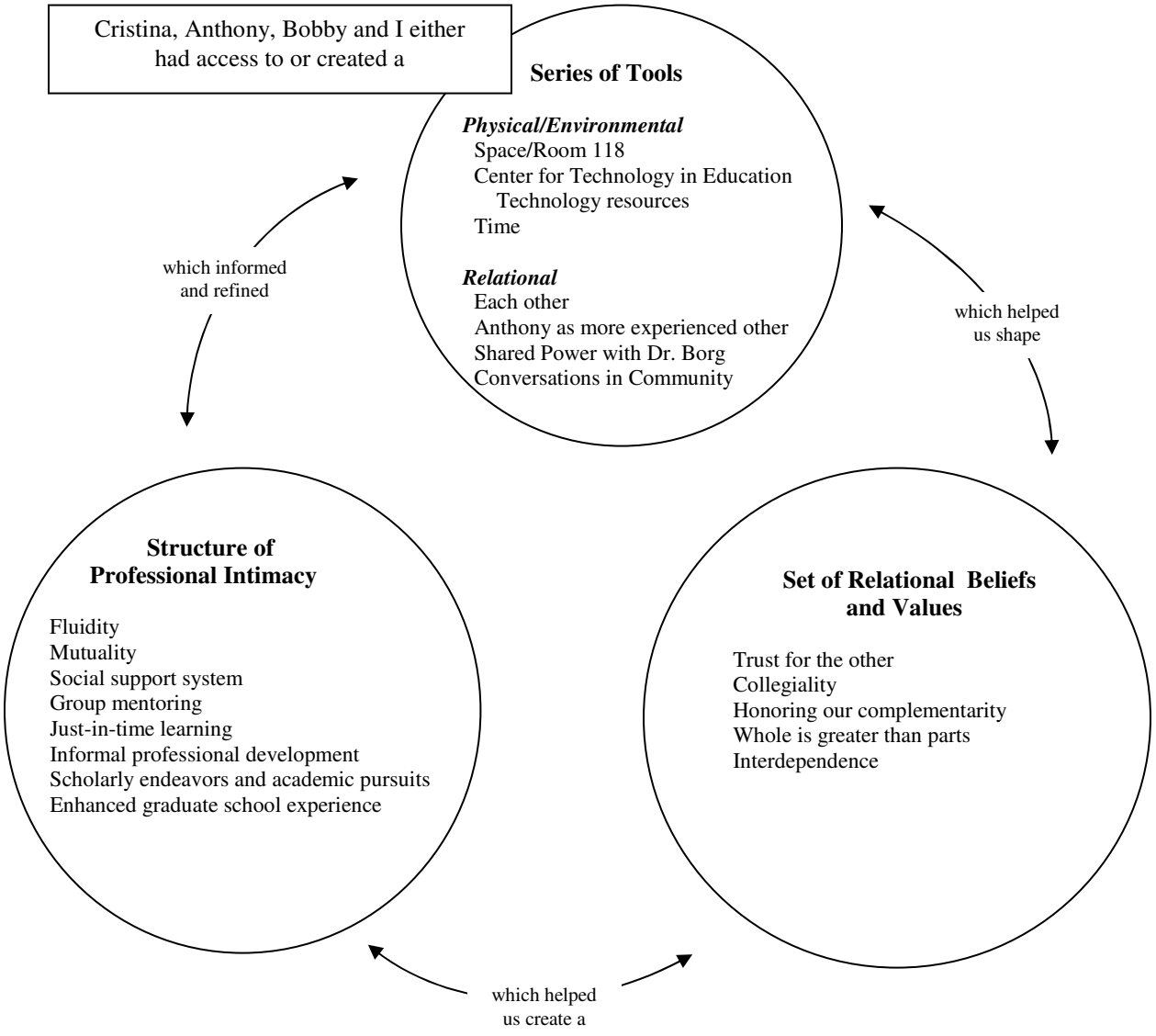
According to Josselson (1992), "above all relationships *move.* We discover the self through our connection with others, and our heightening of self-knowledge makes possible more complex and deeper ways of reaching others" (p. 247) [emphasis in original]. The systematic analysis of Cristina, Anthony, Bobby and my relationships with each other reveals aspects of how our relationships moved from four individuals to a group, and how we formed a partnership that ultimately attained a level of professional intimacy. Our level of professional intimacy, rooted in connection (Fletcher, 2001), created a structure and support for our work and our development as people and academics. As Wenger (1999) posits, "because learning transforms who we are and what

we can do, it is an experience of identity. It is not just an accumulation of skills and information, but a process of becoming" (p. 215).

Our process of becoming was not necessarily straightforward or linear; in fact, the circular graphic in 4.1 captures the recursive nature of our relationships and our practices. The physical/environmental tools laid a foundation, but as our work together

Figure 4.1

The Nature of Cristina, Anthony, Bobby, and Don's Relational Practices



progressed we invented, reinvented and refined our relational tools and our process. It was our fluidity, our desire, our motivation and our combined abilities that enabled us to push our individual and collective selves.

An important ingredient that led to our professional intimacy was the fact that our work together was sustained over the course of two years. Cristina, Anthony, Bobby and I saw each other daily, and spent several hours together, both in and out of the tech guide office—in classrooms, in team teaching situations, in writing groups. Our interactions in these multiple contexts and environments strengthened our respect for and trust in one another's abilities; our work together in these different contexts mattered.

Martin and Thomas (2000) suggest that "as interpersonal relationships develop the levels of ambiguity and uncertainty tend to fall and are replaced with better understanding, familiarity, and security" (p. 42). Within just a few weeks of coming together in the fall of 2000, the four of us realized that we needed each other to be successful and we began to conceptualize each other as a source of knowledge (Johnson-Bailey & Cervero, 1998), as a resource, as a tool. We valued what each other offered both socially and professionally and drew upon this more and more throughout the course of our work together.

Each of us had prior collaborative experience from which we drew, either consciously or not, and Lisa's ways of being served, to use Bobby's words, as a "negative example" or an example of what not to do. Room 118 shaped not only our purpose and process, but also our power relations, which in turn shaped our identities (Wilson, 2001). And while Dr. Borg's more hands-on leadership approach during the second and third semesters played a part in our cohesiveness, our own motivation to create a certain kind

of environment (Fletcher, 2001) played a significant part in our development. Our relational practices included aspects of interdependence, observational learning and peer mentoring and enabled the four of us to generate other collateral possibilities related to researching, writing, presenting, and teaching.

Throughout this chapter, I have nested Cristina, Anthony, Bobby and my perceptions of our personal and professional development. Cristina and I described our experiences as "transformative" and while this tends to be a word that is often used to capture the essence of learning experiences, it does apply within the context of our work. We were all, I believe, changed significantly and for the better by our work with Project Tech Quest. Perhaps Bobby captured it best when he said, "I can only hope to be part of a similar experience some day. (Bobby, Personal Communication, 07/20/05).

Through our work with Project Tech Quest we created a relational space (Josselson, 1992) for ourselves as graduate students, a space that sustained Bobby's tenure in graduate school; a space where each of us could grow personally and professionally, individually and collectively. This relational space supported our professional intimacy, which, in turn, allowed us, to negotiate those moments during the project where we were confronted with challenges, either human or technological.

In the next chapter, I turn to explore Cristina, Anthony, Bobby and my response to one such challenge—an announcement by Elizabeth—and the ripple effects it created.

CHAPTER V: ELIZABETH'S ANNOUNCEMENT

Through our work with Project Tech Quest, Cristina, Anthony, Bobby and I established and nurtured relationships with a variety of individuals—faculty members, project administrators, personnel from the Center for Technology in Education—whom we assisted, and who, in turn, aided us in accomplishing our work for the project. These interactions encompassed a range of informal and formal contexts from impromptu hallway chats to scheduled meetings and office visits to faculty professional development workshops.

Cristina, Anthony, Bobby and I used the three focus group interviews as an opportunity to reflect on these various relationships and contexts, our actions and reactions, and our choices and decisions. During much of the second and part of the third focus group interviews, the four of us discussed our interactions with Elizabeth, the project coordinator, her entrance into the project, and the ripple effects created from her arrival. We also discussed Elizabeth's leadership style and her announcement that an outside presenter would lead a faculty professional development workshop. This is the incident under discussion in this chapter.

Examining Elizabeth's announcement and the contexts surrounding it gave Cristina, Anthony, Bobby and me the opportunity to consider our relationship with her, her regard for our work, as well as our own beliefs about our work. Turning the announcement into a critical incident offered us a chance to further explore our interpersonal relationships, and our responses to imposed power, i.e., ways we coped and also resisted, or to use Bobby's words, "push[ed] back" (Bobby, personal

communication, 07/21/05, p. 2). Moreover, rendering the incident critical gave us a chance to consider and reflect on occasions when we did not fit with each other, and within the larger context of the project, and the tensions that resulted from this lack of fit.

In this chapter, I use Cristina, Anthony, and Bobby's voices, along with my own to reveal how we came to understand the critical incident—whose interests were served, what conditions sustained the action, what power relationships were expressed, what structural factors prevented alternative actions—and how, in some ways, Elizabeth's announcement shaped our work with her and with each other throughout the remainder of the project. In order to illuminate various subtleties and emphasize detail surrounding the critical incident (Tripp, 1993), I add Dr. Borg's voice to our quartet and, at times, draw on excerpts from personal correspondence with Elizabeth, Cristina and Bobby, and archival data from the project. To situate the incident in its wider social context (Tripp, 1993), I draw on literature related to organizational culture (Fletcher, 2001; Mumby, 1993), organizational intelligence (Perkins, 2003), identity (Gee, 2001) and power (Apple, 1995; Miller, 2003; Mumby, 1988; Scott, 1990).

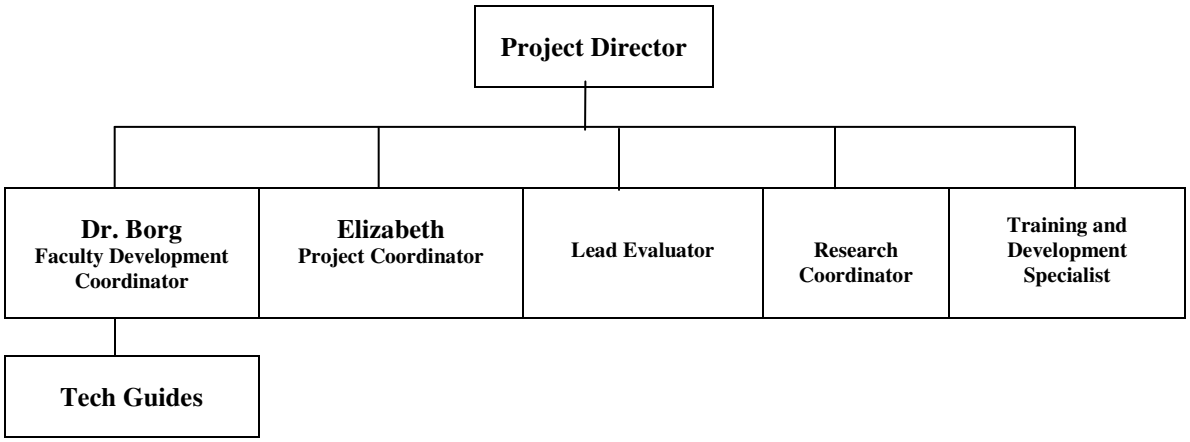
I begin with a description of Elizabeth's background and her role as project coordinator. I then turn to briefly discuss Cristina, Lisa, Anthony, Bobby and my role in designing the professional development workshops. Next, I present the critical incident, followed by an in depth discussion and analysis of the incident in relationship to social and organizational structures, power dynamics and our positionality as graduate students.

Background to the Critical Incident

Elizabeth, who was hired by the Director of Project Tech Quest, joined the project in early January 2001, filling the coordinator's position left vacant by Tom's departure four months earlier. (See Figure 5.1 for the organizational structure of Project Tech Quest.) Elizabeth had a background in accounting and had worked briefly as a middle school teacher and as an assistant principal prior to joining the project. In her role as project coordinator, Elizabeth was responsible for management and coordination of various grant-related activities including overseeing the acquisition of resources for the project, maintaining Institutional Review Board (IRB) approval, completing six month and annual reports to the Department of Education, demonstrating how the project met the Governmental Performance Reporting Act (GPRA) requirements, and coordinating project sponsored activities such as campus-wide technology lectures and visits by guest speakers and outside project evaluators (Elizabeth, personal communication, 06/26/03).

Figure 5.1

Organizational Structure of Project Tech Quest Personnel*
Spring 2001



*This graphic offers a glimpse of the organizational structure. It does not mean to suggest that the individuals represented were at the same level within the structure. As an assistant professor and the faculty development coordinator of Project Tech Quest, Dr. Borg maintained a higher status than the other individuals in the row.

Cristina, Lisa, Anthony, Bobby and I had been working together for five months prior to Elizabeth's arrival, and Lisa, Cristina and I had been together for one year. We were all keenly aware of one another's idiosyncrasies, strengthens, weaknesses, patterns of interactions, and work methodologies. As I indicated earlier, a high level of comfort and trust existed among Cristina, Anthony, Bobby and me.

This familiarity, coupled with our beliefs regarding technology integration and our work with the Project Tech Quest faculty, created a unity between Dr. Borg and the five of us. Through our daily routines and interactions, our weekly meetings, and our preparation of the faculty professional development workshops, we developed patterns and processes that were shared across members of our collective (Hutchins, 1995; Salomon, 1993). We had developed a sense of ownership of the project and become, in Anthony's words, "almost like protective parents of the project" (FG Interview, 10/31/02, p. 44).

During the fall 2000 semester, Cristina, Anthony, Bobby, Lisa and I planned and then conducted, along with Dr. Borg, faculty professional development workshops on various software—Inspiration, KidPix, HyperStudio, PowerPoint—and on effective uses of the Internet—Web searching and WebQuests. With each workshop we gained confidence in our abilities. Dr. Borg appreciated our preparedness, often commenting that "we made her look good" and faculty members remarked on how beneficial they found the workshops.

We seemed to hit our collaborative stride in early March 2001 with the Desktop Publishing workshop, in which we drew upon Anthony's knowledge of problem-based learning and used a fictitious memo from the dean of the college of education to pose a

"problem" of creating more aesthetically pleasing course announcement flyers for the faculty to "solve." Faculty who attended the workshop gave our work very favorable reviews, most rating the experience as "outstanding" (Project Tech Quest Six Month Report, 05/01/01).

The Critical Incident: Elizabeth's Announcement

Buoyed by our success with the workshops in general and the Desktop Publishing workshop in particular, it was a bit of a surprise when, during a Thursday morning tech guide meeting in mid March 2001, Elizabeth announced that she had arranged for a technology teacher from a local high school to conduct the April iMovie workshop.

Cristina, Lisa, Anthony, Bobby and I had been designing the workshop's agenda for several weeks. We had ordered an iMovie user's manual, were learning the software, and had researched and compiled articles for an upcoming reading discussion. We were truly excited about what we were planning. When we shared this with Elizabeth, she indicated that the teacher would work with us to plan and conduct the workshop. After two weeks and no communication from the teacher, we expressed our frustration to Elizabeth who announced that due to lack of time to coordinate with us, the teacher would conduct the workshop himself. We could attend the workshop and assist him, but he would be the presenter.

While we were caught by surprise by Elizabeth's original announcement, we were disappointed, even troubled, by her announcement that the teacher would conduct the workshop solo. In truth, I think we were all a bit astonished by Elizabeth's final declaration. It seemed to come out of nowhere, and was delivered in a matter of fact,

nonchalant tone. Equally disquieting was the lack of intervention on Dr. Borg's part. Cristina, Lisa, Anthony, Bobby and I were frustrated and left wondering whether or not the high school teacher would be effective in meeting the needs of the faculty. Over the last year, we had established relationships with many of them and were growing in connection. We knew them, their proclivities, their needs; they seemed to appreciate our previous efforts. There was, however, no further conversation, no discussion of possible alternatives with either Elizabeth or Dr. Borg. Consequently, we interpreted Elizabeth's declaration as a mandate: simply put, we could attend the workshop and assist the teacher.

Analysis

Categorizing Elizabeth's announcement, made just two months into her tenure with the project, as a failure to recognize our previous efforts with the faculty technology workshops is certainly one way to begin to understand it. However, in order to make this into a critical incident, we need to do more than merely categorize it (Tripp, 1993). The probing questions introduced in Chapter 2 provide one way to deconstruct Elizabeth's announcement and the conditions surrounding it. Whose interests are served or denied by Elizabeth's announcement? What conditions sustain this action? What power relationships are being expressed? And what structural, organizational, and cultural factors are likely to prevent any of us from engaging in alternative ways?

Following this questioning protocol during the focus group interviews allowed Cristina, Anthony, Bobby and me to engage in a line of reasoning proposed by Smyth (1991) when he declares, "I take 'critical' to mean more than being negative, carping, or

disapproving" (p. 321). Smyth aligns himself with Apple's (1975) view of critical as being "a radical process of reexamining our current positions and interrogating the relationships that exist, and how these connect with social structures from which they emerge" (p. 127).

I begin the analysis with an exploration of whose interests were served and denied by Elizabeth's announcement.

Whose Interests?

Serving the Interests of the Institution

In addition to the management and coordination of various grant-related activities, Elizabeth was responsible for supervision of Project Tech Quest's six objectives, one of which involved the recruitment and coordination of twenty-five master technology teachers from the consortium partner school districts (Elizabeth, personal communication, 06/26/03). Once recruited, these teachers would play an important role as members of the integration teams (teacher, tech guide, faculty member) and "participate as guest practitioners in university method classes" (Project Tech Quest Grant Proposal, 1999, p. 23). Little progress had been made on this objective before Tom's exodus four months earlier. Consequently, meeting this objective and the five others became Elizabeth's priority and the focus of her work during the first months of her tenure.

Government-funded higher education initiatives such as our university's PT3 grant require adherence to strict guidelines and procedures in order to ensure accountability and meet requirements outlined by the funding organization. Copious data

collecting, record keeping, and reporting are standard procedures, given parts of the "buy-in" of those lucky enough to receive funding.

While Elizabeth's attention was focused on meeting the immediate needs of all six project objectives, our interests and goals as tech guides centered on one, which involved maintaining and expanding our relationships with the faculty and increasing their abilities to integrate technology. We were also focused on continuing our own growth and professional development.

In retrospect, and at first glance, perhaps it was in Elizabeth's vested interest to secure the teacher's participation for the iMovie workshop, as it would be the last professional development workshop of the semester and the last of the project. (The focus of the project during the third year shifted to supporting faculty members' application of technology-infused lessons.) Elizabeth's decision to have the teacher conduct the workshop was driven by requirements outlined in the project's grant proposal and exemplifies a situation where the needs, objectives or goals of a project (i.e., the institution or university) take precedence over human or relational factors (i.e., people). Our interests and desire to conduct the iMovie workshop were usurped in order to meet a grant requirement. There were, it seemed, no other possibilities.

I will explore this notion of meeting a grant requirement (i.e., getting the match), the way the decision was rendered to us by Elizabeth, and possible alternatives more fully in the next section where I consider several conditions, which Cristina, Anthony, Bobby and I believed may have perpetuated and sustained Elizabeth's action of using the master technology teacher.

Conditions that Sustain the Action

Constructing the Role of Project Coordinator

Negotiating entry into a new work environment can be a daunting experience. Learning the procedures and expectations of the job along with navigating the relational dynamics of the new environment presents multiple challenges. Acclimating to a group's unspoken norms as well as to the various personalities can be a tricky, complex process, one that requires tact, skill, and grace.

Cristina speculated that initially Elizabeth "didn't exactly know what we were doing or what our roles were; it took us semesters to figure it out" (FG Interview, 03/24/03, p. 27). Further, Cristina highlighted that Elizabeth's previous administrative experience required different qualities and skills than those needed in her role as a project coordinator: "This was a completely different environment from a school. And let's be honest, until you get into a new job and begin to understand the dynamics, and if you don't have a grasp of the university, it's difficult" (FG Interview, 03/24/03, p. 27).

Elizabeth's unfamiliarity with our work as tech guides and her limited experience in higher education, coupled with the status of various project objectives and the fact that the project was understaffed administratively, created a challenging work environment. Dr. Borg summarized the situation succinctly: "Elizabeth was in a really hard place to bring the thing up to speed. It was a mess" (Interview, 03/27/03, p. 2).

During the early weeks of the spring 2001 semester, Cristina believed that we viewed Elizabeth as both "a newcomer and an outsider at the same time" (Cristina, personal communication, 01/09/06, p. 3). In Cristina's words, "we were being cautious about what we said, but we were also trying to build a relationship with Elizabeth and

understand what our roles were in relation to hers" (Cristina, personal communication, 01/09/06, p. 3). Dr. Borg echoed this notion, noting, "everybody was a bit leery of who Elizabeth was going to be, what her role was, and how she was going to fit in the group" (Interview, 03/27/03, p. 6). During this time, I perceived Dr. Borg to be professional but reserved in her interactions with Elizabeth. As Dr. Borg recalled, "We were all trying to figure out who we could trust. How had the dynamic now changed with the addition of this person" (Interview, 03/27/03, p. 8)?

Cristina viewed Elizabeth's action of using the master technology teacher for the workshop as one way to further construct her role and establish her identity as project coordinator. In Cristina's words:

> She had to deal with Dr. Borg, who was faculty. She was trying to establish some power because she was supposed to have it and use it to define and coordinate this project. I think the iMovie workshop was part of that: setting her space, defining something. (FG Interview, 03/24/03, p. 27)

During her first few weeks with the project, Elizabeth worked actively and quickly to "set her space" and establish herself in her role—sending introductory e-mails, stopping by the tech guide office, attending meetings—and to be recognized as, to use Gee's (2001) term, "a certain kind of person."

According to Gee:

> When any human being acts and interacts in a given context, others recognize that person as acting and interacting as a certain 'kind of person' or even as several different 'kinds' at once….The 'kind of person' one is

> recognized as 'being,' at a given time and place, can change from moment to moment in the interaction, can change from context to context, and, of course, can be ambiguous or unstable. (p. 99)

Gee (2001) defines four ways to view identity or what it means to be a "certain kind of person" (p. 100). His notion of the Institutional perspective (or I-Identities) is most helpful for this discussion. An I-Identity refers to a person's position (e.g., a professor, a project coordinator, a graduate student) and is not something a person could accomplish by him/herself. I-Identities receive power from authorities within an institution. The source of the power, then, is based in an institution and is authorized by authorities within the institution. In her I-Identity as project coordinator, Elizabeth's source of power was the university, and it was the director of Project Tech Quest who authorized her power.

Also relevant to this discussion of role construction and identity is the notion of how Cristina, Anthony, Bobby, and I viewed Elizabeth's identity because, as Gee (2001) posits, a person does not have an identity until someone else validates that identity. Further, Elizabeth's position provided her with formal power authorized by the project director, but also present in a position such as Elizabeth's is a level of informal power. Informal power encompasses issues of trust and respect, which in large part are earned, over time.

Did Cristina, Anthony, Bobby, and I respect Elizabeth? Initially, it would have been difficult for anyone to come into the project and simply have our respect. Cristina, Anthony, Bobby, and I gained each other's trust and respect through our daily interactions and our work together over time. We were, early on, as Dr. Borg and Cristina

indicated, cautious and selective in our word choice and in our actions while trying to establish a relationship with Elizabeth. How Elizabeth responded, how she accessed and used her formal and informal power (and gained or didn't gain our trust and respect), as well as our responses to her actions are areas I will continue to explore throughout the remaining pages of this chapter.

In her I-Identity, Elizabeth was subject to the project director's authority, a situation that enabled, reinforced, and to some degree required her to align with power (i.e., authority). This association and the ramifications created from it are discussed below.

Aligning with Power

As Cristina observed,

> Elizabeth came into a project that had already started with no power whatsoever. She didn't have a Ph.D. She had to come in strong. She aligned herself with the project director in order to survive. The people who had a problem with him went away. I think she tried hard to be good. (FG Interview, 05/28/04, p. 34)

While highlighting Elizabeth's positionality and to some degree her vulnerability, Cristina's statement also hints at the management style and the possible tensions that existed between the project director, who was also the director of the Center for Technology in Education, and several former employees of both the Center and the project. It is worth noting that we perceived the director of Project Tech Quest as a shadowy man-behind-the-curtain figure whom we rarely saw save for appearances at the

project's beginning or end-of-semester faculty meetings or when he was in immediate need of project data. In Anthony's words, "he had no idea what we were doing" (FG Interview, 03/24/03, p. 43).

Bobby echoed Cristina's line of reasoning in regard to Elizabeth's choice of relationships when he acknowledged that Elizabeth "knew who the power person was" (FG Interview, 05/28/04, p. 35). It is only natural that Elizabeth would align with the person authorizing her position. What is interesting and worth exploring, then, is the degree and extent to which she did so. Aligning herself in this way ensured Elizabeth the support of the authority (i.e., the project director) and provided the direction, or in Bobby' words "a road map," (FG Interview, 03/24/03, p. 23) with which to navigate her decision-making process. Further, Bobby believed that "whatever we said that conflicted with that was just negated; we were graduate students after all" (FG Interview, 03/24/03, pp. 22-23).

Traditionally, the organizational structure of higher education institutions positions graduate students working as project or teaching assistants at a level slightly more elevated than graduate students not in such positions. These recognized roles come with status and niche within the higher education system (Park, 2004). Within the hierarchal chain of Project Tech Quest, our role as tech guides/project assistants ranked at the bottom, a ranking of which we were aware, but one that was confirmed shortly after Elizabeth's arrival.

The fact that Elizabeth's position was vacant during the entire first fall semester after Anthony and Bobby's arrival is significant. During this period Cristina, Lisa, Anthony, Bobby, and I took full advantage of our autonomy. The project director's

seemingly "hands-off" style worked to our advantage. We participated actively in the decision-making process with Dr. Borg. We approached our role as "protective parents" seriously and deliberately. With Elizabeth's arrival and her subsequent actions, however, our participation in terms of planning and decision-making (i.e., our guardianship) for the project was minimized considerably.

In the end, I perceived that it may have been Elizabeth's I-Identity that prevented her from aligning, or even fully engaging with us. It would not have been in her best interest to become our ally, as we had no power through which we could provide authority. Further, I believe that because of her I-Identity—both her formal and informal power—and our own I-Identities as tech guides and graduate students, we kept Elizabeth at a distance, never really inviting her in, and even, as I will discuss later, resisting her.

It is interesting to consider if Cristina, Anthony, Bobby, and I would have invited anyone in Elizabeth's position in. Our work with Tom, the first project coordinator, was too brief (two summer months) and under different conditions (just Cristina and me working) to use as a basis for comparison. Nonetheless, how might we have responded to someone else in the role, someone with a different approach or style of interaction?

I will continue to explore our positioning as graduate students and our interactions with Elizabeth in the sections that follow.

Getting the Match

Bobby theorized that upon Elizabeth's arrival, the project director told her "he was worried about the master teacher piece, 'We've got to get them on campus in order

to fulfill the grant requirements'" (FG Interview, 03/24/03, pp. 25-26). During her interview, Dr. Borg offered some contextual history that confirmed Bobby's speculation:

> I know Elizabeth was under pressure from the project director to get the school districts contributing because we needed their match on the project. Their match was that they would release teachers and then we would count the teachers' time as match: strictly dollars and cents rather than personal or political. (Interview, 03/27/03, p. 7)

Given the situation, Dr. Borg believed Elizabeth saw the iMovie workshop as a way to "bring a teacher in, give him some credibility, and get some match out of the school district" (Interview, 03/27/03, p. 7). Further, Dr. Borg suggested that the "action wasn't necessarily a way to subvert all of you and take the workshop away from you. It may have felt like it, but I don't think it was" (Interview, 03/27/03, p. 7).

And yet, the importance of and the need for "the match" were never discussed with us, either before or after Elizabeth's announcement. When I queried Dr. Borg about this during her interview, she responded, "In retrospect, I don't even know that I thought about it that clearly at the time. But I know that she was under pressure" (Interview, 03/27/03, p. 7). Here, Dr. Borg's words offer insight into how positionality enables different ways of framing or seeing an incident as critical.

Framing Elizabeth's action of using the master technology teacher for the workshop as something necessary within the context of the project is problematic, as it deflects criticism away from her method of delivery, her style of communication, and her management approach (Apple, 1995). Furthermore, I would argue that Elizabeth may have overstepped her position—her I-Identity—when she alone (or perhaps with the

project director) decided to have the master technology teacher conduct the iMovie workshop. In reality, there were other ways for "the match" to occur. For instance, even though the iMovie workshop was the last scheduled professional development workshop, other "special" workshops—Photoshop, for example—taught by faculty or experts outside the college of education were conducted at various times throughout the project. Perhaps a master technology teacher could have conducted a "special" workshop on another piece of software.

Or perhaps a master technology teacher could have attended a faculty member's class and taught a technology-infused lesson or workshop. One faculty member with whom I worked invited her master teacher to come to a language arts methods class and demonstrate a project using AppleWorks software. This provided a powerful, first-hand model for both the faculty member and her students. Brainstorming possibilities with Elizabeth and Dr. Borg may have yielded additional alternatives to meet "the match" requirement and kept a collaborative component to our work.

Acting Like the Boss

Although Elizabeth's responsibilities were never conceptualized to include the role of "boss" of the tech guides (Project Tech Quest Grant Proposal, 1999) she did, as this and other incidents demonstrate, try to embody this role and form a "power over" (Miller & Fletcher, 1999) relationship. Dr. Borg, who was our boss, acknowledged this ongoing tension with Elizabeth, saying,

> I tried to make it clear to Elizabeth that I was your supervisor and she needed to go through me, but there were times, data collection, for

> example, when she really did need to go to all of you in her role as program coordinator. (Interview, 03/27/02, p. 7)

For further discussion, and as another way to move this incident into a broader context, I will categorize Elizabeth's role of project coordinator as a middle-level management position and our roles as tech guides as the employees. This perspective offers another vantage point from which to view the hierarchical relationship that existed between Elizabeth and the tech guides. In this scenario, Dr. Borg would also be a middle-level manager and the project director would be a top-level manager (CEO).

Middle-level managers are ultimately responsible for carrying out the goals set by top management. This is accomplished through supervision or management of employees with the manager managing or leading through a certain style, schema or approach. Management by Objectives, the approach used in Project Tech Quest (Project Tech Quest Grant Proposal, 1999), enables management to "break down jobs into a series of specific, concrete, measurable, and verifiable goals to be achieved in a specified time frame" (Fletcher, 2001, p. 25). Given the diverse and wide-ranging components and objectives of Project Tech Quest, this approach appears practical; however, when coupled with a "dollar and sense" mentality, it can result in top- and middle-level managers who are at times inflexible or limited in their thinking, and who dictate to ("It doesn't matter what the workers think, meeting the objectives is what counts") rather than communicate with their subordinates.

I perceived that, in many ways, Cristina, Anthony, Bobby and I, along with Lisa, were self-managing. A fact Dr. Borg highlighted when referring to our work ethic: "the four of you could take off and go in your own direction and in general Lisa was willing

to follow" (Interview, 03/27/03, p. 5). Individually and as a group, we were creative, knowledgeable, and highly motivated people. We often held each other accountable, checking with each other on deadlines and due dates, collaborating to accomplish our various tasks. In our day-to-day work, we did not have, or even need, a manager, a leader.

Perhaps, then, it was our I-Identities as graduate students in combination with her own status in the project's hierarchy that enabled Elizabeth to perceive herself as our superior, even overstepping Dr. Borg in the process. Regardless, being given a directive—"the teacher will conduct the workshop"—from someone overstepping her authority felt like having our hands slapped; a kind of punishment, without explanation and for no apparent reason.

In the following section, I will continue to explore Elizabeth's positionality as well as the "asymmetry of power" (Tripp, 1993) that existed between Elizabeth and us.

Power Relationships

Power Over

Elizabeth's top down, one-way directive left us with little space for negotiation (or so we thought) and was in sharp contrast to our work with Dr. Borg in which we would consider multiple options, discuss possibilities, and often create consensus before setting a course of action. Here, there was no conversation, no shared decision-making, no power with; it was less about communicating, more about issuing a communiqué (Freire, 2000).

And while we expressed our initial concern and frustration to Elizabeth, in the end, her final declaration and her display of power went unchallenged (Mumby, 1988). We said nothing to either Elizabeth or Dr. Borg. What prevented us from engaging in further conversation with either of them? Perhaps we were, after just a few months, beginning to have clarity on Elizabeth's style of interaction, her use of power. "The exercise of power," according to Mumby (1988), "involves the reproduction of the structure that best serves the interests of the dominant group in the organization" (p. 90). In this respect, by not trying to challenge, interrupt or at least negotiate with Elizabeth, we, had in fact, served her interests and in the end, given her more power.

Miller's (2003) notion of power-over is another useful lens through which to view Elizabeth's announcement. Miller believes that we can apply the term "power-over" to "situations or structures in which one group or person has more resources and privileges and more capacity to force or control others" (p. 5). Elizabeth's position as coordinator provided her with resources, access to authority, and privilege in the dominant group; her attempts to be our boss facilitated a posture of control and dominance. Our position as graduate students sustained our membership in the subordinate group.

Answer-Centered Leadership

Further, Elizabeth's announcement embodied elements of what Perkins (2003) terms answer-centered leadership where the "leader" declares what is to be done and why, although in our context the "why" was not fully revealed. Anthony was bemused by Elizabeth's attitude; he wondered why she "couldn't come to us and say, 'you guys have been working on this, what do you think'" (Interview, 03/24/03, p. 29)? After further

consideration, Anthony concluded, “She never would have done that; she never came in with an open posture” (FG Interview, 03/24/03, p. 29). An open posture is not a characteristic indicative of answer-centered leadership. Rather, as Perkins argues, when the leader provides just the answers, a command-and-control stance is enacted, and results in inflexibility and a form of interaction that “does nothing to promote the individual or collective growth of the participants” (p. 97). Miller (2003) acknowledges a similar characteristic of power-over practices citing, “structural power reinforced by power-over practices obstructs growth and constructive change” (p. 5).

And while answer-centered leadership can be a helpful interactive style in certain situations, it does, according to Perkins (2003), carry additional hazards:

> micromanagement, the needless hovering over people who in fact do not need to be told what to do; and authoritarianism, the overbearing treatment of people who have minds of their own and soon enough will either passively or actively resist or leave. (p. 97)

We interpreted Elizabeth’s announcement (and her general management style) as an attempt at micromanagement and authoritarianism, which as I will discuss below, eventually lead Anthony, Bobby, and me to engage in resistive acts.

I now turn to the structural and organizational factors Cristina, Anthony, Bobby and I thought might have prevented Elizabeth and the four of us from engaging in alternative ways.

Structural and Organizational Factors

Dr. Borg's Role

Earlier, I referenced Dr. Borg's commitment to and support of Cristina, Lisa, Anthony, Bobby, and my growth related to technology use, researching, and writing, and our development as future academics. This support, while still present, waned during the latter part of year two and throughout year three of the project. As Cristina observed, initially, Dr. Borg was "good at bridging the spaces" (FG Interview, 03/24/03, p. 3) between the project director and the tech guides. But when Elizabeth arrived, Cristina recognized that Dr. Borg "started to pull back" (FG Interview, 03/24/03, p. 3). And, in Cristina's words, "that is when things started to change. I felt we could be in some sort of danger" (FG Interview, 03/24/03, p. 3). Little did we know how accurate Cristina's premonition would be.

As I indicated earlier, Dr. Borg did not intervene on our behalves after Elizabeth's announcement. Having done so might have created other possibilities. Perhaps one of the reasons she didn't intervene was due to her limited investment in the actual planning of the workshops. Cristina, Lisa, Anthony, Bobby and I planned the content for the previous professional development workshops. We would confer with Dr. Borg regarding logistics and she was present during the workshops to facilitate the experience, but the bulk of the planning, preparation and execution was our responsibility. In the case of the iMovie workshop, we had just begun the planning process and had not yet shared our intent with Dr. Borg; had we done so, we may have garnered her support.

After the announcement, Dr. Borg, while still supportive, was at times matter-of-fact, even distant when dealing with the tech guides' relationship with Elizabeth. As a

tenure-track professor, much of Dr. Borg's time and energy was centered on meeting requirements for tenure. This is to be expected. But during the last year of the project, she seemed to grow more and more disheartened with the college of education, the administration, and what she saw as her potential within her department. Eventually, this dissatisfaction led her to pursue other employment possibilities and she left the university the next academic year.

As For Our Part

I cannot know for certain if Elizabeth ever sensed our disappointment with her final decision to have the master technology teacher conduct the iMovie workshop. As I mentioned earlier, we never talked about it with her; we never tried to negotiate an alternative. Individuals do, as Perkins (2003) suggests, have a variety of choices when it comes to deescalating moments of tension or resolving conflict. Perkins offers three modes of resolving conflict: consensus resolution, civil resolution and power resolution. Consensus and power are particularly relevant to this discussion. Consensus resolution refers to the process people or groups use to "figure out what option to go with; or what to try first, then next; or a compromise, deal." (p. 181). In contrast, on occasion, "people or groups, resolve conflicts through power—through wielding political or administrative authority in their own behalf, or physical conflict, or other means of direct conflict" (p. 181).

Typically, according to Perkins,

> consensus resolution techniques try to achieve a better mutual understanding and a mutually agreeable resolution" among participants.

> Power resolution, on the other hand, can simply be a matter of a person getting away with what he or she has the power to get away with. (p. 182)

I perceived that Elizabeth chose the latter resolution technique when making her announcement. Her "eye-on-the-prize" mentality and her middle-level management position may have restricted her agency and limited her ability to see and then consider our perspective or engage in an alternative action.

And certainly, Cristina, Anthony, Bobby and I could have attempted the consensus technique. Many times during the fall semester, we had used a consensus approach in our work with Dr. Borg and it seemed to benefit all participants. I suspect that Dr. Borg's perspective as a professor enabled her to support us—our work and our professional development. Elizabeth was not a professor and really had little interest in our growth. In short, I believe our positionality as graduate students limited our agency and our options. And almost immediately we had learned two important lessons of the informal curriculum from Elizabeth and her announcement: our place in the project's chain of command and our position in the academy. These lessons would be revisited and reinforced several more times throughout the course of our work with Elizabeth, the project director, at times with Dr. Borg, and as will be discussed in the next chapter, with faculty.

Elizabeth's Missteps

Within just a few weeks of her arrival and after just a few interactions with her, Anthony found Elizabeth "arrogant" (FG Interview, 05/28/04, p. 36). He perceived that she "didn't care what we thought" (FG Interview, 05/28/04, p. 36). Bobby had a similar

reaction after she attended a class he was conducting for one of his faculty members. Throughout the class, Elizabeth talked with the faculty member, something Bobby found distracting, even annoying. After the class she offered little commentary or feedback. In Bobby's words, "I saw that she was really not interested in our work. She was there to collect her paycheck and kiss the project director's ass so the checks wouldn't stop" (Bobby, personal communication, 07/21/05, p. 2). Moreover, he believed that "there were many missteps along the way that would've made Elizabeth's life and our lives a lot easier" (FG Interview, 05/28/04, p. 35).

For Cristina, one such misstep occurred shortly after Elizabeth's arrival when she failed to recognize our history as collaborators. According to Cristina,

> When Elizabeth first came on, I think she did something that wasn't very smart. When there is a history, it's important to recognize that, but she just said, 'I decide this, I decide that,' which wasn't our spirit. You know the collegial meeting every week where we talked about our work? She didn't get that. (FG Interview, 05/28/04, p. 35)

I, too, found Elizabeth's apparent lack of awareness of our collaborative efforts troubling. She rarely acknowledged our collective, wide-ranging experiences in teaching or professional development. And when she did, it was, as Anthony put it, "so superficial it didn't really matter" (FG Interview, 03/24/03, p. 43).

Missteps not withstanding, Cristina perceived Elizabeth to be a good match for the project and the university. From Cristina's perspective, Elizabeth was able to adapt herself and "produce what she was supposed to do, and do it well" (FG Interview, 05/28/04, p. 39). In Cristina's words, "I think I may be the only one who thinks this way,

but she was effective. I am not saying that it was good. I am saying she was effective for what [the project director] wanted done" (FG Interview, 05/28/04, p. 39).

Bobby and I agreed that Elizabeth was effective in terms of producing reports and giving presentations, Anthony, however, speculated that Elizabeth's "effectiveness from the perspective of the project director, the organizational structure of the project, and how she worked" (FG Interview, 05/28/04, p. 41) may have, in the end, limited the project's overall impact and success, specifically in relationship to her work with us and the faculty.

Organizational Structure

The organizational structure of Project Tech Quest, as discussed earlier, established Dr. Borg and Elizabeth's I-Identities as middle-level managers who reported to a higher authority. From Dr. Borg's perspective, Elizabeth's middle-level position was problematic. (Interestingly enough, Dr. Borg never discussed her own positionality as a tenure track assistant professor.) In Dr. Borg's words:

> In some ways Elizabeth was in a very hard place because [the project director] was her employer. She needed to answer to him and he told her what she needed to do in terms of the project. And she was totally dependent on us to supply her with all the information about the professional development piece, which was the only successful piece. (Interview, 03/27/03, p. 2)

This catch twenty-two situation would be challenging for anyone to negotiate; however, Elizabeth's relationship with us didn't make it easy for her. As Dr. Borg further

noted, “Elizabeth really needed our cooperation and I don’t know if it was necessarily always a bad thing to use the knowledge of that power that we had to leverage and get some of the things we got out of her” (Interview, 03/27/03, p. 2). Dr. Borg’s notion that we used our power to leverage is fascinating, unfortunately, I am not entirely sure to what she was referring.

The Management by Objectives model used by the project administrators is a common management approach in the corporate world. This approach offers a clean, efficient tracking system where managers check off objectives as employees complete them. Shortly after beginning his work with the project, Bobby was disappointed and troubled to discover how closely the structures of the project (and the college of education) mirrored a corporate mentality: “Coming into a university after ten months in Silicon Valley, and just having things be strictly business, the products and everything, it was just business, that’s what turned me off” (FG Interview, 03/24/03 p. 44). And over time, I believe it was this structure and the mentality that accompanied it that fostered shades of resentment and disenfranchisement. I continue exploring this line of thinking below.

Elizabeth as Conduit

During the second and third focus group interviews, Anthony recalled an incident from early in the final semester of the project when Elizabeth approached him at the copy machine outside the tech guide office. In Anthony’s words,

> She walked up, looked me in the eyes and said, ‘You know, I’m not the enemy.’ I just smiled. I certainly didn’t say, ‘I know that.’ I think she had

> read a book on management the night before that said: tell your employees you're not the enemy. (FG Interview, 05/28/04, p. 38)

Anthony recounted that Elizabeth would offer this testimonial at various times over the course of the last semester of the project, usually when requesting project-related data. According to Anthony, "I was always pushing, challenging her requests and so she finally figured it out after a while" (FG Interview, 03/24/04, p. 23). He had found several ways to both subtly resist and even openly challenge Elizabeth and interpreted this pronouncement as a way for Elizabeth to conceal her frustration with him for not being more forthcoming with the project reporting logs and as a way to deflect or shift responsibility away from her.

I, too, see Elizabeth's statement as a way for her to mitigate her role in the data collection process, but perhaps most importantly, a way to confirm to Anthony that she was simply taking orders from "above:" a way to indicate that her requests were not really her requests, but those made by someone above her. Moreover, for me, Anthony's recollection illustrates how Elizabeth exemplified the conduit metaphor (Clandinin & Connelly, 1995): the project director's voice of authority spoken or delivered through her words and actions.

Cristina perceived that Elizabeth's background as a school administrator motivated and informed her "I'm not the enemy" statement. In Cristina's words, "that's what administrators do, they comply with things and something is supposed to happen. They have to make people do it" (FG Interview, 05/28/04, p. 38). Cristina's observation of Elizabeth as administrator is congruent with the conduit metaphor. Often school administrators enact philosophies, mandates, or policies developed by school boards or

superintendents, while sometimes offering the same justification as Elizabeth: "It's not me (read, I'm not the enemy here) who is making you do this."

Further, Cristina speculated that Elizabeth's administrative experience hindered her collaborative abilities, stating, "I think that was part of her way and why she wasn't such a good collaborator" (FG Interview, 05/28/04, p. 38). In truth, I never envisioned Elizabeth as a potential collaborative partner. It was clear, almost immediately, that she approached her work from a different perspective: "top-down" (FG Interview, 05/28/04, p. 36) as Anthony put it.

I would argue that throughout much of her work with project, Elizabeth served as the project director's mouthpiece. Her words and actions, designed to meet project responsibilities and facilitate data collection, were often-camouflaged forms of simple and technical control (Apple, 1995), which, as Cristina observed, enabled Elizabeth to "get things done" (FG Interview, 05/28/04, p. 39). And yet, I believe it was this approach, with its subtle and overt messages, used in combination with the overall project's organizational philosophy that ultimately hampered Anthony's, Bobby's and my ability to stay fully invested in our work with Elizabeth.

Split Visions

I had been using the phrase "in some ways we fit" in the working title of the dissertation and during the third, and final, focus group interview I wanted to explore this notion a bit further and asked Cristina, Anthony and Bobby if there were ever times when we "didn't fit" either together or in a more general sense. It was then that Cristina offered Elizabeth's announcement as an example of when we "didn't fit" within the larger

context of the Tech Quest project. From her perspective, "we always saw ourselves as learning. We never denied that we were learning and we didn't know it all. But we knew that we were working together to make some things happen" (FG Interview, 05/28/04, p. 46).

Cristina continued,

> We fit when we were recognized as tech guides with a voice and participation and decision making. What were we going to do? How were we going to do it? But then when Elizabeth made that announcement, then we didn't fit. We didn't fit because that wasn't supposed to be like that. We weren't supposed to be in the background bringing water to this guy while he was doing the workshop! (FG Interview, 05/28/04, p. 46)

We all laughed as Cristina finished her last sentence, perhaps envisioning another aspect of our role: tech guide as water boy/girl. But indeed, the iMovie was one clear illustration of when our vision for the project didn't match either Elizabeth's or the project director's vision, and there may have been others. For example, Bobby recalled our enthusiasm after the success of the fall 2000 semester and our interest in seeing "how much further we could take our work with the faculty" (FG Interview, 03/24/03, p. 23). He also remembered how during a planning session in early January 2001, a meeting where Elizabeth was not present, when we, together with Dr. Borg, generated a timeline of possible workshops and scenarios for the remainder of our work with the project. He recalled, too, how Elizabeth, "with her road map from the project director" (FG Interview, 03/24/03, p. 23) squelched many of these plans. According to Bobby, "there

would be no more dreaming, no reaching for any of those ideas" (FG Interview, 03/24/03, pp. 22-23) after Elizabeth's arrival.

Did the success of our work during the fall 2000 semester give us a false sense of entitlement? Because as Bobby mentioned during the second focus group interview, when referencing Elizabeth's announcement about the iMovie workshop, "We weren't in control anymore" (FG Interview, 03/24/03, p. 23). We certainly, during the fall semester, grew to value certain conditions—collegiality, mutuality, shared power—in our daily interactions with each other and with Dr. Borg; values that we perceived to be different from Elizabeth's. Cristina speculated that Elizabeth approached her work and her relationship with us in the ways she did because of "a combination of factors: her personality, her information, her education, her previous experiences" (FG Interview, 03/24/03, p. 27).

But why should Elizabeth have consulted with us before making her decision about the iMovie workshop? Beyond basic respect, I also believe it has to do with recognition for our shared history, and for a valuing of our experience with the faculty, our previous accomplishments. Ultimately, Anthony believed that over the course of the entire project there was "more respect for the data than for us" (FG Interview, 03/24/03, p. 4). Cristina concluded "we probably should perceive our role as people who worked for Elizabeth on the project with no, with no, with no voice" (FG Interview, 05/28/04, p. 44).

Experiences Shape Reality: Developing Modes of Coping

Perhaps particularly relevant to the discussion of our relationships with Elizabeth, the project director and Dr. Borg are the various modes of coping that Cristina, Anthony, Bobby, and I used during our work with the project. Coping strategies refer to the "specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce or minimize stressful events" (Taylor, 1998, p.1). These strategies differ from resisting in that resisting, as we will see, involves destabilizing strategies that in some ways disrupt the dominant discourse (Fletcher, 2001). Our coping strategies, which developed over time and to some degree out of necessity and in response to factors highlighted previously, took different forms—critique, humor, and fantasy, or an increased focus on our work for the project and on our own personal and professional development—depending on the context. Regardless of form and context, the modes of coping became another tool, in our series of collaborative tools, which enhanced our communication and contributed to a stronger cohesiveness among the four of us.

Hidden Transcripts

Elizabeth's presence changed the dynamics, focus and content of the weekly tech guide meetings. According to Cristina, "before Elizabeth's arrival we were meeting every week to make decisions and solve problems. But then, we were meeting to report to her" (FG Interview, 05/28/04, p. 47). Anthony agreed and felt Elizabeth's presence at the meetings was to "totally serve the project director's interests" (FG Interview, 05/28/04, p. 34). Dr Borg recalled that at times there was an air of hesitation and uncertainty during the meetings where Elizabeth was present. In Dr. Borg's words:

> I think none of us felt as free to talk about problems in the project, especially problems in dealing with the project director. I know lots of times that what really needed to be said in the weekly meeting got said after the meeting was over and after Elizabeth had left. (Interview, 03/27/03, p. 6)

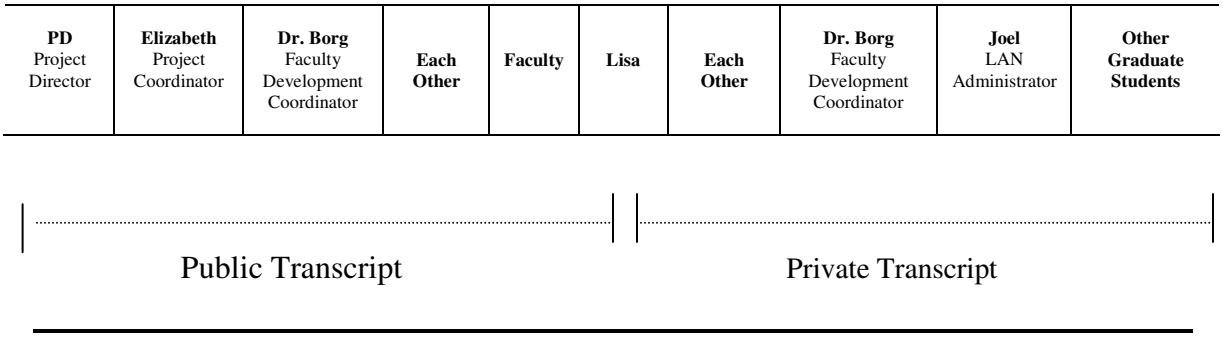
These after-the-meeting meetings offered an opportunity for us to share our concerns about the direction or management of the project, and would result in the production of a private or "hidden transcript" between Dr. Borg and Cristina, Lisa, Anthony, Bobby and me. Scott (1990) believes that "every subordinate group creates, out of its ordeal, a 'hidden transcript' that represents a critique of power spoken behind the back of the dominant" (p. xii). Further Scott proposes, "much of what passes as normal social intercourse requires that we routinely exchange pleasantries and smile at others about whom we may harbor an estimate not in keeping with our public performance" (p. 1). In these instances, we may, according to Scott (1990) "sacrifice candor for smooth relations with our acquaintances" (p. 1) or the more powerful other, which allows the contradictions or misrepresentations to remain beyond the direct observation of those in power (Scott, 1990). Public transcripts, then, are the result of the face-to-face conversations, discussions, and interactions created in the social realm.

Figure 5.2 represents the various actors/audiences with whom Cristina, Anthony, Bobby, and I created both public and private transcripts. Our production of private transcripts was not exclusive to the subject or critique of Elizabeth. At times Cristina, Lisa, Anthony, Bobby, and I, along with Dr. Borg, created hidden transcripts in relation

to the project director or the faculty with whom we worked. Other times Cristina, Lisa, Anthony, Bobby, and I created hidden transcripts in relation to Dr. Borg's actions.

Figure 5.2

Cristina, Anthony, Bobby, and Don's Discursive Sites, Arranged by Audience



Source: Adapted from Scott (1990).

For example, Cristina, Lisa, Bobby, and I created a hidden transcript after we learned that Dr. Borg had submitted, without our knowledge, a draft of a paper that we had been working on with her to a conference in Ireland. The hidden transcript created in this context included moments of venting by Cristina, Lisa, Bobby, and me as well as our thoughts on how we might approach Dr. Borg about the situation, some thing we never did. The process of creating hidden or private transcripts enabled us to brainstorm possibilities, create strategies, problem-solve, and infuse moments of levity into various aspects of our work.

Fantasy

Bormann and Bormann (1996) believe, "group members share fantasies, which create a common subculture for the participants" (p. 24). Within a group context, the

word “fantasy refers to the creative and imaginative shared interpretation of events that fulfills a group’s psychological or rhetorical need to make sense of its experience and to anticipate its future” (p. 150). According to Bormann and Bormann, “rhetorical fantasies often deal with things that have actually happened to group members” (p. 150).

We created one such fantasy while in New Orleans for the 2002 American Education Research Association (AERA) conference. Shortly after our arrival in the French Quarter, Anthony, Bobby, and I saw a T-shirt in a novelty shop that we thought summed up our relationship with Elizabeth. The simple, direct statement in small white type on the black shirt read, “I don’t get paid enough to kiss your ass!” Each day as we walked by the shop, we talked about getting a shirt for each us, and one for Cristina, too. We joked of wearing them to the project’s final tech guide meeting: one final statement of resistance, defiance, solidarity. What could Elizabeth do to us? We were disappointed when we entered the shop and found that the shirt hanging in the window—a size small—was the only one available.

We would, after our return from New Orleans, replay this experience several times during the last few weeks of our work with the project, even discussing the possibility of making our own shirts (something we never did). And perhaps we would never have actually worn the T-shirts, but the thought of doing so gave us something to fantasize about, and sustained us during our last few weeks together. Collectively remembering this event provided a touch of lightness during moments of tension usually brought on by Elizabeth’s requests for project data. We also, at times, applied the slogan to other contexts and other people, which helped sustain the fantasy, achieve empathic

communication (Bormann & Bormann, 1996), and further strengthen our interpersonal relationships and our level of professional intimacy.

Strengthening Our Fit

In the previous chapter, I highlighted how Lisa's interpersonal skills and patterns of collaboration served as catalysts that brought Cristina, Anthony, Bobby, and me closer. In some ways, Elizabeth had a similar impact on our interpersonal endeavors. Anthony, for example, saw a stronger "solidarity" (FG Interview, 03/24/03, p. 47) among the four of us as a result of Elizabeth's presence. Cristina believed that "if we needed something we knew how to rely on each other independently of Elizabeth" (FG Interview, 03/24/03, p. 48). Bobby felt this process enabled us to get to "know each other better personally, our strengths, our weakness" (Interview, 03/24/03, p. 49), and as a result, we found, according to Bobby, "how we really fit together well" (FG Interview, 03/24/03, p. 49).

While solidarity and fit are similar, they are not identical. In the context of this study, fit acts as a metaphor for the various ways Cristina, Anthony, Bobby, and I came together personally and professionally to accomplish our work both as graduate students and as tech guides. Our abilities to fit clearly contributed to our solidarity, but as Anthony highlights above, Elizabeth was also a catalyst for our solidarity.

Pushing Back: Developing Resistance

As indicated above, our interactions with Elizabeth during her first three months with the project were not directly adversarial. However, Bobby believed that the iMovie

workshop marked a turning point and served as "our first indication that she was going to impede us and that we would have to push back" (Bobby, personal communication, 07/21/05, p. 2). Our "pushing back," while perhaps another mode of coping, manifested itself more as subtle and not so subtle forms of resistance.

The Log

One of our ongoing responsibilities as tech guides was to document our daily activities in a reporting template or log. Once complete, the templates were submitted to Elizabeth, who compiled our entries into reportable data used to evaluate the project, although we were not sure of her process or the final form. Several of us also kept tech guide journals; these were typically spiral notebooks in which we recorded brief narratives related to the work we were doing with individual faculty or with each other. Anthony, who was keeping a researcher's journal as part of his dissertation study of faculty members' approaches to integrating technology in their methods courses, felt rewriting entries from his journal into the template was "double the work" (FG Interview, 03/24/03, p. 41). During the focus group interview, Bobby jokingly disagreed with Anthony's concept of work, stating, "the log was *not* work! That was an excuse really. It was about 15 minutes" (FG Interview, 03/24/03, p. 41) [emphasis in original]. Regardless, of the amount of time it took, Anthony often chose not to submit a weekly log.

There was very little writing space on the template (see Appendix F). Over time, I began to view the process of recording my very cursory notes onto the template as a superficial form of recording keeping, which had very little to do with my actual day-to-

day work with the project's faculty or my work with the other tech guides. Increasingly, I began to view the template as a symbol of control for Elizabeth; a symbol I became less likely to engage with or perpetuate.

I felt that we didn't have much else that we could do in terms of resistance. It was year three of the project; we had very little interaction with Elizabeth save for the weekly meetings. But why resist at all? I don't think of myself as a difficult person. (Perhaps this is what all difficult people say.) What was it about the templates? Was it really just about the superficiality? Actually, it was larger than the templates. Part of it was about the fact that I knew Anthony and Bobby were not turning in their templates; power in numbers. In the end, it was about exerting what little control I thought I had and offered a way to resist Elizabeth's "power over" mentality.

Anthony viewed not turning in the weekly log as "playing a petty game" (FG Interview, 05/28/04, p. 37). To him, "It was a space to play, to resist; it was monkey wrenching" (FG Interview, 05/28/04, p. 37).

For Bobby, withholding the log was a way to resist Elizabeth's control while at the same time creating his own form of power/control in the process. In his words, "It was something we could hold back. It was something that we could harass her with. Watch her squirm. And it didn't give us a headache" (Interview, 03/24/03, pp. 34-35). He recalled, "On the days when it was due, Anthony and I were there in the office and it took energy to resist. We'd talk about it and strategize ways to make sure that we pissed her off" (FG Interview, 10/31/02, p. 47). Bobby found this form of resisting pleasurable, offering, "I think we got some enjoyment out of it, which was good" (FG Interview,

05/28/03, p. 37), “It was one power we had over our ‘boss’” (FG Interview, 03/24/03, p. 36).

Over the course of the project’s final fall and spring semesters, Anthony, Bobby, and I received several terse e-mails from Elizabeth prompting us to submit our templates. According to Dr. Borg, Elizabeth would at times ask her for assistance in securing our templates, stating, “I just want to get what I need so that I can do my record keeping” (Interview, 03/27/03, p. 1). Dr. Borg would appease Elizabeth by saying that she would “play the work supervisor card” (Interview, 03/27/03, p. 9) to get us to cooperate. And in turn, “the guys,” Cristina’s phrase for Anthony, Bobby and me, would receive an e-mail from Dr. Borg chiding, “OK kids, let’s do what Elizabeth needs now” (Interview, 03/27/03, p. 9). Cristina and Lisa rarely, if ever, received such an electronic request, either from Elizabeth or Dr. Borg, as their templates were submitted on time, without fail.

Cristina viewed Anthony, Bobby, and my behavior of not turning in the logs as grandstanding, declaring, “You guys were actually resisting and showing off” (FG Interview, 05/28/04, p. 37). In her position as an international student, Cristina felt she had little space or room to resist. “My way to resist the thing was just to comply with her. Or I believed I was resisting, maybe I wasn’t” (FG Interview, 05/28/04, p. 37). “Many times,” Cristina confessed, “I just put down stuff that really wasn’t true, but for me it didn’t matter” (FG Interview, 03/24/03, p. 41). Within the larger context, Cristina didn’t see the value of not submitting the log. She was thankful for a job.

Cristina wondered if Anthony, Bobby, and my resistance was related to issues of gender, asking if we would have “used the same tactic if the program coordinator had

been a male" (FG Interview, 03/24/03, p. 38)? Interestingly enough, Anthony responded, "If she'd asked nicely, I would've done it" (FG Interview, 03/24/03, p. 43). We will never know what choices we would have made; however, I imagine something would have been different.

Cristina, Anthony, Bobby, and I were each, on some level, resisting the process of completing the logs. Doing whatever we could based on our perspectives and our positionalities: Cristina, while in compliance with Elizabeth's request for the data, was at times passively completing the form with "stuff that really wasn't true." Anthony, Bobby and I were actively not submitting any paperwork, a collective mode of resistance meant as a destabilizing strategy (Fletcher, 2001), a way to interrupt the discourse or what we viewed as Elizabeth's exercise of power. It was our attempt to exercise a little power of our own.

Photo Call

A second, much more subtle, resistive act came late in the last semester of the project after Elizabeth sent an e-mail requesting Project Tech Quest faculty members, administrative staff, and tech guides gather for a picture outside on the stairway leading into the Center for Technology in Education. The picture would be added to the project's Web site and serve as an artifact of the project.

Although we never talked about it until the first focus group, Bobby and I both made a conscious decision not to attend. Bobby's explained, "I refused to go because that wasn't part of who I was; it had nothing to do with me or the Center for Technology in Education or the larger project" (FG Interview, 10/31/02, p. 44). For me, the photo shoot

did not represent the reality, the centrality, of our work, attending it was not a priority. Further, I viewed this as a "photo op" for Elizabeth and the project director. I also believe Bobby and my overall dissatisfaction with Elizabeth and the project director perpetuated our nonattendance.

Anthony, too, had no intention of attending the event, and had, in fact, forgotten about it until that morning when he walked around the side of the building just as the group was organizing. He recalled, "I literally walked right into it. It's picture day. What could I do" (FG Interview, 10/31/02, p. 45)? He was "invited" to take a place on the stairs, next to the project director.

Both Cristina and Lisa attended the photo shoot. While reflecting on her participation, Cristina remarked, "I didn't really care about being or not being in the picture" (FG Interview, 10/31/02, p. 45). She elaborated,

> I really was aware that if it wasn't for the project, we, wouldn't, I wouldn't have the job. For me, because of my particular situation, that was an important thing to remember. Institutionally, I was part of it because I was working there. And if they want to take a picture, go ahead. (FG Interview, 10/31/02, p. 46)

Here, as in her earlier discussion of the log, Cristina highlights how her status as an international student intensifies her vulnerability. To some degree, each of us were vulnerable, but perhaps Cristina more so because of her international status. Further, Cristina's words signal her priorities and why she was involved in the project and at the university: to get a Ph.D. So, like the log, the picture was a non- issue for Cristina. Her

actions also demonstrate that, at times, we each made individual decisions of how and when to participate or resist.

Collectively, Bobby and I saw this as opportunity to resist another of Elizabeth's requests. Interesting enough, by not participating in the photo session, Bobby and I were actively rejecting the public representation of the tech guide role, a role we had been deeply invested in for two years. Our move, I'm sure, went unnoticed by Elizabeth, the project director, and even Dr. Borg.

Cristina, Lisa, Anthony, Bobby, and I had, over the course of the entire project, been documenting through digital pictures, our own and various faculty members' participation. These captured moments, when taken together, conveyed a much more authentic and wholistic representation of the project and of our work; certainly a more complete rendering than one photo on a stairwell could ever do.

Discussion and Conclusion

Considering Elizabeth's announcement as a critical incident gave Cristina, Anthony, Bobby, and me a chance to examine the nuances and the complexities inherent in our relationships with her, the project director, Dr. Borg and each other. This process of critique enabled us to examine the clash between creative, authentic growth producing work relationships and the constraints of the middle management business model, and to recognize how central the exercise of power was to our tech guide experience. Examining the social and organizational structures that supported and sustained these various power dynamics revealed how the individuals with whom we worked constructed and navigated

their relationships with us and with each other, and in turn how we constructed our relationships with them.

Further, this examination revealed both the intricacies and boundaries associated with our positionalities as graduate students within the project. Reflecting specifically on our range of interactions with Elizabeth revealed that her announcement and the manner in which it was delivered, while an isolated episode, was somewhat indicative of the social, administrative, and organizational structure that she employed throughout her work with us. I perceived that there was a taken-for-grantedness on Elizabeth's part: she would tell, we would do (or we were supposed to do). Top-down directives can result in employees feeling disenfranchised and disempowered, which may result in a "culture of obedience" (Mumby, 1988). While Cristina, Anthony, Bobby, and I, at times, may have felt disempowered, we did not simply fall in line and take it. Rather, we chose to passively and actively resist Elizabeth's authoritarianism and her attempts at micromanagement. We engaged in individual or collective resistive acts depending on the situation and our positionalities. Yet common across these situations is our gendered responses to power. Anthony, Bobby, and I, for example, resisted completing the reporting log, while Cristina, because of her international status, was compliant. Similarly, Cristina chose to attend the photo call while Bobby and I actively resisted; Anthony participated but only by accident. It may have been, in the case of the reporting logs, that Anthony, Bobby, and I took advantage of our status as white, middle-class males and positioned ourselves in direct line with power without fear of retribution, a privilege not afford Cristina.

With experience comes learning, through learning comes wisdom, and through wisdom (and a little distance) comes insight. Looking back on our work with Elizabeth now (several years later), it appears to me that several of our interactions were somewhat dysfunctional, our behavior juvenile, her way of functioning perhaps a little heavy-handed. But context and history are important. And at the time, we perceived that we were confined by the organizational structure of the project, the personalities of those with whom we worked, and by our positionalities as graduate students.

I will, in the final chapter, return to this discussion of relational practices and mutual empowerment across structural power lines. In the next chapter, I continue the exploration of positionality and mutuality when discussing Cristina's, Anthony's, Bobby's, and my relationships with project faculty.

CHAPTER VI: A FACULTY MEMBER'S COMMENT

The major focus of Cristina, Lisa, Anthony, Bobby, and my work with Project Tech Quest centered on helping faculty become more skilled, knowledgeable, and capable in their thinking about and use of technology. We attempted to accomplish this through a variety of technology professional development activities, including monthly reading discussions and workshops. Faculty attendance at these events fluctuated depending on the topic under discussion and the time of day the activity was offered. In addition to the discussions and workshops, we often attended faculty members' methods courses where we would model a particular piece of hardware or software and assist the faculty member with a technology-infused lesson. At times, we created resources such as handouts, Web sites, surveys, and other materials to support, supplement, and enhance the faculty members' abilities to integrate technology into their methods courses.

Each of us also conducted one-on-one sessions with our five faculty members. During these meetings we might explore a particular piece of software and then brainstorm possible ways to integrate the software into a classroom activity, plan a technology-infused lesson, develop a Web site, or explore other areas of interest to the faculty member. The amount of time we spent with individual faculty was fluid and varied; often fluctuating from week to week and semester to semester depending upon the faculty member's course load, the course content, the faculty member's other professional and personal commitments and responsibilities, and—above all—his or her levels of interest and motivation.

The three focus group interviews provided Cristina, Anthony, Bobby, and me a chance to reflect on our experiences with the various professional development activities and our individual and collective relationships with the Project Tech Quest faculty. During the third interview, the four of us discussed a faculty member's very brief visit to the tech guide office where she made a comment regarding her tech guide's performance. This is the incident under discussion in this chapter.

Turning this faculty member's comment and the events surrounding it into a critical incident gave the four of us a chance to consider our positionalities as graduate students in a way different from our discussion of Elizabeth's announcement. With this incident, we took a closer look at the intricacies related to our patterns of interactions with project faculty, the various ways they responded and interacted with us, and how our positionalities as graduate students impacted our relationships.

In this chapter, as in the two previous ones, I combine Cristina, Anthony, and Bobby's voices with my own to create a collective account of our experiences. I again add Dr. Borg's voice to the conversation to provide detail and enhance the rendering and the analysis of the incident. I also use excerpts from an interview with the faculty member involved in the incident, excerpts from a taped conversation with Anthony and Bobby, and other archival data from the project to provide further context and to support the analysis of the incident. And here, as before, I draw on personal communication, specifically from Dr. Borg. In order to situate the incident in its larger social context, I draw on literature related to authority (Bruffee, 1999), identity (Gee, 2001), collaboration (Kail & Trimbur, 1987; Romper & Whipple, 1991), higher education (Fish, 1994; Levin, 2006; Sharnoff, 1993), organizational culture (Mumby, 1988), power (Miller, 2003), and

technology professional development (Koehler, Mishra, Hershey & Peruski, 2004; Leh, 2005; Musanti, 2001; Otero et al., 2005; Smith, 2000).

I begin with a brief description of Cristina, Lisa, Anthony, Bobby and my relationships with project faculty. I then present the critical incident followed by an in depth discussion and analysis of the incident in relationship to social and organizational structures, power dynamics, and our positionalities as graduate students.

Background to the Critical Incident

Cristina, Lisa, Anthony, Bobby, and my personal and professional relationships with our individual faculty members evolved throughout the life of the project, and over time, each of us developed a close working relationship with at least one of our five faculty members. Cristina, for example, worked closely with two special education faculty members—team teaching and publishing together. Lisa developed a strong relationship with a science education faculty member and created an extensive Web site for her courses. Bobby's close working with a faculty member in bilingual education led to summer work as part of a bilingual education summer institute. Cristina also served on the faculty of the institute. Anthony developed a close working relationship with a physical education faculty member and the two maintained a standing weekly meeting throughout the course of the project. During much of the first and part of the second year of the project, I had a standing weekly meeting with a faculty member in early childhood; together we published a short article looking at ways graduate students constructed meaning while "playing" with technology.

Within these relationships there was reciprocity, all parties benefiting from the exchanges and the interactions. Establishing and maintaining these individual relationships enabled the faculty members and us to develop more fully in our understanding and use of technology. While reflecting on her experiences with the project, one science education faculty member commented that Project Tech Quest "afforded me the opportunity to explore professional development that would have been much, much harder for me to do on my own" (Hall et al., 2001, p. 6). Toward the end of the project, several faculty members spoke adamantly of wanting to continue some type of personal technology support after the project concluded, even meeting with the dean to discuss possibilities.

Cristina, Lisa, Anthony, Bobby, and I valued our interactions and relationships with the faculty as they gave us an intimate look into the responsibilities, expectations and demands of life in the academy, which in turn added another dimension to our work with the project and enhanced our overall graduate school experience. In many ways we "fit" with our faculty; there were times, however, as we shall see below, when this was not the case.

The Critical Incident: A Faculty Member's Comment

One morning in late October 2001, Cristina, Anthony, Bobby, and I were in the tech guide office when a Project Tech Quest faculty member appeared in the doorway forcefully asking, "Where's my tech guide?" This type of entrance was not uncommon for this particular faculty member who had a proclivity to be spirited and good natured. Bobby explained that "her tech guide"—Lisa—was in Virginia conducting a site visit on

another PT3 project. All four of us had turned our attention to the faculty member who commented harshly and a bit sarcastically, "I didn't know I had to have my students bring disks to the lab." And then, without missing a beat, she announced, "I'm not going to trash one of your colleagues, I'll tell Dr. Borg" (Don's Tech Guide Journal, 10/24/01). Initially, none of us responded verbally to her comment, perhaps because of our complete surprise and our uncertainty of just what to say. Our nonverbal responses—blank stares accompanied with a raised eyebrow or two—revealed our feelings of bewilderment and our discomfort with the situation. I sat motionless, thinking to myself what's going on here, how might I respond? Was she joking? Her forced delivery and stilted body language indicated otherwise. After a moment of awkward silence, Bobby retrieved several boxes of floppy disks from the resource closet. The faculty member then engaged Anthony in a few minutes of small talk before leaving, whereupon the four of us just looked at one another and thought: "What was that all about?" Some of us began to smile, perhaps thinking, "Oh, here is another time we can stick it to Lisa," but then Cristina shifted our attention to what really transpired and the gravity of the event: This could have been any faculty member making a similar comment about any one of us and because of our status as graduate students we were defenseless to respond.

At the next morning's tech guide meeting, Cristina recounted the incident to Dr. Borg, acknowledging that the faculty member "left us powerless, because what were we going to say, 'it's your fault?' We couldn't say anything" (Tech Guide Meeting Transcript, 10/25/01, p. 1). Dr. Borg was cordial, but somewhat indifferent after Cristina's retelling, simply responding, "Yeah, you might as well name the name; we are

all fairly good at deductive reasoning" (Tech Guide Meeting Transcript, 10/25/01, p. 1). Without further commentary, she shifted our attention to the meeting's agenda.

Analysis

Dr. Borg's limited response may have been due, in part, to this particular faculty member's attitude and past performance related to the project. Dr. Borg would later acknowledge that the faculty member was "pretty hard to work with and her technology skills were very limited, yet she could see the potential of using some hardware and software in her discipline" (Dr. Borg, personal communication, 07/19/06, p. 1). Further, Dr. Borg believed that this faculty member, "wanted to do the integration without putting in the time to really understand how the hardware, software and data together support student learning" (Dr. Borg, personal communication, 07/19/06, p. 1). However, there may be more to it than that, and it is for those reasons that this incident holds significance, warrants further exploration, and is worth telling and retelling.

We could categorize the faculty member's comment in a variety of ways: as an example of misinformation or miscommunication on the part of the faculty member or even Lisa; as a faculty member's inexperience with technology; or as a faculty member venting her frustration with technology through an impulsive, spur of the moment comment. However, as we did with the critical incident with Elizabeth, we need to do more than merely categorize the comment (Tripp, 1993).

Therefore, during the third focus group interview, Cristina, Anthony, Bobby, and I used the probing questions to deconstruct the faculty member's comment and the conditions surrounding it: Whose interests are served or denied by the comment? What

conditions sustain and preserve this action? What power relationships are being expressed? What structural and organizational factors are likely to prevent the faculty member and the four of us from engaging in alternative ways?

I continue the analysis with an exploration of whose interests were served and denied by the faculty member's comment.

Whose Interests?

Serving the Interests of the Faculty Member

According to Mumby (1988), "language does not simply inform; it creates the very possibility for the creation of meaning environments" (p. 102). Within the context of this incident, the faculty member uses language to make a series of statements: "I didn't know I had to have my students bring disks to the lab. I'm not going to trash one of your colleagues, I'll tell Dr. Borg." Through her word choice she was not inviting or even expecting a response. In fact, her words and their delivery rendered Cristina, Anthony, Bobby, and me voiceless. Just moments before the faculty member's arrival the four of us were engaged in our typical morning banter and exchange. Upon her arrival and after her comment we sat speechless, silenced by her words. Cristina remembers, "feeling shocked" (FG Interview, 05/28/04, p. 11). In her words, "I think we didn't know what to say" (FG Interview, 05/28/04, p. 13).

The faculty member is also using language as an innuendo; her attack on Lisa camouflaged in cleverness, or so she believed. And further, in making her comment, the faculty member is using language to do several things simultaneously: she is exhibiting her authority as a faculty member while critiquing Lisa's performance as less than

satisfactory and rendering the four of us speechless in the process. But also present in her statement is a shifting of responsibility: It's not my fault (read "my problem"); I wasn't told the students needed to bring disks. This displacing of responsibility was something other faculty members would do from time to time, but not to such an obvious degree or in such a public arena with witnesses present. I will explore this notion further in the pages below.

As Mumby (1988) asserts, "language is an instrument of power as well as an instrument of knowledge and communication" (p. 102). Making such a comment ultimately serves the faculty member's interest as it offers her an occasion to exhibit authority, i.e., power, over Lisa (and us) and to communicate her dissatisfaction. Coming by the tech guide office gave her both an audience and an opportunity to display her disproval of Lisa; an event, which Anthony speculated, may have been "premeditated" (FG Interview, 05/28/04, p. 27) given the faculty member's relationship with Lisa. And while not directly asking for disks or for help, the faculty member managed to convey her need and was rewarded.

Dr. Borg remembers a visit from the faculty member after this incident, but "it wasn't the first time" (Dr. Borg, personal communication, 07/19/06, p. 1). Other times, Dr. Borg recalled, the faculty member "complained about Lisa not knowing the software well enough" (Dr. Borg, personal communication, 07/19/06, p. 2) to help her. Perhaps the faculty member was upset or embarrassed to find herself in this situation in the lab with her students, one more reason not to embrace Lisa as her tech guide. Regardless of how subtle or impulsive the comment, Cristina, Anthony, Bobby, and I heard its message(s) loud and clear: Lisa was not doing her job, this faculty member was going to do

something about it, and we, in our position as graduate students, could say nothing in response. But perhaps most significant was our belief that regardless of our past history with Lisa, she was not an anomaly; this could happen to any one of us.

I now turn to consider several conditions, which may have sustained the faculty member's ability to make such a comment.

Conditions that Sustain the Action

A Fear of Technology

The faculty member's level of comfort and general attitude toward technology and her view of the integration of technology into her content area are all conditions informing her statement and thus impacting this incident. Reflecting on her technology abilities during an interview with Lisa in January 2001 (ten months prior to her visit to the tech guide office), the faculty member described herself as a "Neanderthal" and added, "I'm still sort of afraid actually of the whole unknown, and I don't like machines in that they don't work a lot" (Faculty Interview, 01/29/01, p. 1). She went on to say, "I don't know enough to support the students…. I know so little that it bugs me" (Faculty Interview, 01/29/01, p. 2).

The faculty member's discomfort with and vulnerability toward technology permeate her interview statements, even suggesting a slightly technophobic stance. And while her confessions align with Smith's (2000) observation that "despite an increase in technology access, teacher educators are limited in their use of technology" (p. 167), and may in fact mirror beliefs of other faculty members involved in Project Tech Quest, her honesty in sharing her fears is somewhat unique. The majority of project faculty was less forthcoming when discussing their abilities and their concerns related to technology.

During our discussion of this incident, Cristina, Anthony, Bobby, and I realized that this faculty member's participation, while limited during the first eighteen months of the project, dropped off significantly during the last year; as Anthony recalled, "she was one of several faculty members who just disappeared" (FG Interview, 05/28/04, p. 15). For this particular faculty member, it may have been her fears related to technology that diminished her participation.

However, also relevant to this discussion is the notion that initiatives such as Project Tech Quest, while voluntary, are often imposed on faculty as necessary for the teaching profession. The results can be problematic when faculty members are not, for various reasons, fully invested in the process. Often these initiatives or programs create pressure for faculty to engage, to improve, to change. It is clear from her interview statements that the faculty member had a desire to engage, to improve her teaching practice, to better prepare pre-service teachers. Perhaps, then, it was this deeply sensed vulnerability toward technology, a trait Bobby characterized as "a nervousness about tech integration," (FG Interview, 05/28/04, p. 15) that led the faculty member to limit her participation in project activities and ultimately make the comment she did. And while the faculty member's comment is a clear, yet subtle critique of Lisa's performance, it may on some level, given the faculty member's vulnerability with technology and her limited level of participation, also be a critique of technology in general and the work of the project in particular.

Identity as Authority and Power

In the previous chapter, I introduced Gee's (2001) notion of Institutional perspective or I-Identities when highlighting how our positions as tech guides and our I-Identities as graduate students sustained our membership in the subordinate group in relationship to Elizabeth and the project's hierarchy. And while our I-Identities were not static—we were in the process of becoming academics—our membership and positionality also apply to this discussion: graduate students are subordinates to faculty.

The position of faculty member is also an I-Identity. A faculty member's power is authorized by a variety of authorities within the institution including the board of trustees, university administration, and senior faculty within the department. The I-Identity of faculty member assures membership in the dominant group and brings with it aspects of power, privilege, prestige and a status within the institution. In addition, the I-Identity of faculty member encompasses certain expectations and responsibilities in terms of teaching, advising, researching, and publishing.

Fish (1994) suggests that because the academy continually requires academics to be in the position of submission related to areas such as interviewing, publishing, teaching, even promotion, that they have grown to feel oppressed, even abused, which leads to a desire to abuse back. This practice, Fish posits, underlies much of academic life from tenure decisions and other rites of academic passage to interactions with students.

Bobby speculated that because some faculty members have had to make sacrifices to get where they are, and now with the power and academic freedom found in the university, they at times could enact a posture of "it's all about me" (Taped conversation, 03/12/02, p. 1). In his words, "they have this earned respect and they use it" (Taped

conversation, 03/12/02, p. 1). Further, he hypothesized that faculty who were "strong in their convictions" (Taped Conversation, 03/12/02, p. 3) related to technology and teaching and learning were able to embrace their tech guide, while those who were "less strong or had been abused themselves" tended to "engage in a cycle of abuse with their guide now that they are on the top" (Taped Conversation, 03/12/02, p. 3).

In their study of one hundred thirty-eight graduate students from a variety of disciplines at Wayne State University, Jagatic and Keashly (2000) determined that negative interactions with faculty ranged from verbal abuse—being yelled and screamed at—(2.2 percent) to little or no feedback on performance (29 percent). Faculty flaunting their status ranked slightly higher (21 percent) than being spoken to in a sarcastic tone (18.1 percent). The researchers categorized their findings as "mostly neglectful behaviors" suggesting that perhaps because "direct forms of abuse are not tolerated by institutions of higher education, the ambiguity of neglectful behaviors makes these behaviors 'safer' for the perpetrators" (p. 3).

Does, then, the authority accompanying the faculty member's position in the dominant group, i.e., her I-Identity, her conditions of submission, and her nervousness of technology integration, allow, or even warrant her disclaimer, i.e., the shifting of the responsibility, and the public critique of her tech guide? I would argue "no" and suggest further that the faculty member's comment about speaking with Dr. Borg is a blatant, even flaunting, display of power; inherent in the comment is her status in the academy. And her power as a faculty member is more than an allusion. Cristina, Anthony, Bobby, and I were profoundly aware of the fact that in this situation and at other times throughout our work with faculty that they had power, an attribute we acknowledged and

respected. By making such a statement in front of us—Lisa's peers—the faculty member is wielding her authority, in a sense cueing us to her expectations, and teaching us another lesson of the hidden curriculum of graduate school: our place in the hierarchy, our place in the subordinate group.

I will now turn to explore several factors related to power that Cristina, Anthony, Bobby, and I believed may have impacted our relationship with the faculty member.

Power Relationships

Power Over

The fact that Cristina, Anthony, Bobby, and I were all in the tech guide office the morning of the faculty member's visit makes this event particularly significant and memorable. We each heard her words, felt the anxiety, experienced the discomfort of wanting to respond but not being able to, and sensed the tension created by the subtle but deliberate exercise of power, of authority. It was a shared experience, one that involved a "power-over" (Miller, 2003) dynamic, which according to Miller (2003), is coercive and arises out of fear. We perceived that the faculty member used her language, status, and actions to try to intimidate and silence.

We were surprised by the faculty member's use of the phrase "my tech guide" versus "Lisa" because by this point we were eighteen months into the project. The impersonal nature and tone of the phrase reminded Bobby of how a disgruntled employer might direct her employee: "I need something done. I want her to work for me" (FG Interview, 05/28/04, pp. 7-8). Cristina found it troubling that this faculty member would

make such a statement given what we knew of her perspectives and attitude. In Cristina's words,

> I never thought that she would be the one to do such a power thing, such an unethical thing, coming into the office and bitching about one of our colleagues. The faculty thing came up and she acted or reacted. (FG Interview, 05/28/04, p. 10)

And the faculty member's reaction offers a one-way account of the situation: her own. Cristina, Anthony, Bobby, and I knew how Lisa had, on multiple occasions, attempted to reach out to her faculty, including this particular faculty member. We had access to the hidden transcripts (Scott, 1990), participating at times in the creation of them with Lisa when she would detail her attempts to engage with different faculty and express her frustration with their lack of reciprocity. Anthony recalled, "Lisa had several faculty members who were very, very strong outgoing personalities who were also very into power" (FG Interview, 05/28/04, p. 21).

Also relevant to this discussion is Lisa's approach to working with her faculty; perhaps Cristina said it best when she reasoned:

> Lisa wanted to put herself into a collegial relationship with her faculty, but they didn't allow her to do that for some reason. It might have been her personality, the way she would talk to them, overpowering them like you do with a child. There was something about that; she wasn't successful. (FG Interview, 05/28/04, p. 21)

Perhaps, then, Lisa did not want to have reciprocity with her faculty. Perhaps she wanted to be perceived as expert, a role her faculty members were less willing to

acknowledge. In the end, the faculty members' personalities and attitudes toward technology combined with their use of power and responses to Lisa's work approach may have limited their abilities to engage in reciprocity with her. From Miller's (2003) perspective, power-over practices, regardless of who is enacting them "obstruct growth and constructive change" (p. 5). While referencing the attitude of the faculty member who made the comment and her relationship with Lisa, Dr. Borg speculated, "perhaps someone else would have been a better tech guide for her, but she still would have required a lot of patience" (Dr. Borg, personal communication, 07/19/06, p. 1).

Even with our knowledge generated through the construction of the hidden transcripts with Lisa and our knowledge of her approach to working with faculty, Cristina, Anthony, Bobby, and I believed that we had little space in which to engage with the faculty member after her statement; her authority, her word choice, and her power over stance precluded such interaction.

The Imbalance

Less than a week after the faculty member's appearance at the tech guide office, Project Tech Quest hosted a Collaborative Exchange Visit where two outside evaluators visited campus to review the work of the project. During a round table discussion with project faculty, administrators and the two evaluators, Dr. Borg, when discussing the work of the tech guides, stated,

> We can't ignore the fact that faculty have power and graduate students do not. And even though the graduate students are here with a different kind of expertise, I have at times had to say to faculty, 'these people are not

> your personal technology slaves; they are here to help you.' (Roundtable Discussion, Collaborative Exchange Visit, 10/30/01, p. 12)

She went on to say, "In our weekly meetings we talk about how to work with faculty members if they play the faculty card and do the power thing. It has not happened very often, but it has been interesting to negotiate" (Roundtable Discussion, Collaborative Exchange Visit, 10/30/01, p. 12).

Dr. Borg's announcement was a rare public acknowledgement of faculty power and the inherent imbalance, i.e., the potential for power-over practices, in the tech guide/faculty partnership. What is interesting is that Dr. Borg chose to make this comment in such a setting, given the audience—a majority of tenure track professors, project administrators and the outside evaluators. Perhaps the proximity of the faculty member's comment prompted Dr. Borg's admission. The faculty member involved in the incident was not present during the roundtable discussion; this, too, may have contributed to Dr. Borg's ability to be so forthcoming. The nine faculty who were there did not respond directly, or indirectly, to Dr. Borg's comments, although there was laughter after her tech guide as slave reference; instead their comments focused on how advantageous they found the project and their work with the five of us.

Thus far, I have centered the discussion almost exclusively on the faculty member who made the comment about Lisa. In the remaining pages of this chapter I will expand the focus and explore more generally Cristina, Anthony, Bobby, and my relationships and interactions with the other Project Tech Quest faculty and what happened when they played the "faculty card" or did "the power thing" which Dr. Borg referenced above.

One Step Behind the Power Line

Romper and Whipple (1991) define the "power line" as the gulf that separates people at different levels of authority. Anthony acknowledged the Project Tech Quest "power line" when describing our stance, positionality, and approach to working with the faculty: "We would never confront them. We always managed. We always stayed a step under them. We put ourselves in that powerless position or relationship and they would enforce that sometimes" (FG Interview, 05/28/04, pp. 16-17). We were, as Anthony highlights, at times unwilling to get too close, let alone acknowledge the "power line" with faculty. The incident under discussion in this chapter is one example. Clearly, Cristina, Anthony, Bobby and I did not attempt to approach the power line to pursue a line of defense on Lisa's behalf, due in large part to the way the faculty member cued us through her word choice: she would handle it by telling Dr. Borg.

Each of us, when reflecting on our entire time with Project Tech Quest, could recall other situations where we were rendered "voiceless," where we believed we could not discuss certain issues with faculty. For example, Cristina, Bobby, and I periodically had faculty members who would miss scheduled appointments with us. This in itself was not particularly bothersome. What was troubling, however, was the fact that the faculty member would seldom acknowledge his or her absence. One extreme example took place in early March 2002 when Cristina received an 8:00 a.m. phone call at home from a faculty member requesting a meeting later that morning. When Cristina arrived at the faculty member's office at the appointed hour, the faculty member was nowhere to be found. And although the phone call to Cristina's home was a first, the missed appointment was not. Cristina, visibly upset at the time, remarked, "What is with this

woman to do this *so* many times? Before I used to feel bad, but now I am angry with her. It's not working" (Don's Tech Guide Journal, 03/06/02) [emphasis in original]. The faculty member would never acknowledge the phone call or the missed meeting. Over time some faculty members' lack of communication did wear on us, and this issue, as Dr. Borg publicly acknowledged, was a frequent topic during our tech guide meetings. And while we found this habit problematic, we were reluctant to "call them on it" for fear of retribution while on our paths toward graduation.

We did distribute a *Praises and Concerns from Dr. Borg and the Tech Guides* handout to faculty during the wrap up meeting at the end of the Fall 2000 semester where we detailed several areas of praise—things that were going well—and a few concerns including when faculty do not notify tech guides that an appointment will be missed, do not attend classroom activities conducted by the tech guides, and see tech guides as personal assistants rather than technology mentors. Our five statements of concern may have influenced the way some faculty interacted with us, although now in hindsight, we might have been more successful with more direct interventions.

There were times when Dr. Borg encouraged us to follow up with the faculty about missing project activities. For example, during a tech guide meeting in mid February 2002, Dr. Borg expressed her disappointment in the lack of faculty attendance (six of twenty-five) at a software showcase held just a few days earlier. She suggested that the tech guides conduct a phone survey with faculty to see why more of them hadn't participated. Anthony and Bobby were not present during this discussion, but Cristina, Lisa and I all expressed hesitation about calling the faculty to directly confront them on their lack of participation. Dr. Borg suggested we phrase the question matter-of-factly,

but we still resisted, suggesting instead that she initiate the conversation. No survey of any kind—anonymous or otherwise—was ever taken; however, in this context, we might interpret Dr. Borg's insistence that Cristina, Lisa, and I "call" the faculty on their behavior as an example of her pretending the imbalance of power, i.e., the "power line," did not exist.

There were also moments when it was difficult to respond honestly to faculty members. Cristina, for instance, recalled a hallway encounter with a faculty member who lamented to her, "I wish you were my tech guide" (FG Interview, 05/28/04, p. 12). Cristina felt that engaging with this statement would in some ways have compromised her standing with the faculty member and the other tech guides. In her words, "faculty had the power to say, 'Okay, I don't like you, I don't want you, I want somebody else'" (FG Interview, 05/28/04, p. 12). Cristina's example and the faculty member's comment when taken together demonstrate just how precarious our relationships with the faculty really were at times as well as how their words had the potential to disrupt our relationships with each other.

Eichelberger and Fulford (2001) might categorize Cristina's hallway incident and similar events with faculty as "sticky" situations. In their program at the University of Hawaii at Manoa, graduate students serve as one-on-one technology mentors to faculty and are taught, through a series of cross-training and role playing sessions, to handle "sticky" situations such as faculty members expecting the graduate student to do the technology work for them, faculty members not completing agreed upon work, or chronically canceling appointments. The program's experienced graduate student mentors train incoming mentors. While highly successful in dealing with "sticky"

situations or navigating the "power line," Eichelberger and Fulford's program has experienced mentor-faculty incompatibility usually due to a graduate student's unfamiliarity with content specific software. Cristina, Lisa, Anthony, Bobby, and I did not have the wisdom of more experienced mentors to draw upon during our work with Project Tech Quest; we did, however, have each other and in many ways, as shown in the previous chapters, mentored ourselves through our daily interactions with project activities, and at times with situations involving faculty.

Unlike our pushing back with Elizabeth, which in some ways also involved a "power line," we seemed unwilling to directly confront our various "sticky" situations or venture too close to the faculty "power line." I believe this was due to several factors, the largest of which was our fear of jeopardizing our long-term relationships with faculty and our status as graduate students with the college of education. We knew that Project Tech Quest would conclude in May 2002, but Cristina's, Lisa's, Bobby's, and my commitments to our doctoral course work, dissertations, and teaching responsibilities within the college would continue well beyond that date. In short, we had more at stake than just our current job as tech guides; confronting or crossing the "power line" could have had lasting, potentially negative, consequences.

In the section below, I continue to explore our relationships with project faculty, the notion of mentoring by graduate students and other structural and organizational factors Cristina, Anthony, Bobby, and I thought may have prevented the faculty and the four of us from engaging in alternative ways.

Structural and Organizational Factors

Institutional Hierarchy

By design, institutional hierarchies create a system of power (Fletcher, 2001). In an institute of higher education, the I-Identity of a tenured faculty member has more status (read power) than a tenure-track faculty member. All Institutional identities (I-Identities), as Gee (2001) points out, "require discourse and dialogue to sustain themselves" (p. 104). Institutions and the actors involved generally work to support the discourse and dialogue necessary for the identities to exist.

Within the Project Tech Quest hierarchy, Dr. Borg, an untenured assistant professor, was positioned as the faculty development coordinator of twenty-five college of education faculty, who were at various ranks of tenure and promotion. Dr. Borg's expertise in instructional technology qualified her for this position, but how did her status as a tenure-track faculty member impact her abilities as development coordinator? Cristina, Anthony, Bobby, and I often speculated that her positionality created a challenging and restrictive environment that may have been part of what was behind her limited response to Cristina's sharing of the faculty member's comment about her tech guide. The faculty member who made the comment was a tenured professor. We might interpret Dr. Borg's failure to take up the conversation as, "I'm not going to trash one of my colleagues. I'm not going to go there." As Mumby (1988) posits, "organizational discourse is thus both the medium and product of organizational structure" (p. 105). From this perspective, Dr. Borg was also working with a "power line."

Autonomy

There were just a handful of opportunities for graduate assistantships within the college of education during the life of Project Tech Quest—Spring 2000-Spring 2002. And at the time, Project Tech Quest was the only grant involving a team of graduate students. Across the college there were a limited number of collaborative endeavors between faculty and graduate students; even collaborative activities between faculty members seemed restricted to a few individuals or programs. Collaboration was not a common practice, not part of the culture.

According to Gandolfo (1998), "If there is a single 'tradition' that impedes the development of new ways of understanding learning, it is the radical isolation of most higher education faculty members in their much valued autonomy" (p. 29). This valuing of autonomy coupled with the institutional hierarchy and a culture lacking in collaborative energy may have impacted the way some faculty members perceived Cristina, Anthony, Bobby and me, and what we had to offer in terms of technological knowledge and support.

I continue to explore the notion of perception in the pages that follow.

In Relation

From time to time the word "mentor" was used to describe our position in relation to faculty. None of us, save for Anthony, remotely considered this an appropriate definition for either our role or the relationship. Cristina, for example, felt that in order "to be a mentor you need to be in a position of having some sort of wisdom that is

beyond a technique or a specific content" (FG Interview, 10/31/02, p. 35). To her, "guide would be a better word" (FG Interview, 10/31/02, p. 39).

Bobby felt more like a "paid tutor than a mentor" (FG Interview, 10/31/02, p. 35) and recognized that, "at best, there was a nice collaboration, but not mentoring" (FG Interview, 10/31/02, p. 38). I, too, would not classify any of my relationships with faculty as me mentoring them; however, I do believe, in some ways, one of the early childhood professors briefly mentored me during our writing collaboration.

As I discussed in the previous chapter, our Institutional perspectives or I-Identities (Gee, 2001) as graduate students were defined and authorized by the university, and in part, by Dr. Borg and the language and guidelines of the Project Tech Quest grant proposal. Cristina speculated that, "the way graduate students were positioned" in the university and how the tech guides "were defined by Dr. Borg initially, and ourselves later, impacted our relationships with the faculty" (FG Interview, 05/28/04, p. 30).

Dr. Borg acknowledged that originally the tech guides were conceived as mentors to the faculty, a positioning she always knew would be difficult, more difficult for the tech guides than for the faculty because, in her words, "every person who has a Ph.D. is very important" (03/27/03, p. 3). Bobby found Dr. Borg's initial cautionary words related to the complexity and unpredictability of faculty a useful reminder in his daily interactions with faculty. He recalled, "Dr. Borg did a good job when Anthony and I first came on to say, 'Look, these people are sometimes difficult.' So, I had that frame of mind anytime I'd knock on the door" (FG Interview, 05/28/04, p. 17).

Initially, Dr. Borg imagined the faculty would view the tech guide as "some sort of on-demand help: when faculty had the time and were ready to learn, there would be

someone available" (Interview, 03/28/03, p. 3). She knew the evolution of what the tech guides did would come from the personalities of the people involved in the pairing. In her words:

> That's partly why the role was loosely designed and based on personality. I knew there were some people who wanted to participate, who would be very open to the idea of being a learner from a graduate student. I also knew there were some people who would find it very difficult to let their guard down and say, 'I don't know. I need help.' (Interview, 03/28/03, p. 3)

While this stance of lowering the guard and saying "I don't know, I need help" worked for many faculty members, the vulnerability associated with the phrase and the actual act itself was not possible for some. As Dr. Borg recalled we spent a lot of time "talking about the same four or five faculty members throughout the project" (Dr. Borg, Personal Communication, 07/19/06, p. 1).

Gee's (2001) notion of being recognized as a certain "kind of person" may have influenced the ways in which some faculty members were able to perceive us, and what we had to offer in terms of technology support. Cristina captured the tension associated with being perceived by faculty in an entry in her tech guide journal, where when describing her response to a faculty member's action she wrote, "I felt invisible. Visibility for graduate students is a big issue, especially for our work" (Cristina's Tech Guide Journal, 11/09/00).

This lack of perception, lack of acknowledgement, as highlighted earlier, was taxing. All human beings long (need) to be perceived. Is this not part of being alive?

Should this not be a fundamental right in any context, regardless of institutional hierarchies or any other personal characteristics or attributes? Sharnoff (1993) wonders if "perhaps hierarchy is to the university system what class is to America—it informs all behavior and circumstances but is rarely discussed or acknowledged—at least in terms of its implication" (p. 6). Further she posits, "Graduate students might be locked into a position that is separate and not equal to faculty both on an administrative and departmental level, but professors also have a rigidly inscribed and restricted position" (p. 7).

Is it feasible or even practical, then, to expect faculty members to be mentored by or collaborate with graduate students? Can faculty members perceive graduate students as a resource, a source of knowledge? When I asked one of the twenty-five Project Tech Quest faculty members if she would categorize her relationship with her tech guide as a mentoring relationship, she laughed and said, "No, I wasn't being mentored, I never felt like it was that way!"

Kail and Trimbur (1987) suggest that collaboration can occur only when all participants are at the same level of authority. Certainly, our status as graduate students precluded us from attaining the same level of authority as faculty (nor do I think we were expecting this.). However, as I highlighted in the opening pages of this chapter, Cristina, Lisa, Anthony, Bobby, and I had instances of successful collaborative experiences with faculty. These were relatively short in duration, save for Anthony, but nonetheless meaningful.

Bobby felt equal only when faculty put him in that position by asking what he thought or what they might do. In his words, "At times, they put that expertise on me and I was fairly confident with my technology skills or at least the skills to figure out how to do something and they gave me that place" (FG Interview, 10/31/02, p. 40). For him, respect—the valuing of ideas—was one of the most important elements in his successful relationships with faculty. He felt some faculty members respected him because of what he could do with technology, but not for other reasons. A successful relationship, to Bobby, included mutual respect where he was "treated not as a grad student, but as a colleague" (Taped conversation, 03/12/02, p. 1). Relationships that lacked mutual respect resembled more of an "I know who I am and I know who you are" (Taped conversation, 03/12/02, p. 1) stance on the part of the faculty member. He referenced a faculty member who often wanted to know his opinion and who suggested the two research and write together; in his words, "she totally valued what I had to offer and made me feel like a total colleague" (Taped conversation, 03/12/02, p. 1). Bobby's words describe a tech guide and faculty relationship built on mutuality and one that has the potential to be growth producing for all involved. His words also remind us that it was the faculty member who initiated, decided or directed this outcome.

Cristina "never felt equal at all with *any* of them" (FG Interview, 10/31/02, p. 38) [emphasis in original]. For her, "there was always a power differential that she could not escape" (FG Interview, 10/31/02, p. 35). She did, however, recognize that the relationship was "constructed" (Interview, 10/31/02, p. 41) between the faculty member and her. In Cristina's words, "I think it depends on the other, it is not something that is unilateral" (FG Interview, 10/31/02, p. 40). She reflected on the challenges of

constructing relationships with her individual faculty members in a self-study when she wrote:

> The different expectations, the different levels of previous technological knowledge, the broad range of attitudes toward technology integration and the different communication styles and availability of working with me, seriously affected and effected my own availability, attitudes toward them and possibilities for an open dialogue. (Musanti, 2001, p. 13)

Dialogue became an integral tool through which Cristina came to know her faculty members and "their uniqueness as educators and as learners" (p. 13). During the third focus group interview Cristina crystallized and expanded upon this notion, saying, "There is something about personality and you know some ways of imposing yourself and not imposing yourself. Talking, opening doors and seeing how it can work, but sometimes the way you do it matters more than what you're doing" (FG Interview, 05/28/04, p. 16).

Indeed, Cristina, Anthony, Bobby, and my approaches and styles of interaction with the Project Tech Quest faculty were as diverse and eclectic as we were. Bobby hypothesized that we approached our work with individual faculty the same way we might strategize while playing a card game. In his words:

> We had five cards each. How are we going to play them? I very much believe that influenced how we saw the entire project. How do I act? What is my role here? You had to think about it because it was obvious the professor had a role. How are you going to respond, play it? And whether

> we thought about it consciously or not, we did decide. (FG Interview, 05/28/04, p. 24)

Bobby's comments highlight how we might "play" each card or each faculty, but further his comments highlight how we might "reveal" certain aspects of ourselves, i.e., our identities, how we might "act" depending on the faculty member with whom we were working. I believe, too, that we were always conscious to take our cues from the faculty member; cues grounded in a faculty member's level of interest often dictated how much time we should spend exploring a particular piece of software, even how far we could push for a meeting, always mindful of the "power line." It was always the faculty member who got to decide.

Bobby also believed our previous experiences with teaching and technology influenced how we perceived ourselves as resources for the faculty. In his words:

> I think all of us had different strengths and weaknesses. But Anthony had several things going for him. He was further along in his graduate studies. He was also older and more experienced than a lot of his faculty. He had the technology and the teaching experiences, where I felt that I had the technology, but not the teaching. Cristina and Don might have felt stronger with the teaching than the technology. (FG Interview, 05/28/04, p. 20)

Anthony acknowledged that his relationships with faculty "were really close in terms of power" (FG Interview, 05/28/04, p. 21). "I don't know if it had to do with my age, or where I was in my program or because I had done a lot with professional development and technology, but I felt really equal with all of them" (FG Interview,

10/31/02, p. 37). And he did wonder if his extensive "public school teaching experience added more validity" (FG Interview, 05/28/04, p. 21) to him in the eyes of the faculty.

It is interesting to consider how our experiences as teachers may have impacted our relationships with faculty. Experience does matter and several faculty members seemed to appreciate our lived experience as classroom teachers. For example, one early childhood faculty member with whom I worked noted, "I sensed mutual respect toward educating young children in ways that brought out their creative potential" (Hall et al., 2001, p. 8). Our common belief system served as a starting point and enhanced our approach to thinking together about how we might integrate technology into the faculty member's early childhood courses.

Cristina believed her experiences with education in Argentina, while valuable, were difficult to translate into her work with the faculty. In her words:

> My experiences were different and I considered that as a shortcoming, but I don't know. I felt like I probably positioned myself like that. I think it's a two-way situation. The way they act and also the way I act when they act like that. Or the way I feel when they act like that. (FG Interview, 05/28/04, p. 22)

Further, Cristina felt that she had more of a graduate student-professor relationship because she put herself in that position. She speculated,

> I don't know how much they were imposing that relationship on Anthony or it was more back and forth because I think he was positioning himself as more of an equal, putting aside that grad student issue. I couldn't really do that. (FG Interview, 05/28/04, p. 20)

Cristina was not alone here: Lisa, Bobby and I also had graduate student-professor relationships with the faculty. For various reasons—his age, his gender, his experience—Anthony was positioned differently, in more of a collegial relationship, something Lisa wanted but was unable to obtain, perhaps due in part to the faculty with whom she worked. But in the end, our abilities to be in relation to faculty were shaped by the faculty. At times, they would play the faculty card by imposing hierarchy or power, which rendered us silent, voiceless, invisible. We did not "fit" in these situations.

At times, and perhaps most important, the opposite was also true; faculty positioned us as a collaborator, a potential colleague, a resource, these contexts created opportunities for us to engage in a shared vision, mutuality, growth and empowerment. Perhaps it is not surprising that what Cristina, Anthony, Bobby, and I valued in our work and relationships with faculty is very similar to what we valued in our work with each other—trust, respect, power with, reciprocity.

Web of Technology Professional Development

As I indicated above, the degree to which a Project Tech Quest faculty member was willing (and able) to interact with us was often determined by his or her level of interest or motivation, but other factors also influenced our interactions. During our end-of-the-semester interviews with the Project Tech Quest faculty, it was not uncommon for many of them to associate their limited participation in project activities with lack of time. They would frequently cite other professional obligations as having or taking precedence; tenure and promotion requirements did impact some faculty members' participation. My relationship with the early childhood professor, for instance,

diminished substantially after she realized that her participation in Project Tech Quest would carry little weight toward tenure. Are, then, faculty members who have a desire to change their pedagogy, at times, caught having to choose between competing activities related to professional development, their day-to-day expectations and responsibilities as faculty and the demands for promotion and tenure? Studies examining faculty members' conditions of work often acknowledge this tension between an untenured faculty member's desire to engage in professional development competing with the demand to maintain a significant research and scholarship agenda; professional development focused on technology with its potential learning curve and investment of time, complicates the situation even more (Angelo, 1994; Baldwin, 1998; Gandolfo, 1998; Hall et al., 2006).

Or as in the case of the tenured faculty who made the comment about Lisa, does fear of technology push some faculty away? If so, how might we craft professional development opportunities to support faculty who experience technophobia? What might we have done to better support this faculty member and the others who "just disappeared?" Perhaps part of their disappearance was based on a mismatch between the project's expectations and their individual beliefs and goals as teacher educators.

Discussion and Conclusion

Considering the faculty member's comment as a critical incident gave Cristina, Anthony, Bobby, and me a chance to examine the subtleties and intricacies of our relationship with the faculty member in particular and the project faculty in general. This process of critique enabled us to explore the complexities of our relationships, and to

examine, as we did in the critical incident with Elizabeth, how central the exercise of power was to our tech guide experience. Examining the social and organizational structures that supported and sustained the various power dynamics revealed how various faculty members constructed and negotiated their relationships with us. Moreover, this investigation illuminated both the possibilities and the limitations associated with our positionality as graduate students.

There are unwritten rules in any department, college, or university that graduate students need to learn in order to successfully navigate the challenges of their graduate programs. Typically, other graduate students, faculty and administrators, and at times common sense, help new graduate students learn these various rules and protocols. In our position as tech guides Cristina, Lisa, Anthony, Bobby, and I were engaging in a new practice within our institution: graduate students as technology mentors. So in a sense we were learning the unwritten rules that any new graduate student would be expected to learn when entering academia while, at the same time, exploring uncharted territory as technology mentors to faculty. Through this exploration, we were at times caught in our own web of technology professional development; the critical incidents under discussion in this dissertation offer two examples.

Does the hierarchal system of higher education allow for mentoring of faculty by graduate students? As I highlighted in chapter 1, several other universities participating in the Preparing Tomorrow's Teachers to Use Technology (PT3) initiative utilized graduate students as technology mentors to college of education faculty (Koehler, Mishra, Hershey & Peruski, 2004; Leh, 2005; Otero et al., 2005). At the time of Project Tech Quest, the climate and culture of our institution did not seem to foster or promote a culture of

collaboration among faculty or between faculty and graduate students. This may have also impacted our abilities to be in relation with faculty members.

Authority and positionality are two often-interlocking issues in relation to classroom power dynamics (Johnson-Bailey & Cervero, 1998). As we have seen, they also applied to the context of our work as tech guides. Each of us, save for Anthony, experienced situations where faculty members used the authority of their position to remind us of, and subsequently reinforce, our place in the hierarchical structure of the academy. At times this was done through language, i.e., word choice, as illustrated in this critical incident. Other times, this was done nonverbally, simply by not showing up for an agreed upon meeting and after missing it never acknowledging it.

None of us ever spoke to Lisa about the faculty member's visit or her comment. Our silence may have been due to our personal and professional relationships with Lisa, or perhaps we thought too that it would do little good given Lisa's relationship with the faculty member. There seemed to be limited space for Lisa, or any of us, to "open the door" once the faculty member slammed it shut with her comment.

Cristina's notions that "it depends on the other" and being rendered visible are important considerations for our work, as are Dr. Borg's notion of faculty letting "their guard down," and Bobby's notion of entering into the relationship with an attitude of respect for the other. Taken together these notions illustrate the complexities and the challenges inherent in our work with faculty, but perhaps more importantly these notions embody the potential for relational practice across institutional hierarchy.

When we look at our work with individual faculty and across the range our experiences, we see moments of rich and significant mutuality and growth in relationship.

But we also see boundaries and institutional structures that preclude such possibilities; our positioning as graduate students, Dr. Borg's role and positioning as the faculty development director and faculty members' positioning shaped what was possible.

In the next and final chapter, I will explore the significance of the dissertation research. What might we learn from this exploration of Cristina's, Anthony's, Bobby's, and my experiences, our relational practices, and our interactions with project administrators and faculty? In the next chapter, I will also offer possibilities for future research related to mutuality across hierarchy and power lines, and learning experiences that focus on relational versus individualistic learning.

Chapter VII: FINDINGS, IMPLICATIONS AND RECOMMENDATIONS

Life can only be understood backwards, but it must be lived forwards.

—Kierkegaard

As Kierkegaard's words remind us, life, and thus experiences, can only be understood backwards and through reflection. In this dissertation study, I invited Cristina, Anthony, and Bobby to join me in reflecting on our collaborative and shared experiences with Project Tech Quest, and to consider how our various interactions impacted our development. Engaging in a co-construction of meaning making of our experiences as tech guides enabled the four of us to come to understand the significance of our environment, the conditions that supported and facilitated our collaborative endeavors, the factors that enabled and also impeded our successes, and how these experiences, which ran parallel to our formal doctoral course work, enhanced our overall graduate school experience and helped shape our personal and professional identities.

The systematic analysis of the two critical incidents—*Elizabeth's Announcement* and *A Faculty Member's Comment*—revealed both the nuances and complexities of our relationships working with Project Tech Quest administrators, teacher education faculty and each other. At first glance, the two incidents may seem less than positive or minimally transformative; however, taken together the incidents illuminate how aspects of mutuality, positionality, identity and power were ever present and inherent in our work as tech guides and central to our experience as graduate students. In this sense, then, the incidents were transformative as they have shaped and informed the choices I make and

the possibilities I consider in my current work as a faculty member. I describe these processes more fully in the Epilogue, which follows this chapter.

I begin this chapter by offering a synthesis of the study's findings in relationship to the two research questions: how do graduate students involved in a technology professional development project make meaning of their collaborative and shared experiences, and how did the graduate students' interactions impact their personal and professional development? I then detail the contributions and implications of the research by focusing on aspects of relational cultural theory and mutuality in conjunction with graduate education. I also discuss possibilities surrounding the use of critical incidents and the implications this approach holds for qualitative researchers. I conclude the chapter by offering several recommendations for future research related to teaching and learning in general and graduate education in particular.

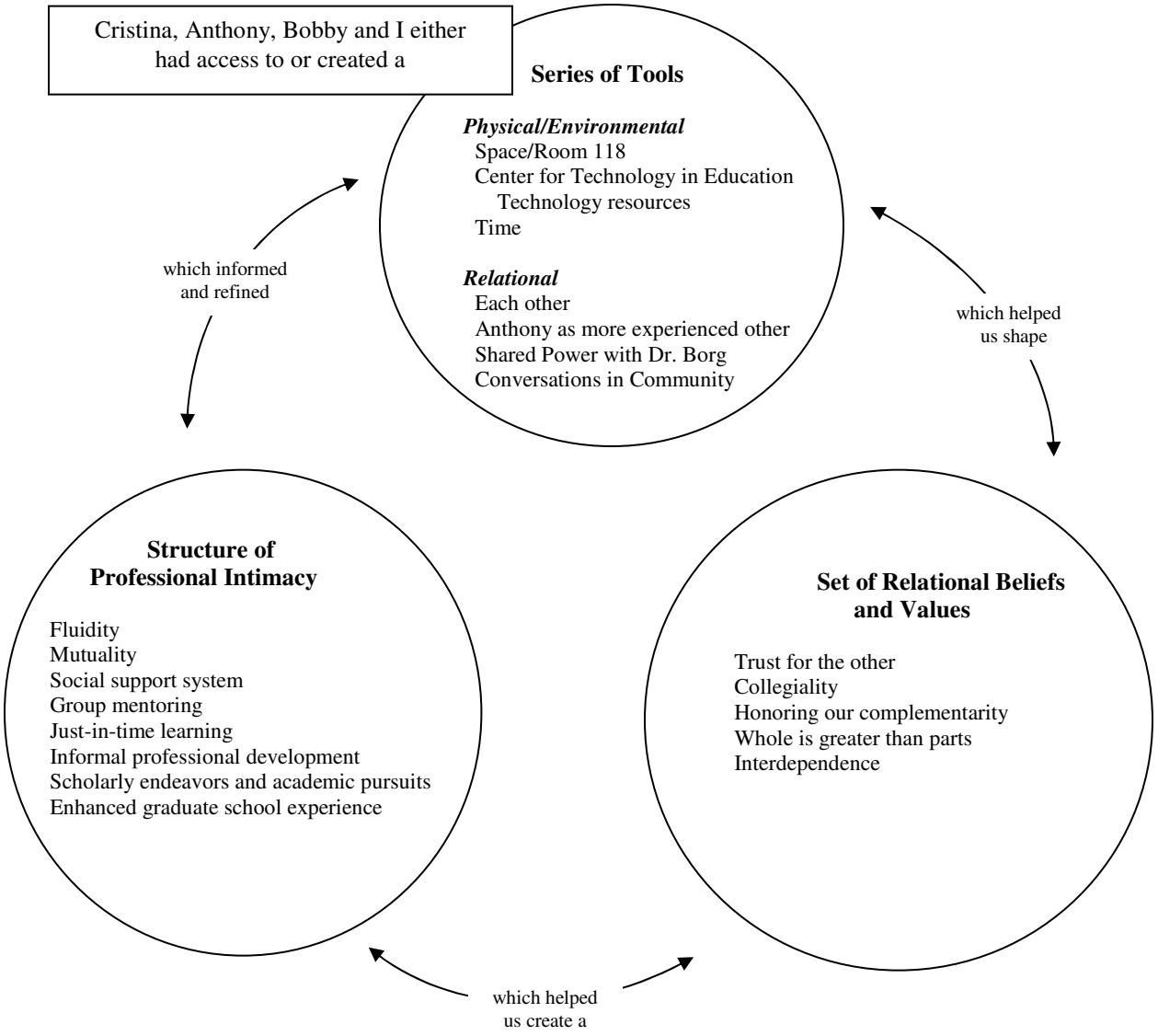
Making Meaning of Our Collaborative Experiences

Relational Practices

Cristina, Anthony, Bobby, and my examination of our collaborative interactions and experiences captures some of the intricacies of our interpersonal relationships and reveals how our relational practices (Fletcher, 2001) were comprised of a series of ***physical/environmental and relational tools***, which helped us shape our ***relational beliefs and values*** and create and maintain a level of ***professional intimacy*** that enabled us to negotiate issues of power, identity and mutuality throughout the life of Project Tech Quest (see Figure 7.1).

Figure: 7.1

The Nature of Cristina, Anthony, Bobby, and Don's Relational Practices



The ***physical/environmental tools***—our tech guide office in the Center for Technology in Education coupled with the element of time and other resources—laid a foundation for our interactions and provided an impetus for action (Fuoss, 1998). As our work together progressed, we invented, reinvented and refined our application of several

relational tools—our use of dialogue, our interactions with Dr. Borg and each other, and our recognition of Anthony's expertise related to technology professional development and his knowledge as a more experienced, more advanced graduate student.

As tech guides, Cristina, Anthony, Bobby, and I often constructed meaning through a variety of social interactions and activities centered on shared problems and tasks—preparing a flyer, designing a Web page or an agenda, or presenting a faculty technology professional development workshop. Consistent across these various contexts were our conversations in community (Craig, 1995), which enabled the four of us to explore our tentative understandings, listen for possibilities, make suggestions, create new individual and shared knowledge, engage in joint problem-solving, debate alternatives and raise issues of concern. Our dialogic process was thoughtful, purposeful, managed and unhurried; taking or making time became an integral part of our creative and meaning making processes. Further, our sustained interactions and conversations provided a "continuity of reflection" (Craig, 1995) for our work, allowing us to deepen our understandings of technology integration and faculty professional development. Our ongoing dialogues also strengthened our understanding of issues and concepts related to our graduate courses—specific assignments, concepts related to qualitative research, data collection and analysis.

Throughout much of the project, our interactions with Dr. Borg, the faculty development coordinator, involved a shared power or "power with" (Miller & Fletcher, 1999; Woehrle, 1992) dynamic where she shared information, responsibilities, and the decision making process with us. She trusted and drew upon our individual and collective areas of expertise. Her initial stance as an active listener and ardent supporter gave us

credibility and validity, affirmed our efforts and strengthened our cohesiveness. There were times, however, when Dr. Borg embodied characteristics that were less than relational—sending the paper to Ireland without our knowledge, for example. These instances strained our relationship with her, and yet we never discussed our disappointment. In hindsight, these were missed opportunities on our part. If in fact, we had mutuality, what did we really have to lose by expressing our concern with her?

Our physical/environmental and relational tools helped the four of us craft and enact a ***series of relational beliefs and values*** that were grounded in trust and collegiality and enhanced by our complementarity. We valued what each other offered both socially and professionally—our work as teachers in various contexts as well as Cristina's approach to pedagogy, Anthony's understanding of technology professional development, Bobby's abilities and skills with trouble shooting and problem solving, and my aesthetic and graphic design skills. Within just a few weeks of coming together in the fall of 2000, Cristina, Anthony, Bobby and I became a close-knit group where our strengths and weakness were freely shared. We realized that we needed each other to be successful and began to conceptualize each other as a source of knowledge (Johnson-Bailey & Cervero, 1998), as a resource, as a tool. Enacting our unspoken, yet shared, values contributed to our synergy and energized and invigorated the four of us. It was this dynamic that enabled us to move forward in ways that were genuinely and mutually supportive for each of us.

Cristina, Anthony, Bobby, and I recognized the ways in which the diversity of our backgrounds, experiences, and modes of thinking strengthened and sustained our daily interactions, but we also knew that our whole was greater than the sum of our individual

parts. We understood that whatever we did was not because of us as individuals, but because of us as a group (Josselson, 1992); our pluralistic ways of thinking about our work together created an overlap between the individual and the group (Agnew et al., 1998). In Bobby's words, "it was always 'we' it was never 'I'….we did this, always working together, everything we did" (FG Interview, 10/31/02, p. 28). Anthony echoed Bobby's notion of "we" when relating how he describes his tech guide experiences to his current colleagues, "Even the way I talk about it now, it is still a 'we' thing, it is not a 'me' thing even here" (FG Interview, 10/31/02, p. 30). The use of the pronoun "we" is significant as it signifies, or names, our collective efforts and achievements as relational (Fletcher, 2001).

Moreover, we embodied principles of what Minnis and her colleagues (1994) describe as a true collaboration, where there exists "a commitment to shared resources, power, and talent: no individual's point of view dominates, authority for decisions and actions reside in the group, and work products reflect a blending of all participants' contributions" (p. C-2). We developed a shared sense of ownership and became, in Anthony's words, "almost like protective parents of the project" (FG Interview, 10/31/02, p. 44).

Cristina, Anthony, Bobby, and my physical/environmental and relational tools and our beliefs and values combined to create a structure of ***professional intimacy*** (Fitzgerald, et al., 2002) through which we could nurture a social support system, develop our identities, pursue scholarly and academic endeavors, and construct new knowledge and skills. We engaged in a reciprocal process of learning from and with one another. Our relationships, practices and processes were dynamic, recursive, yet fluid, a trait

Bobby indentified as “key” (FG Interview, 10/31/02, p. 23) to our success. Recognizing and honoring our complementarity enabled the four of us to create various configurations and combinations in order to accomplish different tasks.

Each of us found similar yet different ways to describe our collaborative interactions. Anthony, always the science teacher, characterized our relationships as “an ever changing amoeba that looked different on different days and different several times during a day” (Interview, 04/29/02, p. 3). Cristina believed that our complementarity yielded an interaction, or way of being, that was “like a couple” (FG Interview, 10/31/02, p. 24). Bobby saw the four of us as “a good group of people who brought unique strengths and weaknesses,” which combined to “really fit” (FG Interview, 10/31/02, p. 23). For me, our configuring and reconfiguring of individuals and relationships and our evolving interactions had a strong improvisational quality. Similar to the ways in which jazz musicians or improv actors work, Cristina, Anthony, Bobby, and I began each new endeavor with a direction, but we did not necessarily know where we were going to end up or even the process we were going to use to get there. We trusted and drew upon our intuition and our abilities to be in the moment, to negotiate and be responsive to the stimulus in our environment; at times taking risks to accomplish a task. Yet there was a relaxed intensity about our work together that required little extra effort by any of us (Schrage, 1995).

Looking back at our collaborative processes and experiences illuminates how we developed and sustained our relational practices, and reveals how, to use Cristina’s words, “in some ways we fit” (FG Interview, 10/31/02, p. 4). Before addressing the second research question, I turn next to aspects of the two critical incidents and revisit

Cristina's, Anthony's, Bobby's, and my understandings and perceptions of our shared experiences with Project Tech Quest administrators and faculty members paying particular attention to notions of power and identity.

Making Meaning of Our Shared Experiences

Tripp (1993) reminds us that in order to render an incident critical we have to say what the incident meant. Rendering Elizabeth's announcement and a faculty member's comment critical enable Cristina, Anthony, Bobby, and me to make visible notions of whose interests were served or denied and the conditions that sustained each action. We were also able to consider the power relationships that were being expressed in each incident and the structural and organizational factors that may have prevented participants from engaging in alternative ways. Reexamining our positions and critiquing and questioning the existing relationships and the various connections to the social structures from which they emerged (Apple, 1975) enabled the four of us to contemplate and come to know aspects of our relationships both with each other and those with whom we worked that had previously been overlooked, underappreciated or minimally scrutinized.

Our focused conversations surrounding Elizabeth, the project coordinator, and her decision and announcement to have a master technology teacher lead the iMovie professional development workshop permitted Cristina, Anthony, Bobby, and me to more fully understand our relationship with Elizabeth, her entrance into the project, the ripple effects created from her arrival, her leadership style and her regard for our work. Rendering the announcement critical gave us the chance to consider and reflect on

occasions when we did not fit with each other, and within the larger context of the project, and the tensions that resulted from this lack of fit.

Our focused conversations surrounding a faculty member's comment about her tech guide enabled the four of us to examine the subtleties and intricacies of our relationship with the faculty member in particular and the project faculty in general. Critiquing the faculty member's comment enabled Cristina, Anthony, Bobby, and me to come to understand the asymmetry of power (Tripp, 1993) inherent in our relationship with the teacher education faculty and recognize how we, as graduate students, were positioned by the organizational structure of institutions of higher education.

Negotiating Power and Identity

Taken together, the two renderings reveal both the intricacies and boundaries associated with Cristina's, Anthony's, Bobby's, and my positionalities, and to some degree our vulnerability, as graduate students working within a grant-funded technology professional development project. Moreover, the renderings demonstrate how aspects of power and identity were inextricably linked within the context of our work. Gee's (2001) notions of I-Identity or a person's position, and the claim that a person does not have an identity until someone else validates that identity, coupled with Miller & Fletcher's (1999) notion of "power over" offer insights into the various dynamics that were present in our interactions with project administrators and faculty members.

Elizabeth's Announcement. As tech guides, Cristina, Lisa, Anthony, Bobby, and I were engaging in a new practice within our institution—graduate students as technology mentors to faculty members. Throughout the life of the project, we were

striving to be seen by the project's administrators and the teacher education faculty with whom we worked as knowledgeable, supportive and capable in our efforts to enhance the faculty members' abilities to effectively integrate technology. But as Cristina highlighted, "it depends on the other," and it was the project administrators and faculty members who had the ability to see us as a resource and support for them in their efforts to integrate technology. As a result, our attempts to be viewed as a certain kind of people (Gee, 2001) involved negotiation, flexibility and at times, conflict.

And while our work as tech guides/project assistants may have placed us at a level slightly more elevated than graduate students not in such positions (Park, 2004), within the hierarchal chain of Project Tech Quest, we ranked at the bottom; a status of which we were aware, but one that was confirmed shortly after Elizabeth's arrival and her announcement.

In constructing her role and establishing her identity as project coordinator, Elizabeth was negotiating several contexts simultaneously: the policies and procedures of the university; the guidelines, objectives and requirements of Project Tech Quest; and the culture that Lisa, Cristina, Anthony, Bobby, and I had created with each other, Dr. Borg and the faculty. In her quest to be seen as "a certain kind of person" (Gee, 2001), we perceived that Elizabeth was attempting to gain acceptance while at the same time establish authority.

Further, Elizabeth's position as project coordinator afforded access to informal and formal power—resources, authority and privilege in the dominant group. And it was her membership in the dominant group that may have led Elizabeth to make her announcement, which was less about communicating, more about issuing a communiqué

(Freire, 2000). There was no conversation, no shared decision making, and no power with. The top-down, one-way directive that a master teacher would lead the workshop left Cristina, Anthony, Bobby, and me feeling disenfranchised, if not slightly resentful; yet clear, as to our limited options for relationships within the project's organizational structure.

Rendering Elizabeth's announcement critical, then, enabled Cristina, Anthony, Bobby, and me to examine the clash between creative, authentic growth-producing work relationships and the constraints of the middle management business model, and recognize that Elizabeth's methodology embodied elements of what Perkins (2003) terms answer-centered leadership where the "leader" declares what is to be done and why. Further, the critique enabled us to understand how a narrow, singular focus on "getting the match" in order to complete a grant requirement took precedence over human interactions or relational factors.

The rendering of Elizabeth's announcement also revealed what happens when mutuality meets institutional hierarchy and how "power over" (Miller, 2003; Miller & Fletcher, 1999) tactics can invite, or incite, acts of resistance on the part of subordinates. At times, Cristina, Anthony, Bobby, and I chose to passively and actively resist Elizabeth's authoritarianism and her attempts at micromanagement. We engaged in individual and collective restive acts depending on the situation and our positionalities.

A Faculty Member's Comment. Over the life of Project Tech Quest, Cristina, Lisa, Anthony, Bobby, and I each developed close working relationships with individual faculty members. Nonetheless, our interaction with faculty was an ongoing topic of conversation during our weekly tech guide meetings.

Many faculty members were able to lower their guard and say "I don't know. I need help." However, the vulnerability associated with this phrase and the actual act itself may have been beyond the scope of some. Here, too, Gee's (2001) notion of being recognized as a certain "kind of person" is helpful when considering what may have influenced the ways in which some faculty members were able to perceive us, and what we had to offer in terms of technology support and knowledge.

Romper and Whipple's (1991) notion of "power line" is also instructive when considering the nature of our interactions with project faculty. As Anthony acknowledged, "We would never confront them. We always managed. We always stayed a step under them. We put ourselves in that powerless position or relationship and they would enforce that sometimes" (FG Interview, 05/28/04, pp. 16-17). Dr. Borg's admission of the "faculty card" or "the power thing" during a roundtable discussion marked a rare public acknowledgement of faculty power and the inherent balance, i.e., the potential for power-over practices in the tech guide/faculty partnership.

Throughout our work with faculty, Cristina, Anthony, Bobby, and I were reluctant to "call" faculty for missing scheduled meetings or their limited participation in project activities for fear of jeopardizing our long-term relationships with them and our status as graduate students with the college of education because, as Hinchey and Kimmel (2000) recognize, "graduate students are directly affected by the behavior of faculty, staff, and administrators" (p. 47). Cristina, Lisa, Bobby, and I knew that our commitments to our doctoral course work, dissertations, and teaching responsibilities within the college would continue well beyond the conclusion of Project Tech Quest. In short, we had more at

stake than just our current job as tech guides; confronting or crossing the "power line" could have had lasting, potentially negative, consequences.

Rendering the faculty member's comment critical, then, permitted Cristina, Anthony, Bobby, and me to understand more clearly how the interlocking issues of authority and positionality (Johnson-Bailey & Cervero, 1998) were ever present in our interactions with faculty and the limitations created by this interconnectivity. Institutional hierarchies, by design, create a system of power (Fletcher, 2001). Within institutions of higher education, the identity of faculty member assures membership in the dominant group and brings with it aspects of power, privilege, prestige and status within the institution. Within the context of the critical incident, the faculty member's identity enabled her to use language as an instrument of power (Mumby, 1998) to exhibit and reinforce her authority, attempt to intimidate and silence, and to cue Cristina, Anthony, Bobby and me of her expectations and our place in the subordinate group.

Rendering the faculty member's comment critical also offered an opportunity for the four of us to consider how teacher education faculty are positioned within the context of technology professional development. Initiatives such as Project Tech Quest, while voluntary, are often imposed on faculty as necessary for the teaching profession. The results can be problematic when faculty members are not, for various reasons, fully invested in the process. Faculty members may wish to improve their technology integration skills, however, a lack of trust in their ability or an overall "nervousness about tech integration," as Bobby theorized (FG Interview, 05/28/04, p. 15), may prohibit them from completely committing to the process. As Anthony recalled, the faculty member who made the comment was "one of several who just disappeared" (FG Interview,

05/28/04, p.15). The faculty member's discomfort with and vulnerability toward technology may have led to her diminished participation in grant related activities. Further, her public comment about her tech guide might be interpreted as a critique of technology in general and the work of the project in particular.

The rendering also enabled Cristina, Anthony, Bobby, and me to consider how some faculty members, who have grown to feel oppressed, even abused, desire to abuse back (Fish, 1994). According to Fish (1994), a cycle of abuse underlies much of academic life from tenure decisions to rites of academic passage to interactions with students. A practice of abuse, which mirrors power-over practices, limits reciprocity and "obstructs growth and constructive change" (Miller, 2003, p. 5).

In sum, rendering the two incidents critical offered Cristina, Anthony, Bobby and me the opportunity to make meaning of our shared experiences with project administrators and teacher education faculty. Both critical incidents center on human interactions within contexts of higher education and are informative in regard to institutional hierarchy and the potentially beneficial and yet tenuous positions graduate students encounter when interacting with faculty in contexts outside the classroom. The renderings also reveal how positionality can simultaneously create opportunities and limit possibilities. That is to say, while our relational beliefs and practices enabled us to develop collectively and individually, our tentativeness, and ultimately our inability to confront issues of power, kept us "in check" and narrowed our potential.

I next turn to summarize the findings related to the second research question.

Impacting Our Personal and Professional Development

As Wenger (1999) posits, "because learning transforms who we are and what we can do, it is an experience of identity. It is not just an accumulation of skills and information, but a process of becoming" (p. 215). Throughout the life of Project Tech Quest, Cristina, Anthony, Bobby and I were in the process of crafting identities and becoming teacher educators. Our professional intimacy, rooted in connection (Fletcher, 2001), created a structure and support for our interactions and development as people and academics.

Growth-fostering interactions, according to Fletcher (2001), are characterized by mutual empathy and mutual empowerment, where participants "recognize vulnerability as part of the human condition, approach the interaction expecting to grow from it and feel a responsibility to contribute to the growth of the other" (p. 31). Individually, Cristina, Anthony, Bobby, and I were competent, knowledgeable, creative and motivated; collectively, our energies combined to create a power of the group, which, in turn, provided a power within (Tisdell, 2001) attitude where we could gain mastery of skills, push ourselves to explore ideas and pursue other possibilities related to our development as teacher educators. The four of us, as Cristina highlighted, pushed "ourselves in the sense of not doing things because we had to, or someone was telling us to, but because we were convinced that we were really doing it in a way that it was supposed to be done" (FG Interview, 10/31/02, p. 29).

Our motivation and inclination led us to create a place of mentoring (Shank, 2002) where we engaged in informal professional development and just-in-time learning.

Our relational practices, with each other and several faculty members with whom we worked, included aspects of interdependence, observational learning and peer mentoring, and enabled Cristina, Anthony, Bobby, and me to expand our knowledge of technology, technology integration and technology professional development.

Our relational practices also generated numerous collateral possibilities related to our development as teachers and future educators. For example, Cristina, Anthony, Bobby, and I participated in numerous formal teaching experiences within the College of Education either individually, as instructors of the stand-alone technology integration course, or collectively, as technology instructors for the university's Bilingual Summer Institute and the undergraduate introductory technology course.

Cristina recognized how our relational practices and our work with the project provided multiple serendipitous benefits for her development. In her words,

> we were learning different things as we were going about technology—how to deal with the institution, how to deal with the faculty, how to deal with power, how to create collaboration….Being in a group allowed me to better understand what was supposed to happen in my Ph.D. work and opened a lot of possibilities. (FG Interview, 10/31/02, p. 42)

These additional activities within different contexts and environments—both formal and informal—generated new opportunities for shared understandings (Schrage, 1995) and were deeply stimulating and satisfying both personally and professionally.

A Parallel Curriculum

Dr. Borg viewed Cristina's, Lisa's, Anthony's, Bobby's, and my work with Project Tech Quest as an opportunity for us to not only broaden our skills with technology but also a chance to develop as academicians. She hoped that our work with individual faculty would help each of us gain an "insider's view of what it was like to be a faculty person" (Interview, 03/27/03, p. 4) and inform our decisions about pursuing work in the academy.

Our day-to-day interactions with project faculty and administrators did offer multiple opportunities for a behind-the-scenes look at life in the academy. For example, my interactions with faculty gave me a first-hand look into what several early childhood teachers educators do, the challenges they face, the commitment and investment of time and energy necessary to engage in ongoing professional development, and perhaps most importantly, the limited "payoff" participation in such activities hold in decisions related to tenure and promotion.

Access to this parallel curriculum provided Cristina, Anthony, Bobby and me with what Richardson (2006) refers to as "practical knowledge" of the discipline, which involves acquiring knowledge related to teaching, engaging in research-related activities and operating as an academic within a department or college. Cristina, Anthony, Bobby, and I valued our positive interactions and relationships with faculty as they gave us an intimate look into the responsibilities, expectations and demands of life in the academy, which in turn added another dimension to our work with the project.

A third aspect of the parallel curriculum centered on the lessons we learned through our less than positive experiences with project faculty and administrators. These

instances—limited communication and participation or interactions—provided, to use Bobby's words, "negative examples" of how not to behave or what not to do when we became faculty members.

In Relation Both Personally and Professionally

Graduate school can be, according to Benton (2003), "characterized by intellectual confusion, a lack of social support, and intense feelings of powerlessness and even worthlessness" (p. 2). Many graduate students experience structural isolation (Golde, 2005), which can lead some to leave school prior to completing their degrees. Bobby recognized that our interactions and relational practices offered both collegiality and a sense of community. In his words, "I honestly don't think I would have stayed in this program if I hadn't been involved with the project" (FG Interview, 10/31/02, p. 32). For him, our work together countered the isolation and uncertainty that many of the graduate students in Nyquist et al.'s (1999) study experienced. In addition to providing the emotional support of friendship, our interactions formed a type of interpersonal scaffolding, which augmented and facilitated Bobby's abilities to complete his graduate course work.

Anthony, as a more experienced other, was proactive and deliberate in illuminating and articulating his process of the graduate school experience—sharing strategies on how to survive the institutional culture of the university, or offering advice on coursework or professors. His informal peer mentoring served as a valuable model for Cristina, Anthony and me. Witnessing Anthony's process and progress provided us with the opportunity to engage in a form of observational learning (Mullen, 2006) where we

transformed our passive observations of him into active engagement by informing our choice making and future practices related to our own graduate work.

Anthony also benefited from our interactions. For him, our work together was "a mutually beneficial relationship, almost simultaneously and mutually beneficial" (FG Interview, 10/31/02, p. 24), and it was "about being a person" (FG Interview, 10/31/02, p. 24). Further, Anthony recognized the significant and lasting impact our work together had on his professional develop when he stated, "I don't think I would be where I am today if I hadn't spent this time working with the other tech guides" (Interview, 09/02/02, p. 5).

As a female, international graduate student, Cristina negotiated the context of Project Tech Quest in ways different from that of Anthony, Bobby, and me. She believed that her background and experiences with education in Argentina, while extensive and valuable, may have impacted how she positioned herself in relationship to some faculty members and in turn how they perceived her as effective. Her experiences mirror those of Chuang (2007), an international graduate student at Iowa State University who, like Cristina, was mentoring education professors on the integration of technology. Chuang experienced a similar need to overcome her "culturally ingrained anxiety about not being a perfectly knowledgeable experienced technology mentor" (p. 59).

Cristina also acknowledged that as an international student she did not consider pushing back or resisting when dealing with Elizabeth and the paperwork of the project. Cristina's priority was to get a Ph.D. and the project provided an opportunity to support that endeavor; doing anything that might jeopardize the situation was not an option.

Implications of the Study

The majority of researchers investigating the graduate student experience tend to be professors or individuals from higher education associations or government agencies (Austin, 2002; Golde, 2000; Kerlin, 1995; Levin, 2006; Smith, 2000; Tinto, 1993; Weidman & Stein, 2003) while studies conducted by graduate students researching their own educational experiences (Nason, 1997) remain in the minority. This dissertation study offers the perspectives of four graduate students and reveals some of the complex dimensions and nuances of our collaborative and shared experiences as part of a faculty technology professional development initiative and answers the call from researchers such as Scott Kerlin (1995), Bobbi Kerlin (1995) and others (Tinto, 1993) who have argued for more studies of how graduate students themselves perceive their experiences.

This study offered Cristina, Anthony, Bobby, and me an opportunity to consider, deliberate, speculate and take into account the multiple factors present in our experiences as tech guides and as graduate students, and, is without doubt, our perceptions of our experiences. As Tierney (1987) and others have noted, perception is not necessarily reality; perception is not necessarily the truth. Cristina's, Anthony's, Bobby's, and my perceptions may not match the perceptions of other participants involved in Project Tech Quest. Partial nonetheless, our perceptions are valid and worthy of recognition because as Tierney argues, "participants' perceptions of problems, solutions, the environment…go a long way toward determining the health of an organization" (p. 71). It is in this spirit that I offer several implications that may fortify the experiences of future graduate students.

Expanding Possibilities Within Graduate Education

Relational Practices. The findings confirm, expand, and extend the work that Miller and her colleagues at the Stone Center have done with relational cultural theory (Jordan, Kaplan, Miller, Stiver & Surrey, 1991). Specifically, the findings reveal the value of relational practices within the context of higher education. The findings indicated that it is beneficial for graduate students to engage in sustained relational processes and reach levels of professional intimacy with each other as it enhances their educational experiences and informs their future work as academics. Through our work with Project Tech Quest, Cristina, Anthony, Bobby, and I created a relational space (Josselson, 1992) for ourselves; a space that sustained Bobby's tenure in graduate school; a space where each of us grew personally and professionally, individually and collectively. The findings also indicated that it can be beneficial for graduate students to engage in relational practices with faculty as it provides faculty with the support to consider alternative teaching practices and provides graduate students with "practical knowledge" (Richardson, 2006) of the profession and access to a parallel curriculum of graduate school.

Collaboration. John-Steiner (2000) observed that while the idea of the solitary thinker may still appeal to "those molded by the Western belief in individualism" (p. 3), there is a different reality in place: one where "generative ideas emerge from joint thinking, from significant conversations and from sustained shared struggles to achieve new insights by partners in thought" (p. 3). The collaborative and relational experiences of graduate students have been minimally investigated.

Recently, Sanders (2008) noted that "graduate students seem inherently unwilling to accept that others could be as good as they are" (p. C3). This recognition came after Sanders witnessed his students' failed attempt at collaboration, and led him to conclude, "success in academe is based on achievement disparity; hence it feels better to see others fail rather than to build them up to share one's success" (p. C3). This study's findings revealed how graduate students can come together to form a knowledge community where relationships are fostered, interpersonal communication is strengthened and personal and professional knowledge is expanded. The findings indicated that when graduate students have opportunities to work collaboratively and collectively, a sense of community develops and is fortified, competition is nonexistent and collegial relations endure throughout students' doctoral programs (Lesko, Simmons, Quarshie & Newton, 2008). Creating environments where graduate students have opportunities to develop interpersonal connections, cognitive interdependence and shared reflection yields a co-construction of knowledge. Fostering such opportunities holds rich potential for individual and collective growth.

Mentoring. As this study confirmed, creating situations and opportunities where graduate students who are further along in their studies can be a helpful and supportive resource for neophyte graduate students (Boyle & Boice, 1998). Establishing environments where more advanced graduate students can engage in sustained relationships can be mutually beneficial for all participants. The more advanced graduate student benefits through sharing his or her knowledge and expertise related to course work, professors, the politics of the department, and the day-to-day logistics of graduate school. The less advanced graduate student benefits from an interpersonal relationship

while learning some of the invaluable aspects of the informal curriculum of graduate school. Creating both formal and informal opportunities where more advanced graduate students can share personal and professional knowledge contributes to the development of less advanced students.

Critical Incidents

Additionally, this study offers implications for qualitative research by providing an example of practitioner research that utilizes critical incidents and builds on the work of Tripp (1993) and others (Angelides, 2001; Smyth, 1991). The four probing questions provided Cristina, Anthony, Bobby, and me with a point of departure and a framework through which to critically explore, describe and analyze the complexities, multiple layers, and underlying structures present in our practices, interactions and experiences. As a researcher, I found that this approach provided an effective method through which to engage participants in a critical exploration of their lived experiences. In addition, this approach provided me, and in turn, the participants, with a bit of distance from which to view our experiences.

Nelson (2001) believes counterstories offer members of subordinate groups with the opportunity to challenge the master narratives. The use of critical incidents in this study enabled Cristina, Anthony, Bobby and me to understand more fully our graduate school experiences and present a series of stories that run counter some of the master narratives of higher education.

Recommendations for Future Research

If the goal, as Anderson, Herr and Nihlen (1994/2007) suggest, is for "educational research to produce knowledge about educational practice that will bring about improvements in practice" (p. 178), then, based on the findings and implications from the exploration of Cristina', Anthony's, Bobby's, and my collaborative and shared experiences as tech guides, I can offer five recommendations for future research centered on improving practices in multiple educational contexts.

Mutuality Across Hierarchical Structures

Wartenburg (1992) reminds us of the situated power present in contexts of higher education. Similarly, Tisdell (2001) highlights how aspects of power and privilege work in classrooms, how the positionality of instructors and students affects the ways classroom dynamics unfold, and how the effect of positionality impacts students' abilities to construct knowledge in higher education settings. This study reveals that there is the potential for mutuality across hierarchical structures when individuals share a common interest, purpose or goal. A recommendation, then, is for research in contexts of higher education that moves beyond positionality to explore mutuality across hierarchies.

Relational Practices

As the study's findings indicate, cultivating or fostering the conditions of growth-in-connection—interdependence, connection, collectivity—among graduate students is advantageous to both students and faculty. I believe that expanding and exploring notions of growth-in-connection and relational cultural theory in a variety of educational settings

holds rich possibilities. A second recommendation, then, is for researchers to explore how relational practices can be fostered among graduate students as well as between teachers and students at all levels of education.

Collaborative Practices of Graduate Students

Through our collaborative practices, Cristiana, Anthony, Bobby, and I developed and maintained a non competitive community where we expanded our personal and professional knowledge collectivity and individually. A third recommendation is for continued research related to graduate students in collaboration, factors that contribute to the students' successful endeavors as well as factors that prohibit such practices from becoming reality.

The Lived Experience of Graduate Students

As this study's findings demonstrate, Cristina's, Anthony's, Bobby's, and my experiences as tech guides enable access to a parallel curriculum of graduate school. As Golde (2005) highlights, the *intended* culture and structure of graduate school may not be what students *actually* experience. Cristina negotiated and experienced situations differently than Anthony, Bobby and me. The gendered experiences of graduate students, specifically, how women and international students negotiate the doctoral environment while in relationship with non-international peers holds continued research potential (González, 2007). Also worthy of further exploration is the privileges some graduate students, i.e., white males, experience in relationship to their non-male, non-white peers.

A fourth recommendation, then, is for researchers to continue to examine the gendered and lived experience of graduate students in a variety of contexts.

Critical Incidents

This study highlights the effective use of critical incidents to reveal the complexities of human interactions. Cristina and I continue to analyze our use of this approach and recently highlighted several implications of the use of critical incidents in a conference paper (see Musanti & Halquist, 2008). Specifically, we suggest that the use of critical incidents offers opportunities to reach for depth and meaning; provide turning points for knowing; create spaces to uncover practices, positionality and perspectives; and reveal layers of meaning and multiple truths. A fifth, and final, recommendation centers on a call for continued exploration of the use of critical incidents in concert with other forms of qualitative research.

In Conclusion

This study revealed how over the course of our two and one half years together, Cristina, Anthony, Bobby, and I came to understand our place within the larger organizational context of Project Tech Quest—where we did and did not "fit," and what our roles could be given our own expectations and the expectations of the various people with whom we worked and the larger structure of the project and our institution. Any one of these factors by themselves would have been instructive, but taken together, they provided a powerful framework through which we could navigate issues of power,

identity and mutuality, and learn and develop both personally and professionally. Perhaps Bobby captured it best when he said, “I can only hope to be a part of a similar experience some day” (Bobby, Personal Communication, 07/20/05).

Epilogue

In the introduction to this dissertation and again in chapter 4, I indicated that my work as a tech guide was transformative. My interactions with Cristina, Anthony, Bobby, Lisa, Dr. Borg, and the faculty with whom I worked enabled me to gain a deeper understanding of how to effectively conceptualize technology as a tool for teaching and learning.

In the fall of 2004, I became a visiting assistant professor of education and human development at The College of Brockport, State University of New York where I teach undergraduate and graduate courses primarily in emergent language and literacy, diversity in education, and research methods. While completing the data analysis and the final renderings of the two critical incidents for the dissertation study, I came to understand how my experience with Cristina, Anthony, and Bobby have also shaped and informed the ways in which I view opportunities for relational practices between myself and my colleagues, and among my students in my courses. In this sense, I have also transformed my understanding of what it means to collaborate and be in relationship with people—how I offer myself as a collaborator, how I recognize and value the strengths of my collaborator—and the possibilities I offer my students—how I use relational language and practices with students, and how I view the potential for learning in each class/course.

My work as a teacher educator is grounded in the belief that knowledge is socially constructed; as such, I create multiple ongoing experiences in which students engage in sustained learning activities, building knowledge together over time. Experiences such as book groups, mini and more expansive presentations, and problem-based learning

activities are common across my courses. Providing time within the class for students to engage in extended conversations and meaning making endeavors is another technique I use in my courses. This time provides opportunities for me to talk with individual groups and offer immediate feedback and support.

I use a variety of strategies to build individual relationships with students. For example, early in each semester, I ask students to complete a Personal Data Sheet, which includes the following statement.

> My philosophy of teaching and learning centers on building and maintaining relationships with and among students. I accomplish this by providing multiple contexts and ongoing opportunities for dialogue. Your responses to the following questions will provide helpful information for our work together this semester, and create a foundation upon which we can build our class community.
>
> What do you need to have your voice heard? What do you need from your peers to be successful? What do you need from yourself to be successful? What do you need from me to be successful?

In small groups, students share their thinking related to the four questions and then work together to create a web, which they share with the class. Through a whole group discussion, the students and I compile a "master web of needs." I transfer this information to an Inspiration document safe for the "what do you need from yourself…," which each student completes on his or her own. The brainstorming and web making activities usually take place during the second class of the semester. I try to keep the conversation light, fast paced, yet focused, while we are making the master web, often

joking that the list for "what do you need from me to be successful" is the longest. I view the web building and our conversations during this process as a time and space where we begin to establish our class community, where each of us begins to come to know one another. We revisit our web at least once during the semester to reflect on our current experiences in relation to what we noted initially.

Another way in which I build personal relationships with students is through a series of three letters—written at the beginning, middle and end of the semester. In each letter, I encourage students to engage in critical self reflection by responding to a series of guiding questions about their strengths and qualities, progress related to course content, and their growth as teachers. The students also complete a KWL chart with each letter where they record their insights and questions related to teaching. I respond in writing to each student's letter. I answer and pose questions and push students to deepen in their thinking regarding certain issues or concepts. Engaging in these written conversations is a time intensive process, but one that holds importance for my work with students.

Several undergraduate students, in their portfolio reflections on assessment, reported how valuable they found this form of self assessment and reflection. I find the letters offer a form of interpersonal interaction that is not possible in a large group setting. In some ways the letters offer a form of autonomy: a student may reveal her frustration, confusion or discovery more readily in a letter than she would in front of her peers or even in a one-on-one setting with her professor.

Empathetic teaching, according to Fletcher (2001), refers to

> a process in which the perceived needs of the learner are paramount. It is a way of teaching that takes the learner's intellectual or emotional reality

> into account and focuses on the other (what does s/he need to hear?) rather than on self (what would I like to say?) using collaborative language to impart information and minimize the status difference inherent in teacher-student interaction (p. 56).

I recognize that learning to be in relation and then valuing the act of being in relation holds potential for me and the students with whom I work, and in turn, the students with whom they will work. Hollingsworth and colleagues (1993) suggest that teacher educators become "vulnerable in relationship to their students," (p. 33) a process that would alter relations of domination and subordination, a process I value and embrace in each course I teach.

My experiences with and access to the parallel curriculum of graduate school influences the choices I offer students. As I continue my work as a teacher educator, I will attend to how I position students (both undergraduate and graduate), how they are positioned by the higher education system, how my colleagues position them, and how students position themselves. What lessons are students learning from the informal curriculum? How might I see these lessons more clearly? How might I help them see the lessons more clearly?

At Brockport, I am surrounded by colleagues who share common values and beliefs about what it means to prepare teachers for the realities of education in the twenty-first century. I feel fortunate to have a close working relationship with one colleague—Sue Novinger—in particular. Initially, we co-taught the early childhood method courses, but after two years the program was dissolved due to the reallocation of resources. We have since formed a writing group, presented at several conferences and

co-authored a book chapter. I deeply value our sustained collaborative endeavors and the level of professional intimacy Sue and I have achieved; although different from that that I had with Cristina, Anthony, and Bobby, it is stimulating and satisfying nonetheless.

As I highlighted previously, Cristina and I continue our collaborative efforts, most recently, presenting a co-authored paper at this year's American Educational Research Association (AERA) annual meeting. We were invited to submit the paper for inclusion in a themed issue of *The International Journal of Qualitative Research in Education* and are currently crafting the final version of the article.

Since going the Brockport faculty, I have had numerous opportunities to serve of department committees in the roles of committee member and chair. In my interactions with colleagues, I am purposeful, direct and supportive in how I use of language when initiating tasks, offering feedback and suggestions, or recognizing faculty members' contributions or accomplishments.

This academic year, I am participating in a faculty learning community (FLC) centered on using research as a teaching and learning tool with students. The members of the FLC are faculty from a variety of disciplines—social work, counselor education, education and human development, physics as well as two librarians. During a recent meeting while we were refining our mission statement and goals for our work together, I introduced the phrase, "a network of support" to the mission statement as a way to name the notion of what it means to be in relation and as a way to "get it on the page." Fletcher (2001) suggests naming relational practices through language and intended outcomes as a way to cultivate relational practices. I look forward to finding ways to use language that invites and supports growth-producing relationships in my continued work in academia.

How I view the potential for mutuality in my relationships with students and with colleagues, both in my immediate department and those from across the campus has been shaped and impacted by my work as a tech guide and my interactions with Cristina, Anthony, and Bobby. I would not have come to these understandings with such clarity had the four of us not engaged in such an in depth exploration of our experiences.

Appendix A

Timeline of Data Collection

Event	Date	Participant(s)	Main Topic(s)
Focus Group Interviews	October 31, 2002	Cristina, Anthony, Bobby and Don	Anthony and Bobby's arrival to project Our interactions with Lisa, faculty, Dr. Borg and each other
	March 24, 2003	Cristina, Anthony, Bobby and Don	Elizabeth's Announcement
	May 28, 2004	Cristina, Anthony, Bobby and Don	Faculty Member's Comment
Individual Interviews	April 29, 2002 September 2, 2002	Anthony	Responsibilities as a tech guide Relationship with other tech guides
	March 27, 2003	Dr. Borg	Project in general, Tech guides' responsibilities, relationships with faculty and each other
Taped Conversations	March 6, 2002	Cristina	Faculty Member's Phone Call
	March 12, 2002	Anthony, Bobby and Don	Relationships with faculty
Personal Correspondence	June 27, 2003	Elizabeth	Job Description
	July 21, 2005	Bobby	Follow up questions, re: roles, strengths
	January 15, 2005	Cristina	Follow up questions, re: roles, strengths
	July 19, 2006	Dr. Borg	Follow up questions, re: our relationship with Elizabeth

Appendix B

Review of Tech Guide Meeting Tapes

Date	Participants	Issues Discussed
May 3, 2001	Dr. Borg, Sylvia, Elizabeth, Judith, Lisa (had to leave), Cristina, Anthony, Bobby and Don	Planning for May 4th wrap up faculty meeting Sylvia's first meeting Cancellation of spring sharing due to lack of communication of faculty Collection of faculty syllabi to see technology integration Summer work—begin to analyze data collected thus far
October 25, 2001	Dr. Borg, Sylvia, Elizabeth, Angela, Cristina, Anthony, Bobby and Don	*Brief discussion of faculty member's visit/comment—"I am not going to trash one of your colleagues…." Reading discussion—Dr. Borg and Bobby only participants Lack of time, brainstorming course release ideas for faculty Schedule of upcoming faculty workshops APS master technology teachers' release time and aligning with UNM faculty Prep for upcoming Exchange Visit, October 29th & 30th
November 8, 2001	Dr. Borg, Elizabeth, Judith, Lisa, Cristina, Anthony, Bobby and Don	Success of Poster Session, housekeeping for remainder of semester Fall interviews Lisa's faculty disappointed in not having master technology teacher's class video taped Refinement of Interview questions—conditions of work, software choices, address diversity of participants Writing group schedule
November 15, 2001	Dr. Borg, Sylvia, Elizabeth, Judith, Cristina, Lisa, Anthony, Bobby and Don	Fall syllabi Housekeeping for Dec. 6th Faculty Wrap Up Meeting Dec. 10th Final Tech Guide Meeting—debrief Wrap Up and Spring 2002 semester Mini grants for faculty Video editing software for XP—mostly Bobby and Sylvia Strategies to involve UNM faculty with master technology teachers (MTT's), trying to get faculty who have visited schools to share experiences with other faculty Motivational Strategies (puzzle pieces) to get faculty to come to Wrap Up meeting Information needed for Annual Report

* Used in rendering of *A Faculty Member's Comment* and/or discussion related to our work with faculty

Date	Participants	Issue Discussed
November 29, 2001	Dr. Borg, Elizabeth, Lisa, Cristina, Anthony, Bobby and Don	Advertisement for December 6th Faculty Wrap Up Meeting Housekeeping for Wrap Up Meeting Meeting time for Spring—Thurs., 11:15—Noon Possible use of resources—tech guides—after completion of grant Strategies for extending work of the grant, January meeting with Dean
January 17, 2002	Dr. Borg, Elizabeth, Judith, Lisa, Cristina, Anthony, Bobby and Don	Dean's meeting tomorrow Upcoming events—book discussions, February's software showcase Remind faculty of MTT Showcase on April 10 Gathering readings for last reading discussion Housekeeping regarding extending the work of the grant Faculty members' lack of participation—possible probing questions for interviews
January 24, 2002	Dr. Borg, Elizabeth, Lisa, Cristina, Anthony, Bobby and Don	Where do we go after yesterday's meeting with the Dean? Strategies for continued faculty support Work needed to be done for Software Showcase Staffing of Faculty Development Room/Tech Center Student Employees Anthony going to St. Louis for Exchange Visit Chris Dede visit April 24—ideas for agenda
January 31, 2002	Dr. Borg, Sylvia, Elizabeth, Cristina, Bobby and Don (absent: Lisa—Science Fair; Anthony—ill)	Handout and preparation for Software Showcase next week Shared Visions paper accepted at information technology INSITE conference in Cork, Ireland—Dr. Borg Scheduling of Master Technology Teachers (MTT) Showcase on Wednesday, April 10 Faculty stipend for participation/participation in general End of Year Reports, Annual Reports, faculty request form (max $250.00 per) Idea of electronic survey to gather faculty's responses to grant activities Chris Dede's visit April 24

Date	Participants	Issues Discussed
February 14, 2002	Dr. Borg, Judith, Lisa, Cristina and Don	Book discussion in two weeks, last chapters in *Digital Divide* Debrief of Software Showcase where five faculty participated *Thoughts on doing phone survey to see why faculty did not participate in Showcase What are the conditions that invite faculty to participate Faculty co-teach with graduate student to help with integration into methods course Possibility of repeating Software Showcase to get more faculty to participate Philosophical discussions relating to technology, teaching and learning
February 21, 2002	Dr. Borg, Sylvia, Elizabeth, Judith, Lisa, Cristina, Bobby and Don	Graduate Student Colloquium March/April Tues after/Wed morning Calendar CD Burning Workshop Marketing/dissemination plan for Chris Dede visit, April 24 Tech Expo—April 10/Parking for participants Book Discussion Master Technology Teachers
February 28, 2002	Dr. Borg, Sylvia, Elizabeth, Judith, Lisa, Cristina, Anthony and Bobby	*Understanding Teachers' Perspectives on Teaching and Learning* publication *Tech Talk* newsletter/CD Burning Workshop, March 6 Final Book Discussion/Lack of faculty participation Extension of Grant IRB Logistics/Set up of MTT Showcase/Tech Expo—April 10 Faculty participation in MTT Showcase Submission of Faculty Request Forms (up to $250 for resources) Submission of Faculty Syllabi Tech Guide coverage of Faculty Development Room **Documentation of faculty involvement with tech guide, use of Development Room on reporting template

* Used in rendering of *A Faculty Member's Comment* and/or discussion related to our work with faculty
**Used in rendering of *Elizabeth's Announcement* and/or discussion related to Elizabeth

Date	Participants	Issues Discussed
March 28, 2002	Dr. Borg, Sylvia, Elizabeth, Judith, Lisa, Cristina, Bobby and Don	Two readings and other housekeeping issues related to Chris Dede April 24th Visit MTT Expo/Showcase (flyer taped to faculty office doors) Possible Readings (Cuban and Dede) for Reading Discussion Protocol/Questions for faculty spring Interview Possible workshop on Endnotes Preparation for AERA poster presentation
April 11, 2002	Dr. Borg, Sylvia, Judith, Lisa, Cristina, Anthony, Bobby and Don	Lack of faculty participation in April 10 Showcase and in overall grant activities—possible question for interview, "Other than time, what kept you from participating more fully in grant activities (attending the software showcase/Tech Expo?" Cristina (culture of the college) Faculty who requested monies for materials Questions for final faculty interview April 16th Reading Discussion Housekeeping for Chris Dede visit, wrap up meeting, data collection (syllabi, self-assessments)
April 18, 2002	Dr. Borg, Sylvia, Elizabeth, Judith, Lisa, Cristina, Bobby and Don	Chris Dede visit Agenda and housekeeping for Wrap Up Meeting, April 30th Possibilities related to future work with faculty Questions for final faculty interview
April 25, 2002	Dr. Borg, Sylvia, Judith, Lisa, Cristina, Anthony, Bobby and Don	Review of faculty interviews (how many done, how many to do) Book discussion attendance and other event data for Final Report High speed dubbing to backup interview tapes Housekeeping related to Wrap up Meeting Needs Assessment
May 2, 2002 (*Final Tech Guide Meeting*)	Dr. Borg, Sylvia, Elizabeth, Judith, Lisa, Cristina, Bobby and Don	Annual Reporting Table/Data Collection Transcript/Summary of each faculty member's interview statement Can faculty check out/watch video of Chris Dede's visit? Scheduling of final faculty interviews Dubbing of faculty interview tapes Summer work

Appendix C

Member Checking

Date	Member(s)	Data Reviewed	Comments
09.18.02	Cristina and Bobby	Together we brainstormed possible incidents we felt were significant from our work together.	
	Anthony	Initial list of incidents	He felt that the list was an accurate summary, no additions.
02.22.03	Cristina	Rough Draft of Different Faces Different Spaces	She felt I needed more description
02.22.03	Bobby	Rough Draft of Different Faces Different Spaces	
12.12.03	Cristina	Dissertation Proposal	
03.24.03	Cristina, Bobby and Anthony	List of incidents	Confirmed relevance
03.24.03	Cristina	Tech Guide Culture graphic	
03.24.03	Bobby	Tech Guide Culture graphic	There are elements of tech guide office that are above and below the water. (p. 9, CItwo)
03.24.03	Anthony	Tech Guide Culture graphic	Location politics should be below the water's surface. (p. 9, CItwo)
05.28.04	Cristina	AERA paper: *Negotiating Power, Identity and Relationships: Graduate Students in Collaboration*	She felt analysis and presentation were going in the right direction.
07.21.05 01.21.06	Anthony	Rendering of Chapter 4	No response. Sent again January 06 per Anthony's request. I think you captured the essence of our work and I could not find any areas where I felt that you blew it or that anything was missing.
07.21.05	Bobby	Rendering of Chapter 4	….I think you did a great job in capturing the essence of the work. The comments that I made [throughout the chapter] are more asides than anything else….

Date	Member (s)	Data Reviewed	Comments
07.21.05 01.21.06	Cristina	Rendering of Chapter 4	Cristina was out of the country in July 05. I sent the chapter in January 06 and she responded saying….you have captured the most important aspects of our collaboration. I included some comments at the end of the chapter. Even the way included Lisa as a catalyst for the growth of our collaboration was very well done, you managed to show her strengths (not only her problematic style of interaction) and to make the point on how her personal characteristics collide with our attempt to strengthen our work as a team. One thing that comes to mind now is the issue of the individual vs. the collegial dimension of our relationship. For Lisa individuality seemed to be a priority, in coherence with what most education institutions tend to prize, or in coherence with a "success or fail" model. Some people have been educated or have grown in contexts that mostly privilege "doing it on your own" to succeed….you may want to discuss this in your discussion or conclusion chapter…
07.18.06	Anthony	Rendering of Elizabeth's Announcement	No response
07.18.06	Bobby	Rendering of Elizabeth's Announcement	No response

Date	Member(s)	Data Reviewed	Comments
08.09.06	Cristina	Rendering of Elizabeth's Announcement	I think you have a very tight analysis of the incident covering many sides of the issue. Very thick account. I'm impressed with your level of detail…I don't have many suggestions because I think you really did a very good job unweaving all the elements that played into the event. The only that I would still suggest that you explore at some point is the gender factor and how it played a role in the power struggle. I'm not sure you have enough data for that exploration. In my case, I think it could've played a role. She was a woman so I might have identified with her and backed off the open resistance vis-à-vis my own rendering as a powerless international student—something I'm not so sure was so "real"—maybe some type of my own fears to that type of confrontation played some role in my passive attitude. Still I agree with your account that I didn't see much of a point in not turning in the logs or attending the picture day.
02.23.07	Cristina	Renderings of Faculty Member's Comment	…I am impressed with the level of detail you were able to capture in your narrative of the incident and in the analysis of our interactions and reflections. I think the organization of the analysis focusing on interests, conditions, power (loved the power line construct and the way you used it) and structural and organizational factors helps the reader understand the complexity and dynamics of our relationship with faculty….

Appendix D

Theme/Critical Incident Matrix

Research Questions: *How do graduate students involved in a technology professional development project make meaning of their collaborative and shared experiences? How do the graduate students' interactions impact their personal and professional development?*

Chapter	Themes related to	Data Sources	Author/Literature
Four: Finding Our Fit	Relational Practices Series of Tools: physical and relational Relational beliefs and values Trust Collegiality Complementarity Interdependence Professional Intimacy Fluidity Mutuality Social support system Growth-in-relationship Enhanced graduate school experience	Cristina's tech guide journal 09-25-00 My personal reflections My tech guide journal 02-10-02 Personal communication—Bobby, Cristina Tech guide autobiographical narratives Transcript of video of PT3 Collaborative Exchange Visit Transcript of interview with Dr. Borg Transcript of First Focus Group Interview Transcript of Third Focus Group Interview	Baird/graduate education Boyle and Boice/graduate education Fitgerald et al./Professional Intimacy Fletcher and Miller/mutuality Fuoss/space, producer of action Josselson/being in relation Minnis and John-Steiner/ collaboration Olson and Craig/conversations Perkins/collaboration Rogoff, Goldstein/co-construction of knowledge Schrage/collaboration Vygotsky/ZPD
Five: Elizabeth's Announcement	Management Power relationships /power over Relationships with administrators Positionality of graduate students-- Voicelessness Informal curriculum of higher education Modes of coping Resisting	My personal reflections Personal Communications—Elizabeth, Bobby, Cristina, Dr. Borg Transcript of interview with Dr. Borg Transcript of 10-28-02 Tech Guide Meeting Transcript of Second Focus Group Interview Transcript of Third Focus Group Interview	Apple/power Gee/identity Fletcher/organization structures Miller/mutual empowerment, power Mumby/organizational structure Perkins/organizational intelligence Scott/hidden transcripts, Power
Six: A Faculty Member's Comment	Identity Institutional Hierarchy Power over Positionality of graduate students Relationships with faculty Technology professional development/ higher education	Cristina's tech guide journal 11-09-00 Cristina's 2001 AERA paper My personal reflections My tech guide journal 10-24-01 Transcript of conversation with Anthony and Bobby Transcript of conversation with Cristina Transcript of Third Focus Group Interview Transcript of 10-25-01 Tech Guide Meeting Transcript of 02-14-02 Tech Guide Meeting Transcript of video of PT3 Collaborative Exchange Visit	Bruffee/authority Gee/Identity Miller/power Mumby/organizational culture Various/collaboration Various/higher education Various/technology professional development

Appendix E

Critical Friends

Date	Person	Data Reviewed	Comments
02.22.03	Judy, fellow graduate student, member of writing group	Rough Draft: *Different Faces Different Spaces*	What did Cristina and you bring to group? Be more explicit on impact in terms of collaboration. What did it mean for the group?
11.12.03	Julie, UNM instructor	Rough Draft: *Different Face Different Spaces*	What happened to Lisa?
04.02.04	Mary, colleague at Eastern Michigan University	My thoughts around the whole tech guide experience and ideas for AERA presentation	Create a clear timeline and perhaps a visual aide for presentation Trust—What does that look like? What doesn't it look like? Comfort—What does that look like?….Shared expertise—What does that look like?….
04.13.04	Audience members at presentation of AERA paper	AERA paper	Audience member: What happened to Lisa? Discussant: Be careful to establish validity, be more explicit in your presentation of member checking
05.09.06	Sue, colleague at SUNY College at Brockport, member of writing group	Chapter 4 (previously *Different Faces…*)	…rich integration of data and analysis….notions about our relationship with Lisa….
07.18.06	Sue	Chapter 5: *Elizabeth Announcement*	…I like that you're not demonizing Elizabeth or her role; smoothly shifted to the issue of identity… There's something interesting going on here. Graduate students imposing (?) their interpretations on Elizabeth's actions. Is this what happens in hierarchical organizations when they can't talk back? What are the options for those at the bottom of the hierarchy?….
03. 29.07	Sue	Chapter 3: Methodology	….Will you revise your questions?… clear description of what you mean by critical incident methodology…Do you need to say "attempted?….

Appendix F

The Reporting Log

Week of:	Name:
	Scope of Work
Monday Hours	**Prepare for reading discussion, meet w/integration team**
Tuesday Hours	
Wednesday Hours	
Thursday Hours	
Friday Hours	

Additional Hours Worked

Day/Hours	Scope of Work
Tues/2.5	*Work with integration team*

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