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ABSTRACT

This study explored how six preservice teachers who participated as interns in a Professional Development School (PDS) program experienced learning to teach in the PDS context. The paper explores the scholarship of learning to teaching, highlighting the disjuncture between the complexity and contexts of school-based practicums, restructuring of teacher preparation programs, and current research. It proposes a grounded theory methodology for studying interns' experiences. Data were collected through individual interviews, participant observation in the field, and document analysis. Findings resulted in a model of learning to teach that involves learning about teaching and how to teach and learning about how to be a teacher (context-appropriation theory). The paper illustrates these two central categories, strategies, and stages of intern development with specific examples. It offers a model of learning to teach illuminated by newly emerging understandings portrayed by participating preservice teachers. Assertations include: at the end of the internship, PDS interns attain a stage of preservice teacher development that is beyond mastery; PDS interns learn about teaching and how to teach primarily through mentoring from a designated mentor and university supervisor; and PDS interns understand how a school functions as an organization. (Contains 53 references.) (SM)



Mastery of teaching in a school-university partnership: A model of context-appropriation theory.

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Abstract

This paper emanates from a study that explored the experiences of six pre-service teachers who participated as intern teachers in a professional development school (PDS) program between a research university and a public school district in Northeastern U.S. This research offers a substantive-level theory of learning to teach in the context of a school-university partnership. The research question driving this study was: How do intern teachers experience learning to teach in the context of a professional development school?

This paper unfolds in four sections. I begin by exploring the scholarship of learning to teach and highlight the disjuncture between the complexity and contexts of school-based practicums, restructuring of teacher preparation programs, and current research. Next, I propose a grounded theory methodology for the study of interns' experiences of learning to teach in a particular school-university partnership.

I then present a model of context-appropriation theory that is generated from the findings of this study. I illustrate the two central categories (learning about teaching and how to teach, and learning how to be a teacher), strategies, and states of intern development with examples of evidence, happenings, and instances. My intention here is to offer a model of learning to teach that is illuminated by newly emerging understandings portrayed by pre-service teachers living this PDS experience. The mindscape for understanding such experience is shaped by the assumptions that underlie the educational purposes of learning to teach in a school-university partnership: enhance the educational experience of all children; ensure high quality induction of new teachers into the profession; and engage in furthering the professional growth of teachers and teacher educators. After writing the theory, existing research on learning to teach and preservice teacher development were compared with these findings. Five assertions were amassed from this model of learning about teaching and how to teach, and about how to be a teacher, and correlated with the literature on learning to teach and pre-service teacher development. In the final section, I conclude by asserting the rich potential and the contributions of this study to the field of teacher education, and pose research questions for future studies.



I begin with a short yarn (Australian for 'story'). Diana, Kathryn, Mark, Caran, Sally, and Colleen were senior education undergraduates who completed a yearlong internship in a school-university partnership. In electing to participate in this non-traditional practicum, these six pre-service teachers (hereon known as interns) agreed to 'give up their senior year of college life.' The interns commenced the program in mid-August and followed the school district's calendar for the duration of the school year. In adopting the elementary school schedule, they relinquished the university's fall holiday and winter break. On a Saturday in mid-May at the end of the university academic year, all six interns graduated with a Bachelor of Science in Education. The following Monday these newly certified teachers returned to their elementary classrooms and continued to learn and teach with their mentor teachers, university supervisors and children until the last school day in June. While the six interns were from Pennsylvania, Diana and Kathryn grew up in small, rural communities. Caran and Sally attended suburban K – 12 public schools. Colleen spent her earlier educational experiences in an urban setting, and Mark was a non-traditional student who had previously worked in the music industry.

At the completion of the internship, each intern was asked for a final statement that highlighted the teachers they now were. Deb offered this excerpt:

Learning to teach required me to redefine myself, to think, and rethink about my beliefs about children, and what it means to be a learner and a teacher. I gave myself permission to figure out the teacher I am now. It took me a whole year to work that out. I know this teacher will change as I enter my first year of certified teaching. This is a comforting thought since it means that I have given myself encouragement to be a better teacher. (Diana, Interview, June 2000)

What central phenomenon, categories of conditions, actions and interactions, context, and consequences framed how she learned to teach? How did Diana's experiences of learning to teach unfold during the internship? Perhaps most importantly, what do teacher educators learn from listening to, observing, and analysing pre-service teachers' experiences of learning to teach



in conjunction with the setting in which interns learn and enact their conceptions of teaching and learning?

This paper unfolds in four sections. I begin by exploring the scholarship of learning to teach and highlight the disjuncture between the complexity and contexts of school-based practicums, restructuring of teacher preparation programs, and current research. Next, I propose a grounded theory methodology for the study of interns' experiences of learning to teach in a particular school-university partnership. I then present a model of context-appropriation theory that is generated from the findings of this study. I illustrate the two central categories (learning about teaching and how to teach, and learning about how to be a teacher), strategies, and states of intern development with examples of evidence, happenings, and instances. My intention here is to offer a model of learning to teach that is illuminated by newly emerging understandings portrayed by pre-service teachers living this PDS experience. The mindscape for understanding such experience is shaped by the assumptions that underlie the educational purposes of learning to teach in a school-university partnership: enhance the educational experience of all children; ensure high quality induction of new teachers into the profession; and engage in furthering the professional growth of teachers and teacher educators. After writing the theory, the existing scholarships on learning to teacher and pre-service teacher development were used as "supplemental validation" (Creswell, 1998, p. 301) to explore how these findings differed from the published literature. Five assertions were amassed from this model of learning about teaching and how to teach, and about how to be a teacher and correlated with the literature on learning to teach and pre-service teacher development. In the final section, I conclude by asserting the rich potential and the contributions of this study to the field of teacher education, and pose research questions for future studies.



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Research and Scholarship

By identifying obstacles to teacher learning long associated with school-based practica, recent studies (Darling-Hammond, 1994; Goodlad, 1994; Holmes, 1986; Levine, 1992; Levine & Trachtman, 1997) have narrowed the dichotomous relationship between what teacher educators hope their students will learn about teaching during field experiences and what they actually learn. Teacher educators agree that a practicum is a "significant occasion for acquiring new knowledge, skills and dispositions" (Zeichner, 1996, p. 12). However, there is little consensual understanding of how this experience contributes to the process of learning to teach and of shaping teacher identity. Russell (1991) espouses that teacher educators know that learning to teach requires practice-time in schools, "but we have no shared conceptualization of how that experience contributes to learning to teach" (p. 9).

Despite the rapid development of scholarly literature on the impact of field experiences on prospective teachers, Zeichner (1981, 1992) maintains that a drawback in understanding the link between classroom-based experiences and learning to teach arises from research studies that fail to acknowledge the complexity and context of the school experience. Further, he (1996) reiterates, "studies of the role of student teaching in learning to teach, by any account, have not provided us much information that is useful for policy decisions related to student teaching programs" (p. 5). Additionally, Johnston (1994) attributes nebulous restructuring of teacher education programs to "superficial survey data doing little to further the conceptualization of this complex issue" (p. 199). Focusing on the dynamic and multidimensional reality of the 'lived' perspective of prospective teachers may be one way to probe deeply into the convoluted nature of school-based experiences. Guyton and McIntyre (1990), in their review of research on student teaching and school experiences, advocate research that attempts to reveal the meanings of



novice teachers' experiences, acknowledging that their unique perspectives may enable teacher educators to construct a conceptual and consensual framework of the process of learning to teach in school-university partnerships.

Teacher educators generally assume that knowledge and skills exist independently of the contexts in which they are acquired (Feiman-Nemser & Remillard, 1996). The notion that teachers can first learn concepts and skills and then apply them in real world teaching situations reflects this assumption. Cognitive psychologists (for example, Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991; Resnick, 1991) have challenged this notion by claiming that all knowledge is situated in and grows out of the contexts of its use. Besides providing a compelling explanation for why teachers use so little of what they are taught in traditional teacher preparation programs, the theory of situated cognition directs teacher educators to embed learning to teach experiences in "authentic" activity (Brown, Collins, & Duguid, 1989), for example, a school-based practicum.

During the 1990's the shape of teacher education programs changed, creating a new mindscape about how best to prepare teachers. Spurred by recommendations from a plethora of commissions, national reports, and studies of teacher education, school-university partnerships such as the varying models of professional development schools (PDSs) and professional practice schools have been in existence across the United States for about the last ten years (Goodlad, 1990; Holmes Partnership, 1990, Levine, 1992). Through their efforts to embed student teaching practicums and internships in public schools under the auspices of professional development school initiatives, teacher preparation programs are attempting to alter the character of pre-service teacher learning. The vision of such school-university partnerships assumes that collaborative efforts to prepare new teachers "create learning opportunities that are different



from and richer than the opportunities either the school or the university can provide alone" (Cochran-Smith, 1994, p. 149). The study of pre-service teacher preparation that is situated in a professional development school (PDS) program focuses attention on contextual learning and teaching. Such research raises novice teachers' voices about their experiences of learning to teach.

An underlying focus of the PDS movement is creating field experiences that support preservice teachers' learning to teach in a context with 'best' teaching practices. PDSs are not intended to simply provide new settings for a student teaching practicum as we have traditionally known it. Rather, Darling-Hammond (1994) proposed that PDS internships offer "opportunities to observe, practice, and debrief, as well as to consult, attend seminars, and reflect with colleagues. This combination helps interns acquire a broad set of understandings and abilities rather than a set of behaviors that ultimately prove inadequate" (p. 9). As they attempted to compare a traditional student teaching practicum with an alternate PDS internship, teacher educators portrayed the internship experiences in a PDS setting as "more intense, more collaborative and more practitioner-oriented" (Teitel, 1992, p. 70).

Given the current trend to integrate school-based practica within a context of school-university programs, the advent of professional development school partnerships further complicates the dilemma highlighted by Zeichner (1981) and Zeichner and Liston (1987). Not only do teacher educators need to mutually construct a shared vision about learning to teach, but also develop an understanding of how this would be framed within a newly emerging school-university context.

Conspicuously absent from the embryonic PDS scholarship is research that focuses on pre-service teachers' experience of learning to teach in the context of a particular PDS model.



Specifically, missing from the literature are studies that explore the interns' portrayal of this participatory process as a lens to develop a model of learning to teach. Most significantly, a review of the existing scholarship reveals models of learning to teach (Grossman, 1992; Grossman, Smagorinsky & Valencia, 1999; Guyton & McIntyre, 1990; Knowles, Cole & Presswood, 1994) and stages of student teacher development (Fuller & Bown, 1975; Kagan, 1992; Sacks & Harrington, 1982) that were generated from data gathered in the context of traditional student teaching practica. These models assumed that student teachers in traditional contexts developed linearly along a "one-shoe-fits-all" trajectory at a synchronous and specified rate. As researchers seek to understand the experiences of pre-service teachers in differing contexts, studies of the multifaceted nature of school-university internships draw attention to aspects of differentiated teacher learning. Accordingly, this paper presents a grounded theory of learning to teach that is based upon research guided by the question: How do intern teachers experience learning to teach in the context of a professional development school?

In this research the following definitions were applied:

Intern: pre-service teacher candidate in the senior year of study for a Bachelor of Science in Education – Elementary degree having a continuous teaching practicum of one public school year (known as internship) where the student has opportunities to contribute to the life of the school as a professional member of the teaching faculty.

Mentor teacher: the classroom teacher nominated by the building peer mentor teachers and ratified by the university and school administration to be the person, in conjunction with the university supervisor (Professional Development Associate, PDA) responsible for the formal supervision of the intern.



Substantive-level theory: a low-level theory that is applicable to immediate situations. In this research, this theory evolves from the study of a phenomenon situated in "one particular context" (Strauss & Corbin, 1990, p. 174), the professional development school internship.

Context: refers to the connected set of social practices in and through which learning to teach takes place among members of the PDS community and includes the proposed outcomes and framework of the PSU elementary education program, philosophy of the PDS-SCASD, relationships among participants, and the PDS curriculum.

Assertions: propositions or hypotheses that relate the categories in this study.

Strategies: specific actions or interactions that occur as a result of the process of learning about teaching and how to teach, and learning how to be a teacher (Strauss & Corbin, 1990).

State of Perception: interns' thinking and practice are composed of implicit and unexamined notions and understandings, events, happenings, and instances of teaching and learning that PDS interns participate in passively.

State of Conception: interns' thinking and practice are composed of explicit and examined notions and understandings that guide how the PDS interns enact principles of teaching and learning, and events, happenings, and instances that PDS interns anticipate.

Appropriation (Leont'ev, 1981): illustrates how the interns' thinking and enacted practices transform from a state of perception to that of conception. Appropriation refers to the process through which an intern actively makes explicit, examines, and adopts conceptual platforms and pedagogical tools available for use in the PDS context.

Methodology

Qualitative research was utilized as the means to propose a substantive-level theory that depicts how intern teachers learn to teach in the context of a professional development school.



Chosen to depict the participants' experiences of learning to teach, the procedures of grounded theory methodology involved (a) developing codes, categories, and themes inductively rather than imposing predetermined classifications on the data (Glaser and Strauss, 1967), (b) generating a substantive, low-level theory of learning about teaching and how to teach, and how to be a teacher, and (c) positing assertions (Erickson, 1986) from the theory.

Participants

The participants were six senior education undergraduates who completed a yearlong internship in the Professional Development School partnership between The Prospect State University and The Scone Area School District. As this study was concerned with generating a model of learning to teach, a purposive sampling approach was elected that would address the intensity desired (Patton, 1990) and create the maximum variation (Patton). The research sites, Fettlerson and Renshaw Field Elementary schools, were two of the four members of this school-university partnership.

Data sources

Data were collected primarily through one-on-one interviews, participant observation in the field, and document analysis. Primary data included: six semi-structured interviews, and documents and artefacts compiled by the interns (reflective teaching journals, lesson and unit plans, internship notebooks and web-based portfolios). Secondary sources were: individual intern plans (IIPs) and daily logbooks, course assignments, informal and formal observations of the participants, and researcher and PDA journals as field notes. Data were collected continuously over a period that spanned one school district calendar year. This study employed the "zigzag" process of data collection that gathers information from the field and compares it to emerging categories, the constant comparative method of data analysis (Strauss & Corbin, 1990).



Data analysis and writing

All transcriptions were analyzed using NVIVO computer software (Richards, 1999).

Line by line analysis of the transcripts resulted in the definition and construction of conceptual categories at "free nodes" and then to "nodes" in NVIVO's tree-structure. I developed memos, defined as further data, to record category development and my ongoing thinking. Since the analytic process of grounded theory is based on immersion in the data, codes and categories were sorted, compared and contrasted until saturated. Then the data was reassembled through systematically relating the categories in the form of a visual model that explains how pre-service teachers learn about teaching and how to teach, and how to be a teacher in the context of a professional development school. The model was tested from the within-case analysis through support provided by NVIVO, and assertions posited. Additionally, the data analysis searched for disconfirming evidence to verify the account (Erickson, 1986).

A central concern for vigour in qualitative research is "evidentiary adequacy" (Creswell, 1998, p. 301) – that is, sufficient time in the field and extensiveness of the body of evidence used as data (Erickson, 1986). Prolonged engagement was a strength that lent considerable credibility to this study. Confirmability was established through the audit trail that consisted of chronological narrative entries of research activities, entry into the field, interviews, transcriptions, initial coding efforts using NVIVO, and the evolution of the learning to teach theoretical model.

Findings

Emerging from the findings of this study is a model of learning to teach that comprises two distinct, yet connected, categories 1) learning about teaching and how to teach, the focus of the first part of these findings, and 2) learning about how to be a teacher, detailed in the latter



section of the findings (Knowles, Cole, & Presswood, 1994). Embedded in these processes are two ideas of learning: situated nature of cognition (Greeno, 1997; Lave & Wenge, 1991) and activity theory (Leont'ev. 1981; Wertsch, 1981). Proponents of the situated nature of cognition (Greeno, 1997) espouse "interactions in one's environment as major determinants of both what is learned and how learning takes place" (Putnam & Borko, 2000, p. 5). This view holds that what we accept and value as knowledge and how we think and articulate beliefs and practices result from the process of interactions of groups of people over time (Putnam & Borko). Evidence from a "situated perspective" bears testimony that interns learn to teach through social interaction (Lave & Wenger, 1991) in a community of practice (Calderwood, 2000). Activity theory illuminates how PDS interns choose conceptual platforms and pedagogical tools to inform and enact their teaching through a process of appropriation. Conceptual platforms are the theories (such as cooperative learning or constructivism or whole language or scientific inquiry) and principles (such as instructional scaffolding or curriculum design) of learning about teaching, about how to teach, and how to be a teacher that PDS interns use as heuristics to guide decisions about teaching and learning. Pedagogical tools are "classroom practices, strategies, and resources that have an immediate utility and include instructional practices such as journal writing" (Grossman, Smagorinsky & Valencia, 1999, p. 12), strategies such as grouping of students or technology resources such as the Web.

In adopting the lenses these perspectives on learning offer, the data analysis of this study yields a model of learning to teach that the researcher labels context-appropriation theory. This model diagrams how pre-service teachers learn ways of teaching in the culture of a school-university partnership (Figures 1 and 2).



INSERT FIGURE 1 and FIGURE 2 ABOUT HERE

As each central process of learning to teach unfolds, PDS interns experience reiterative states of perception and conception that differentiate and support their individual professional development. In a state of perception, the intern may not know or recognize a conceptual platform or a pedagogical tool, or may learn the name of a tool but not know any of its features. Also, an intern may learn some or most of the features of a tool but does not yet understand how those features contribute to an understanding of the tool. In this state an intern 'can judge a good lesson from a bad one,' and are practising 'reflection-on-action' (Schon, 1987). However, during the enactment of the lesson, interns tend to direct attention to themselves and participate in the act of teaching by focusing predominantly on the delivery of the content. For example, an intern creates an activity, but does not yet understand the conceptual platform or the pedagogical tool to ask the questions, What is the goal of this activity? At what point is each child's learning? How can I move a child's thinking and understanding from where it is to where it ought to be? In reflecting on the lesson, the intern attributes effective teaching to whether or not the lesson was successful or otherwise, and how 'good' or 'bad' the intern feels about 'how the lesson went.' Assessing the children's learning is not within the realm of the interns' thinking and practice.

In a state of conception, the intern grasps the theoretical underpinnings that inform and motivate the use of conceptual platforms and pedagogical tools. Interns 'reflect-before-acting' (Gimbert, 2001) as evidenced in mental rehearsal during preparation and actual planning, and 'reflect-in-action' (Schon) witnessed in dialectical conversations with mentor teachers and PDAs (Gimbert). As interns encounter new experiences with the multiple conceptual platforms and



pedagogical tools, their thinking and practices fluctuate from a more passive state of perception to an active state of conception. PDS interns devise and implement strategies (for example, self reflecting, guiding a mentor teacher to make explicit their implicit understandings of teaching and learning, 'kid-watching,' and figuring out how children think and learn) that propel the intern's thinking and practices from states of perception to conception at an accelerated rate. By this I simply mean that when interns develop the necessary strategies to examine and adopt or reject a conceptual platform and pedagogical tool, they spend less time in a state of perception.

The term *appropriation* (Leont'ev, 1981; Wertsch, 1991) is borrowed from activity theory and illustrates how the interns' thinking and enacted practices transform from a state of perception to that of conception. Appropriation refers to the process through which an intern consciously adopts conceptual platforms and pedagogical tools available for use in the PDS context (Grossman, Smagorinsky & Valencia, 1999). As they move from states of perception to conception through reiterative cycles of appropriation, interns make explicit their beliefs and understanding of enacting practices endemic to the school culture (for example, using classroom meetings to establish and maintain an effective classroom learning environment). Further, interns begin to internalise the conceptual platforms and tools they choose to adopt. In summary, individual PDS interns follow a reiterative and spiralling pathway of appropriation as they shift thinking and practices from states of perception to conception.

Fundamental to the transformation of interns' practices and ways of thinking to solve specific challenges within the PDS context is the interns' active role. In the process of appropriation, interns "reconstruct the knowledge they are internalizing" (Grossman, Smagorinsky & Valencia, 1999, p. 13) and make sense of that knowledge as it is enacted in the PDS context. After strategies and actions in this theory are described, specific examples



illustrate an intern's shift from a state of perception to conception in each of the processes of learning about teaching and how to teach (p. 17), and learning about how to be a teacher (p. 22).

As readers view the diagram of the model, they note how a community of practice (Calderwood, 2000) that supports the interns' learning about teaching and how to teach, and how to be a teacher grows and expands over the period of the PDS internship. While the two processes are not considered necessarily sequential, the model suggests in during the first five months of the internship interns focus on learning about teaching and how to teach. During this time, the community of practice is the children and the traditional supervisory triad: the student teacher, the cooperating teacher and the university supervisor. As the internship unfolds, interns learn how to be a teacher through exploring, nurturing and expanding thinking and teaching practices within the professional development school community. Multiple mentors that include methods course instructors, peer interns, school administrators, other school professionals and parents comprise this community of practice

The context-appropriation theory of learning to teach in this particular school-university partnership identifies key characteristics of a field-based experience that foster new ways of teaching, and explains how these experiences are nurtured within an existing school culture. The driving framework of this model are the strategies that support the PDS interns' development of conceptual understandings and pedagogical tools for learning about teaching and how to teach, and about how to be a teacher. In the next section of the findings, strategies that the PDS interns developed in each process are described.

PDS interns learn about teaching and how to teach by employing strategies and actions and interactions as shown in Table 1.

Table 1



| Strategy | Actions and Interactions |
|---|---|
| Unlock expert practitioners' knowledge and skills | Engage in focused observation, modelling, and dialectic sharing with mentor Adopt reciprocal roles of teaching and observing with mentor teacher Co-plan and co-reflect |
| 2. Think and do | Collect ideas and think about doing Rehearse and reflect |
| Understand how children think and learn | Get to know children "Kid-watch' and 'get inside children's heads' |

These strategies and actions support the assertion that PDS interns learn about teaching and how to teach by unlocking the knowledge of expert practitioners and tapping the resources offered by mentors through self-reflection, reciprocal observation, questioning and dialogue, analysis, and reflection; through reflecting on their actions and guiding thoughts; and through making sense of the differing ways children think and learn. In this excerpt, Colleen's thoughts reflect the depth to which novice teachers can realize the significance of understanding children's thinking as they struggle to make sense of learning about teaching and how to teach.

Teaching a class of 26 children is a very different story to teaching 26 children. One of my greatest struggles over the last few months has been trying to work out ways that I could provide for the individual needs of our children. When I had no idea at the beginning of the year how to assess children's understanding, teaching seemed so much easier. I thought I could take a class of children and teach them the same thing in the same given time to the same level of understanding – much like mine. Now that I can look at a child and figure out what his or her needs are, it is so much more complicated. I see what this child needs, but I am only one person. I have to work out ways that I can devise activities to help that child without compromising the progress of the other children in the class. (Colleen, Interview, June 2000)



Three examples are offered that illustrate how interns' thinking and practice shift from a state of perception to conception during the processes of learning about teaching and how to teach.

Example 1: Intern collects ideas and thinks about doing

Like many novice teachers in a traditional teacher preparation program who consider student teaching to be time to collect a repertoire of strategies and skills (Johnson, 1994), PDS interns initially describe themselves as "huge sponges ready to take in new ideas and different ways of managing classroom experiences" (Diana, Interview, September, 1999). Similarly, Mark defined learning to teach as "soaking up" different teaching strategies and "filing them for future use" (Interview, October, 1999). Closely related to this thinking is the expectation by many novice teachers that simply being in the presence of an expert and exemplary teacher means that effective teaching strategies "will be fed to me" (Mark, Interview, September 1999). Mark believed that the way he would passively learn about teaching would be by

being matched with this perfect mentor teacher. We'd work together, and I'd have this blossoming experience as a teacher. My mentor teacher would provide me with all these experiences and great ideas that would feed and nurture me. (Interview, September 1999)

At the beginning of the internship, the interns focused on learning about teaching as a process that is supposed to be "fun for the learners, interns and children" (Sally, Interview, September 1999). The interns associated learning about teaching as enjoyable and shaped "by having fun with children" (Mark, Interview, September 1999). For Mark, learning about teaching was dependent on his enjoying the experience.

Mark and Sally both wanted to learn about teaching, but were reluctant to actively question their learning or teaching style, or to modify these to meet the children's learning needs.

Learning about teaching and how to teach demands that interns actively confront their preferred



learning styles and those of the children in their classrooms. It means trying to match, in many different ways, teaching strategies and instructional practices with children's learning needs. Sally's and Mark's struggles illustrate the tensions pre-service teachers experience as they undertake two simultaneous, and seemingly incongruent roles: first, as a learner of teaching with their unique learning style, and second, as a novice teacher supporting children's multiple learning styles. As they sought to balance this duality, the interns figured out ways to explore and negotiate these roles. With guidance from their mentor teachers and PDAs, the interns analyzed and reflect edon their classroom experiences to make "public the tacit thinking and feeling of both teachers and students" (O'Hair & Odell, 1994, p. 80). Co-teaching experiences facilitated this process. In this way, interns moved beyond wanting to learn by passive osmosis about teaching and how to teach. The following excerpt shows how Diana adopted a conceptual platform of learning and teaching that met both her needs as an intern and those of the children in her classroom.

I am a learner, too. We are all learners in Room 15. I need to learn to teach, and at the same time teach to learn. I am responsible for these children's learning. Being a learner and a teacher at the same time is not easy. Life-long learning rolls off the tongue so easily, but doing it is another thing. I have to find the spaces in my classroom to be a learner and be a teacher. The way I teach may not necessarily be the way I like to learn. Margaret shows me how we can do this. She uses some strategies I like, and others that I do not. She suggested that I try to teach a group one way and then try another. I have to figure out what works for me, and what works for the children. I ask them for feedback, and I think about it. (PDA journal, January, 2000)

Example 2: Intern understands how children think and learn

Research indicates that pre-service teachers relate success in their teaching to feelings of confidence (Applegate, 1986). Ellwin, Graue, and Comfort (1990) and Borko, Lalik, and Tomchin (1987) report that student teachers' perception of unsuccessful lessons are often couched in terms of classroom management difficulties, whereas successful lessons are



characterized as unique aspects of planning and instruction. Another viewpoint, offered by Brandt, Hayden, and Brophy (1975), indicates that pre-service teachers tend to take credit for students' successes, but not for their failures. A different perspective, suggested by Ames (1975), is that pre-service teachers take the blame for failures and attribute success to the students. In a state of perception, the PDS interns framed their successful and unsuccessful lessons in a myriad ways, as reported in the research. However, as classroom experience provided them with extended periods of time with the children, interns shifted thinking and practice into a state of conception. Consequently, they interpreted the success of lessons differently. Rather than defining success in terms of their lesson delivery, interns equated their successful teaching practices with the children's conceptual understanding of a lesson or topic. They figured that even though a lesson "appears to run smoothly, this did not necessarily reflect the children's learning" (Diana, Interview, February, 2000). The interns targeted individual children after the lesson when independent practice was taking place and questioned them, as a means of informally assessing the child's understanding. They used this information to decide whether or not the objectives of the lesson connected with a child's conceptual understanding.

Children are very good at hiding what they do not really understand. They develop ways for compensating for not understanding. I need to be aware of that. (Colleen, Interview, June 2000)

Example 3: Intern 'kid-watches'

Exploring children's thinking is highlighted in the model as a significant contributor to the interns' efforts to understand how to support children's learning. Existing research reports that pre-service teachers often have unrealistic or inappropriate expectations about the students they will teach (Gomez & Comeaux, 1990; Kagan, 1992). This may be a consequence of these pre-service teachers' limited knowledge (Florio-Ruane & Lensmire, 1990). For some student



teachers, reentry to school delivers a mild to severe "reality shock" (Gaede, 1978). Novice teachers find that their images of students, teachers, and schools are incongruent with the beliefs and understandings generated by their own schooling experiences. Such discrepancies may rest in the student teacher's commonly held perception that the students they encounter will be like they were as students (Knowles & Holt-Reynolds, 1991). Knowles and Skrobola (1992) have reported a general consensus among university supervisors that most pre-service teachers who failed their student teacher field experience were unable to determine and respond to their students' needs. The supervisors reported that unsuccessful pre-service teachers typically become preoccupied with themselves and their ability to "survive the semester" at the expense of students. This kind of detrimental self-absorption is explained and supported in research linking pre-service teacher development with professional role identity (Fuller & Bown, 1975; Kagan, 1992).

As they became comfortable with their classroom surroundings, the interns recognized the significance of watching children. Although they initially experienced some tension between being an active 'teacher' in the classroom and a seemingly passive observer, the interns valued time spent 'kid-watching.' As they observed and conversed with a child and groups of children, the interns made sense of children's thinking at a conceptual level. "The more I know about these children and their thinking patterns, the better I understand how to teach them" (Diana, Interview December 1999). In figuring out ways to trace a child's thinking, the interns recognized the wisdom in Colleen's insight. "If I do not understand how children think, then I might assume that they think like me" (Interview, September 1999). As she devised activities to help a first grader develop number sense, Kathryn commented,

As I structure activities that help Tom better understand numbers, I try to think like he does. If I can get inside his head, then it makes my task of teaching him make sense.



What can I do that will push his thinking a little further? I watch him ponder it. I want to know how he figures it out. (Interview, December 1999)

The next section of the findings captures the strategies, and actions and interactions that PDS interns demonstrated as they learned how to be a teacher. This process focuses on the interns' development of roles, responsibilities, and rituals of acting and thinking as members of a professional community of practice. As they shaped their teacher identity, the interns explored the functions of a school and the work of teachers. They stepped beyond the classroom door to participate in the complexity of a school organization.

Table 2

| | Strategy | Actions and Interactions |
|----|---|--|
| 1. | Shape a transitory teacher identity | Negotiate the complexity of teaching Understand the role of a teacher Nurture confidence in self as teacher, colleague, and focus on children Negotiate, What is curriculum? Debate procedural versus conceptual teaching and learning Take risks |
| 2. | Define college student and intern roles | |
| 3. | Develop teacher relationships | Explore the beliefs system of self, mentor teacher and PDA Consider the impact of interns on mentor teachers |
| 4. | Recognize the community partners in the school system | Accept the multiple teacher roles Connect home and school |
| 5. | Ask, Who owns curriculum? | Question curriculum Enhance curriculum |

Three examples are offered that illustrate an intern's shift from a state of perception to conception during the processes of learning how to be a teacher.



Example 1: Intern understands the tole of a teacher

Negotiating their role as a classroom teacher was an important strategy in the interns' growth and development of how to be teacher. This example provides evidence that supports the claim: understanding the role of the teacher significantly shaped the interns' conceptual understanding of their transitory teacher identity.

In the first few months of the internship, the interns portrayed themselves as observers in the classroom whose major role was that of helping. Mark saw himself as "a utility guy" (Interview, October 1999). Also, Mark made sense of his role as a teacher by seeing himself as ping-pong player. He served the question, and the children responded. He described himself as a teacher who "kept the children's attention, so that they listened to me" (Interview, October 1999). Diana adopted "a community member role" (Interview, September, 1999). Colleen defined herself as a "facilitator of children's thinking and discussions who entered children's conversations, probed and assessed their thinking, and then left the group to continue working" (Interview, December 1999).

The factor that shifted Caran's thinking and practice into a state of conception was her realization that knowing all the answers did not determine whether or not she was a teacher in the room.

As a teacher, the students often look to me to have all the answers. I am well aware that I don't. There have been many times this year when I have had to tell the students, "I don't know." Often, this is a discomforting feeling, especially because teachers often feel our job is to 'know.' However, I was pleased to see that last Monday, when I was not sure of the answers, I was much more relaxed about it than I have been in the past. I didn't get the nervous feeling of failure or uncertainty that I have had before. My focus was on trying to figure out how we could find the answer, instead of worrying that the students would lose their respect for me. (Caran, Journal entry, December 1999)

Example 2: Intern negotiates, What is curriculum?



While in a state of perception, the interns' initial response to the curriculum focused on the lack of time. As she compared her previous classroom experiences of curriculum scheduling with the current expectations, Sally was amazed at the lack of instructional time. She remarked how the inflexible scheduling constrained the development of her teaching practice:

After scheduling specials, lunch, the computer laboratory, silent reading and recess, we have time for math every day. But we need to have science, social studies, and language arts. There's no time to do it. We end up doing 20-minute chunks of activities. (Sally Interview, September, 1999)

As they developed a conceptual understanding of What is curriculum? Kathryn and Diana found ways to manage the seemingly inflexible schedule. They nurtured their beliefs about the importance of deepening children's understanding of content rather than "trying to cram it all in" (Kathryn, Interview, April 2000). In this state of conception, interns negotiated the breadth of the curriculum units. This required them, with their mentors' input, to select various ideas from the unit and weave the content into a series of lesson that met the objectives and standards, and fitted with the interns' reshaped thinking about how to teach curriculum.

In reaching a conceptual state of thinking and practice, interns realised the significance of trying to understand how decisions concerning instructional practice and curriculum are made in the complicated context of a school system. Caran sought to understand the role of school administrators in the selection and approval of children's reading material. As she noted,

Recently, I heard that one of the fifth grade teachers in my school was reading a book from the Harry Potter series to her students and was told that she had to stop by our principal. I was interested in the situation because I had been talking with my mentor teacher about the possibility of using the book as a read-aloud later in the year. I investigated the situation further and found out that the principal had concerns about the use of the book. I was disappointed when I learned of this, because I had been looking forward to sharing these books with my students. As an alternative plan, I considered buying the paperback version of the book and putting it in our classroom library for the students to read. Therefore it would still be a "student choice" and not a book we were "forcing" the students to listen to.



In speaking with the principal about this, I was told a memo had been sent to the principals in the school district saying that Harry Potter books should not be used in the classrooms.

I respect the decision made by the administrators. However, it still frustrates me that issues like this arise so frequently. There are so many books, activities, and celebrations that used to be such a joy for the students and the teachers and that now have had to be taken out of the schools. Although I know each step is done with good intentions, I worry about what will be lost next. (Caran, Journal entry, October 1999)

Example 3: Intern accepts the multiple teacher roles

Embedded in the experience of learning to teach in the PDS program is the tension that contextual learning and teaching generates when two cultures, a school and a university, superimpose their curricula on the interns. PDS interns negotiated the concurrent demands of these two organizations. While the objectives of the methods course focused on helping the interns develop methods to teach elementary children mathematical concepts, the interns tussled with the 'dailiness' of teaching a particular group of children. Initially, it is very hard for the interns to think about learning to be an elementary teacher, rather than, for example, becoming a third grade teacher. However, as their school experiences increased, the interns looked beyond their own classroom door. During an interview later in the internship, Colleen again reflected on her experience of learning how to be a teacher:

Over the last week, I've spent time substituting in primary classrooms. Now, I can see the value of challenging my conceptual understanding of teaching math. I am a teacher of children, not solely content. I can help children understand how to think differently about an idea. So it doesn't matter if I teach third graders decimals or first graders number sense, it is the pattern of being a teacher that makes sense to me now. At the beginning of the year, I only thought about teaching content to my children in my classroom. I can see how that narrowed the way I thought about myself as a teacher. I also realised that even though children will spend a year in my classroom, they go on to be children in another teacher's classroom. I am responsible for helping them to learn to think mathematically, not only to think about telling the time. (Interview, June 2000)



The data from this study supports the hypothesis that PDS interns achieved and moved beyond mastery of teaching in the sense that they have acquired skills and understanding to develop effective use of teaching and learning tools. This is not to say that all interns were highly skilled in the use of all conceptual and pedagogical tools by the end of their PDS experience. Nor does this research advocate that every intern reached a state of conception for all tools. However, they anticipate conceptual platforms and pedagogical tools and know how to seek out resources that support their understanding and implementation of these.

Discussion

Although 'learning to teach' literature is rich with descriptions of pre-service teacher development in traditional student teaching settings, this study is distinctive in its systematic examination of learning to teach from the perspective of interns in the context of a non-traditional context, the school-university partnership. A theoretical model that depicts the process of the learning to teach in a situated context was constructed through qualitative data analysis. This model of context-appropriation theory offers a coherent framework for understanding the complex and individualized nature of learning to teach. Most importantly, and resolutely, this model supports the multiple and differentiated pathways pre-service teachers carve as they develop into fully functioning teachers by the completion of their PDS experience.

In effect, the context-appropriation theory of learning to teach in the school-university partnership was my interpretation of the six pre-service teachers' experiences of learning about teaching and how to teach, and about how to be a teacher. As is often the case in qualitative research, the findings are unique to the particular context, researcher and participants of this study. The transferability of this theoretical model takes place as the reader explores these results "in the context of specific circumstances of interest" (Creswell, 1998, p. 315). The



findings offer teacher educators a conceptual framework to support pre-service teachers' learning and teaching in the context of a school-university partnership. Five assertions were amassed from this model.

Assertion 1: At the end of the internship experience, PDS interns attain a stage of preservice teacher development that is beyond 'mastery' (Sacks & Harrington, 1982).

The supporting evidence from this study reflects the complex and developmental nature of learning to teach. Inherent in this assertion is the perspective that the process, rather than the event (Knowles, Cole & Presswood, 1994), of becoming a teacher is multifaceted and individualized.

The teacher development literature presents varying ways of characterizing student teacher development. Sacks and Harrington (1982) offer a conceptualization of student teacher development that includes six stages: anticipation, entry, orientation, trial and error, integration/consolidation, and mastery. These researchers have proposed that as student teachers move through these stages, "there seems to be a discernible movement from the student teacher's perception of the professional self as an unsure apprentice to that of a confident teacher (Glatthorn, 1998, p. 380). Calderhead (1987) suggest that the latter stage of student teacher development focuses on experimentation, during which time a student teacher discovers his or her style of teaching. Fuller and Bown (1975) propose that new teachers experience a series of concern-based stages beginning with a 'preteaching and early teaching stages' (that focuses on self-centered concerns related to survival) and moving to a 'performance stage' (that focuses on concerns about students and their learning and curricular issues).

From the analysis of the PDS interns' experiences, the context-appropriation theory of learning to teach illustrates components of teacher development that take into account the



teacher. The following statements are descriptors that highlight the PDS intern's stage of teacher development at the end of the internship. First, PDS interns are comfortable with making sense of children's conceptual understanding. PDS interns demonstrate how to assess a child's learning, and can implement, extend and modify curricula to meet the needs of specific children. Second, they are function as a colleague and partner within the context of the classroom and school communities. Third, PDS interns have made a strong commitment to the education profession, and draw upon and contribute to the varied resources of the school community. Fourth, they recognize a child's complexity and try different strategies to support that child's learning. Further, through enhanced 'kid watching skills,' PDS interns can demonstrate how and describe why they are meeting a child's needs more capably. PDS interns focus their teaching concerns on children's academic and social successes and can articulate their contributions to student learning. Last, PDS interns are better able to recognize and negotiate the tensions that the job and work of teaching bring.

Kagan (1992) premises that when and how development takes place depends on at least three factors: the pre-service teacher's willingness to explore and change his or her beliefs and images of teaching and teachers; the structure of the pre-service teacher preparation program; and the relationships that are nurtured within the context of the student teaching experience.

This study reveals evidence that a PDS context for teacher preparation supports these three guiding premises. PDS interns are past struggling only with problems of personal and professional competence. While acknowledging that no one learns to teach in a year, the PDS interns have moved beyond the day-to-day survival, hit-or-miss solutions to problems, and intense feelings of inadequacy that teacher development research suggests characterizes the life



of beginning teachers. PDS interns describe themselves "as confident and capable" (Diana, Interview, June 2000).

Assertion 2: A yearlong internship in the context of a school-university partnership offers pre-service teachers developmentally appropriate experiences for learning about teaching and how to teach, and how to be a teacher (Knowles, Cole & Presswood, 1994).

While each intern is expected to be a fully functioning teacher by the completion of the internship, this non-traditional practicum supports differentiated learning opportunities for PDS interns. Appropriately, at the end of the PDS experience, the interns are beginning teachers who have individually shaped their different understandings of learning to teach. Rather than a one-shoe-fits-all approach, the context-appropriation theory supports an individually-tailored and flexible process for learning to teach. For example, while the interns adopted classroom responsibilities by mid-May, individual interns and mentor teachers decided when and how this process unfolded. Caran was planning for mathematics and social studies lessons by December, whereas Colleen did not feel comfortable assuming planning and teaching responsibilities for mathematics until February. Mark spent several months observing and teaching small groups of children before planning for whole-class mathematics lessons. Sally offered guidance and assistance to groups of children during mathematics lessons until mid-February. About this time, Sally assumed planning and teaching responsibility for the majority of the class while her mentor teacher taught a particular group of children with math needs.

The interns perceive the experiences in the yearlong internship as a supported start in a career of learning and teaching, rather than as a capstone to their educational coursework in the teacher preparation program. As she reflected on her internship year, Diana acknowledged the decisions she will need to make:



As I enter my first year of certified teaching, choices will be presented. I will be making decisions based on what I have learned and figured out this past year. I consider the internship year as the first year of my teaching career. I feel comfortable and confident with the teacher I currently am. I decided how and when the time was right for me to try new challenges. The other interns did not follow the same paths as me. I realized in the very beginning I could make choices that worked for me. I developed relationships that supported me to do this. I learned that making choices, good or bad, takes courage. Doing things differently from others around me is challenging. (Interview, June 2000)

Assertion 3: A cycle of observing-teaching-reobserving-reteaching facilitates pre-service teachers' understanding of the principles of teaching and learning and supports the transition of their thinking from perceptual to conceptual notions.

Within the synergistic dimensions of the dyad team, a mentor teacher and an intern continually develop and refine a workable process that models for the novice teacher effective principles of teaching. The mentor teacher demonstrates and explicitly analyses aspects of his or her teaching practice in multiple ways that are developmentally appropriate for the intern. This action facilitates the intern's understanding and practice of learning about teaching and how to teach, and about how to be a teacher. In undertaking the processes' challenges, PDS interns find that the following spiralling cycle greatly assists them in accessing their mentor teacher's tacit knowledge (Ethell & McMeniman, 2000):

- ✓ Focused observation of mentor teacher instructing either a small group of children (3-4) or a class for whole-group instruction
- ✓ Intern and mentor teacher exchange roles. The intern plans a lesson, receives feedback from both the mentor teacher [and the PDA], re-plans and then teaches the lesson [A pre-conference with the PDA, and the mentor teacher when workable pending class schedule]
- ✓ Intern teaches the lesson



- ✓ Intern shares ideas with mentor teacher [and PDA] in a post conference who contribute to the conversation by posing questions to the intern and encouraging the intern to ask questions
- ✓ Intern reflects in writing on the lesson; makes adjustments, suggest changes
- ✓ Mentor teacher and intern again exchange roles and intern observes the lesson
- ✓ Intern co-reflects with mentor teacher [and PDA]
- ✓ Intern plans and teaches next lesson

This cycle provides the mentor teacher a space to signal student teachers to interpret signs of student understanding or perplexity, and talk aloud about making decisions in their pre-lesson planning and in-action lesson changes. Further, mentor teachers can demonstrate how to extend the thinking of elementary students during the lesson enactment, and probe the interns to ask questions about teacher choices, insights, and inklings. Interns have opportunities to rethink and replan specific aspects of their teaching that they considered to be workable on paper but ineffective in practice.

For the duration of the internship, the constant interchange of lesson delivery and control of the teaching proceedings between intern and mentor teacher encourages the intern to view the lesson and hear the children's thinking from differing perspectives. This allows an intern extended space to further probe a mentor's thinking, as well as their own. This aspect of the cyclical process is significantly different from models of traditional student teaching where a unidirectional act of handing over the reigns for each part of the curriculum happens at varying point in the experience.

The evidence supports the assertion that this cyclical process of observing-teachingreobserving-reteaching offers a novice teacher multiple opportunities to explore and make sense



of the principles of teaching and learning. As they experience this cycle, an intern is afforded spaces for assisting a mentor teacher in making explicit their tacit knowledge (Shulman, 1987). When this occurs on multiple occasions, an intern can continue to question and gain insights into the reasons how and why a mentor teacher thinks, acts and decides.

Assertion 4: PDS interns learn about teaching and how to teach primarily through mentoring from a designated mentor and university supervisor. Further, interns learn how to be a teacher through exploring and developing their teaching practices and supervisory relationships in a community of multiple mentors: *E pluribus Unum* – Out of the Many, One.

Throughout the internship experience, the PDS interns identify their mentor teachers and university supervisor as their principal guides and mentors. In describing their supervisory relationships with mentor teachers, interns portray three aspects. First, mentor teachers express to the interns their need for trusting relationships that would be nurtured over time. In establishing these, the mentor teachers and interns share why they decide to become part of this program and, in some cases, describe in detail their commitments. Mentor teachers support the interns as they negotiate spaces to figure out their roles in the classroom and develop relationships with the children and other adults. Second, the interns describe a dialectic relationship with their mentor teachers who talk aloud about their everyday classroom practices, lesson planning, and decision-making strategies. Mentor teachers make explicit what they do and the reasons why. As mentor teachers identify and discuss aspects of their teaching practice, the interns reflect on their own transitory teacher identities. Mentor teachers and interns discuss the reasons for their teaching decisions and actions, and the difficulties inherent in assessing what children know and what they need to know. Mentor teachers offer relationships that create



spaces for interns to ask questions. They model how to probe and extend student thinking by posing questions to the interns. Third, evolving collegial relationships birth collaborative reflection, effective feedback, and reciprocal observation. Mentor teachers suggest ideas for constructing developmentally appropriate activities for the children's learning. They provide the interns with specific feedback about their teaching. The interns are 'given permission' to try out activities they design.

The heightened role of the Professional Development Associate (PDA – traditionally known as university supervisor) in this triad relationship is substantially documented (Gimbert, 2001). Readiness and relationship building with the pre-service and in-service teachers; the stages of the supervision process over time; the PDA's knowledge of and focus on individual children; the flexible structure of the yearlong internship that supported the individual nature of learning to teach, and the role of goal setting and evaluation appear to be quite different in the PDS context (Gimbert & Nolan, 2001).

Relationships with members of the PDS community outside their classroom environments nurture the interns' understanding of how to be a teacher. As they recognize the multiple supervisors in their PDS experience, the interns deepen their thinking about the interdependency of learning about teaching and how to teach, and how to be a teacher. The interns learn how to be a teacher by opening up their thinking and teaching practices to a community of multiple mentors, and seeking to develop professional relationships with their colleagues.

Through on-going conversations with their 'old-timer' (Lave and Wenger, 1991) colleagues in the PDS community, the interns develop an understanding of what it means to do the work of teaching, supporting and enhancing children's learning, and what it means to do the



job of teaching, fulfilling classroom and school-wide goals. Coping with multiple roles and the numerous responsibilities associated with both the job and the work of teaching becomes a source of dissonance for these novice teachers. The interns do not necessarily resolve all of the frustrations associated with this discrepancy. Instead, they find ways to negotiate the tension that arise when they attempt to meet teaching and learning goals and organizational demands.

Instead of assuming that the responsibility for resolving dilemmas is theirs, the interns ask other members of the PDS community: Who can help me understand these concerns? What resources would help me to better understand these issues? Who would be a role model for me to observe and ask questions? Who could give me feedback on how to maintain a sense of balance in my personal and professional life?

As they differentiate and negotiate the work and the job of a teacher, the interns' thinking diverges from that generated by a student teacher in a traditional teaching experience (Bullough, Knowles, & Crow, 1991). Typically, a novice teacher in a traditional student teaching placement is assigned to a single classroom teacher and is required to understand teaching as a discrete classroom-based enterprise (Cochran-Smith, 1991; Knowles, Cole, & Pressword, 1994). Rather, the PDS interns perceive themselves to be welcomed newcomers to a professional community of practice (Lave & Wenger, 1991). As they foster mentoring relationships within the community of practice, the interns demonstrate that learning about teaching and how to teach, and how to be a teacher are interconnected processes. Additionally, the interns fathom how to be elementary school teachers who support and enhance children's learning in the best possible ways.

Assertion 5: PDS interns understand how a school functions as an organization system.

There has been a gradual but sustained shift in recent years toward increased emphasis on the importance of attending to the contexts in which teaching and learning are taking place. The



literature on beginning teacher development is filled with case studies and descriptions of beginning teachers' attempts to deal with the realities of classrooms and school (Bullough, Knowles, & Crow, 1991). The common thread that unites these studies and explains the traumatic nature of many beginning teachers' experience is the lack of mentoring opportunities in the school. While support may be available, beginning teachers have not experienced opportunities to figure out how to access mentoring. These beginning teachers are not conversant on the operations of a school system. The PDS interns display the skills needed to seek out colleagues and resources that may enable their first year of teaching to be less fraught with uncertainty. They are comfortable with recognizing tensions that arise when confronted with a context that may not support their teacher identity, or conform to the image of teaching they hold. The interns are more tolerant of those whose teaching style does not match theirs.

After experiencing the IST meetings, grade team and unit planning meetings, faculty meetings, school district in-service days, and presentations by school district administrators, Caran believed she had an understanding of

school systems to build on, and make changes that work for my students. I understand how complex a school system is. I am starting to see how standards, curriculum, children and teachers fit together. I have found people to help me further this understanding. (Interview, June 2000)

As they question curriculum content within a larger social context, the PDS interns cultivate "a nose for the unintentional curriculum" (Solitis, 1994, p. 249) that can reproduce social injustices and power. The PDS interns assess and proactively respond to children's needs in order to work at relieving social injustices in their schools. For example, as Colleen and Caran planned the Festival of the Arts unit, they noted that the artists represented on the timeline approach devised by their mentor teachers were white, European males. These interns felt strongly that their students "needed to understand that



it wasn't only in Europe and in the sixteen, seventeen, and eighteen hundreds that art was happening" (Interview, June 2000).

Conclusion

This study is significant in multiple ways. First, this research presents the voices of those experiencing the PDS internship first-hand. The existing PDS literature points to the need to deconstruct the interns' yearlong experiences if we are to understand and recreate this experience for others. This study informs teacher educators, classroom practitioners, and pre-service teachers engaged in understanding alternative ways to prepare prospective teachers. It offers contributions to the developing PDS literature, as well as to the voluminous scholarship on learning to teach.

Second, while this study has ended at this point, this model offers implications for the restructuring of teacher education programs in terms of fostering structural and normative supports for nurturing the professional growth and development of pre-service teachers during a yearlong field experience. This theory needs to be subjected to further empirical testing. The question becomes at this point, Would the model hold if I gathered more information from people similar to those that I initially sampled? Also, since the emergent findings are presented for consideration by teacher preparation programs in differing contexts, how would the model apply in other school-university settings?

Third, this study offers a model of learning to teach that can be used to assess the National Council for Accreditation of Teacher Education, *Standards for identifying and supporting quality professional development schools.* Specifically, this theory offers evidence that supports two of the critical attributes of the third stage of PDS development. Critical Attribute I addresses the PDS as "a learning-centred community that is characterized by norms of



practice which support adult and children's learning" (NCATE, 2001, p. 11). This model provides evidence that interns are inducted as members of a community of practice, and function as part of the instructional teams. The interns contribute to school-wide decision making. The PDS interns describe their experience in the PDS context as shared standards of practice, conjoint construction of 'knowledge of practice' (Cochran-Smith & Lytle, 1999), team planning, co-teaching and co-inquiring, and collective reflection. The interns portray their mentoring experiences as opportunities for learning by questioning, by doing, and by collaborating with multiple mentors who hold differing perspectives. Such learning communities stimulate possibilities for building new ways of knowing for the practice and profession of teaching and learning.

Critical Attribute IV identifies the ways in which a PDS "uses processes and allocates resources and time to systematize the continuous improvement of learning to teach, teaching, learning, and organizational life" (NCATE, 2001, p. 16). As they live out the internship year, the PDS interns spend time observing, teaching, and reflecting with many members of the PDS community. The interns observe in multiple grade level rooms, and co-teach with different mentor teachers and different interns, methods course instructors, and university-based teacher educators. The interns reflect with children, mentor teachers, peer interns, university faculty, school administrators, building professionals, and parents. Besides undertaking classroom instructional roles, the interns experience school-wide responsibilities, such as attending IST meetings, coordinating grade level culmination activities, and coaching sports teams.

Last, this study suggests researchers need to undertake comparative studies that explore ways in which PDS work shapes and affects the quality of teacher preparation. How are preservice teachers who are prepared in PDS contexts developmentally different from those who



participate in traditional student teaching settings? How does the tension between the job and work of teaching affect pre-service teacher development? Additionally, the nature of PDS context raises such questions as: How do interns experience learning to teach in a PDS in an urban setting? What different roles emerge as a PDS community grows and changes? And, How do these roles impact pre-service teachers' experiences in a PDS?

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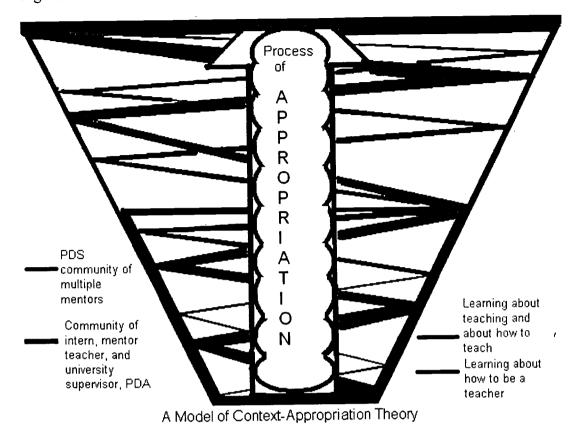
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Figure 1.



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Figure 2.

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Ask, VVho owns the curriculum?

Recognize the community partners in the school system

Develop teacher relationships

Shape a transitory teacher identity

Understand how children think and learn

Think and Do

Unlock expert practitioners' knowledge and skills





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