A HOLISTIC INVESTIGATION OF
TEACHER IDENTITY, KNOWLEDGE, AND PRACTICE

DISSERTATION
Presented in Partial Fulfillment of the Requirements for the
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Graduate School of The Ohio State University

By
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The Ohio State University
2008

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ABSTRACT

This dissertation is a collective of three manuscripts that explore the relationships among teacher identity, knowledge, and practice through a holistic lens. Chapter 2 contains a review of literature that treats professional knowledge or teacher identity as the foundation for teachers’ classroom practice. After reviewing related empirical studies published since 1985, this chapter advocates for holistic investigations of teacher practice, investigations that take into account what teachers know and who they are. This chapter also argues for bridging psychological and educational discussions of identity. In particular, it includes brief discussions of the theories of Erikson, Kotre, Levinson, and Kegan and the ways in which they might be helpful for understanding teachers’ experiences.

Chapter 3 documents an empirical study exploring expert high school teachers’ identities, knowledge, and practice. Using observation and interview methods, this study documented that expert teachers’ identities are composed of many identities. Five were shared by the four participants: advocate for students, challenger, classroom manager, learner, and teacher leader and mentor. Despite these similarities, participants structured their identities and perceived their expertise differently depending on their teaching context. This study also
identified three characteristics of expert teachers. The first was alignment between identity priorities and expenditure of time and energy in class. Second, these expert teachers were generative, and they talked about four channels of generativity: students, novice teachers, the teaching profession, and the community. Finally, participating teachers acted on the basis of integrated knowledge. However, their conception of this blended knowledge differed from pedagogical content knowledge as commonly described in the field. Whereas the field views the integration between pedagogical knowledge and subject matter knowledge to be primary, participating teachers emphasized the connection between pedagogy and knowledge of students. Moreover, this study documented the combination of teacher identity and knowledge provides a clearer picture of the foundation of teacher practice than either identity or knowledge alone.

Chapter 4 outlines a model for holistic dance teacher preparation. It begins with a review of the literature related to dance education, teacher education, and holistic education. It concludes with four tenets of holistic dance teacher preparation: focus on the whole person, integrated curriculum, explicit identity development, and apprenticeships in relevant communities of practice. Although written about the context of dance education, these four tenets are applicable to teacher education in general.
Dedicated to my first and most expert teacher, my mother, Anita Dickerson
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On the basis of convention, I am the ‘sole’ author of this document. This should not suggest, in any way, that writing this dissertation has been a solo endeavor. I could not have done it alone; my collaborators are many, and I have been so blessed by their time, energy, and insight.

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PUBLICATIONS


FIELDS OF STUDY

Major Field: Education
Areas of Focus: Teacher Education, Somatic and Movement Studies, Qualitative Research Methods
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CHAPTER 1

INTRODUCTION

The idea for this study emerged through my reflections on my experiences as a teacher. In particular, I wanted to make sense of the teacher identities I possessed and learn how to move toward a unified, holistic conception of myself as an educator. Moreover, I wanted to better understand how my identities were related to what I did and what I knew in terms of pedagogy and content. Lastly, I thought about what it would mean for any, or all, of these identities to develop into an identity as an expert teacher.

When I developed the design and conceptual framework for this study I had four distinct, yet overlapping, identities as a teacher, “aspects of the whole that constitutes me” as an educator (Peshkin, 1988, p. 18). The first was Math Teacher. In the autumn of 1999, I was hired as a math teacher in a large public high school in Alabama on the basis of having completed a bachelor’s degree in mathematics. Three years later I was hired for a similar position, on the basis of the same credentials, at an independent high school in South Carolina. Any sense I had of how to be a math teacher derived from my confidence in my knowledge of mathematics. Although I had considerable expertise related to the
high school math curriculum, I possessed only basic knowledge of how to teach math. This knowledge was gleaned through ‘apprenticeships of observation’ (Lortie, 1975), observations of my own teachers and discussions with my mother, a career special educator.

My second teacher identity was Dance Teacher. This identity began to emerge when I served as an assistant instructor in several dance technique classes during my high school and undergraduate years. It became more developed when I took full teaching responsibility for a class while I was pursuing graduate studies in dance at Texas Woman’s University. It was also during this time that I began developing a related identity, Somaticist. As Somaticist, I believed that the body and mind are not truly distinguishable and that the experience of knowing is corporal as well as mental. People can ‘know in their bones,’ or ‘know in their guts,’ things they cannot readily articulate in words or analyze logically. These beliefs had a profound impact on who I was as a teacher both in dance and other educational contexts.

My experiences as Somaticist and Dance Teacher stood in contrast to my experiences as Math Teacher. I began teaching dance technique with a different level of confidence because I had studied the content of the course and best practices in movement and somatics education. I would not, however, have labeled myself an expert dance teacher. First, I was insufficiently experienced. I had not taught enough dance classes to feel that I was an expert dance teacher. Second, I did not perceive myself to be an expert dancer, even though I was quite experienced as a performer, choreographer, and dance scholar. Although I
had trained extensively and was very adept at seeing the presence or lack of good technique in the performance of others, I was insufficiently confident in my own skills as a dance technician and performer.

My third teacher identity was Teacher Educator, an identity I lived out in the teaching of foundations courses designed for prospective teachers. Although I was not a historian, philosopher, sociologist, or psychologist, I felt comfortable teaching these classes. Through my classroom experiences and coursework in teacher education, I had developed the pedagogical knowledge to engage students in the content and to model best practices in teaching for my students, most of whom were future P-12 educators. My teaching identity in this context was largely based on my pedagogical expertise.

I knew in my bones these four teaching identities were fundamentally different and yet inextricably linked. I also knew in my bones that these three identities were comprised of many others: who I was as a student, artist, leader, researcher, scholar, and advocate for teachers and the profession of teaching. This sense of what I knew in my bones and my teaching experiences led me to ask questions about the nature of teacher identity, professional knowledge, and expertise. Consequently, I was deeply interested in how I came to possess these three identities. Was it simply a matter of performing, practicing, or enacting them? Was it a function of what I knew and knew how to do? As Math Teacher, I possessed subject matter expertise yet was not an expert. As Dance Teacher, I was a participant in communities of practice devoted to dance-making and teaching dance, yet was not an expert. As Teacher Educator, I was well-versed
in pedagogy for teacher education, yet still did not feel like an expert. So, I became interested in what it means to be an expert teacher and the location of expert teacher identity. Although I felt I possessed expert knowledge related to each of these identities, I did not see myself as an expert teacher. Is expertise grounded in identity as well as knowledge? If so, what would it mean for any one of my teacher identities to become an expert identity?

As a result of these questions, I proposed the following study with the intention of extending prevalent views regarding teacher expertise, knowledge, and identity. I believed expertise in teaching to be more complex, more layered than simply years of service, extended content knowledge, or pedagogical mastery, even though each of these—sometimes individually and sometimes in combination—are commonly-used ways of sampling expert teachers (see Palmer, Stough, Burdenski, & Gonzales, 2005). The results of this study shed light on the nature of teacher identity and expertise. These insights also have implications for teacher education practice. In this chapter, the purpose, research questions, theoretical framework, and emergent elements of the research design are outlined. The chapter concludes with a discussion of the limitations and contributions of the study.

Purpose of the Study

The purpose of this study was to explore expert high school teachers' conceptions of who they are in their classrooms and how their identities are related to their classroom practice.
Research Questions

This study was guided by the following questions:

1. How do expert teachers define and describe themselves as teachers? In what ways do these self-definitions and descriptions hold meaning? What are the salient characteristics of expert teachers' identities?

2. What is the nature of the relationships among expert teachers' identities, professional knowledge, and practice?

3. In what ways is expert identity revealed through teachers' decision-making and practice regarding curriculum, instruction, and relating to students?

4. In what ways do expert teachers' identities extend beyond expert knowledge, decision-making, and practice?

Theoretical and Conceptual Frameworks

The conceptual framework for this study resulted from the layering of several theoretical perspectives. This layering shaped the research purpose and questions as well as the design of the study, and it included paradigmatic approaches, formal theories, and substantive theories as defined by Goetz and LeCompte (1984). Paradigms are synonymous with worldviews, and they are based on “loosely interrelated sets of assumptions, concepts, and propositions” (p. 37). The paradigms that influenced this study are holism and social constructivism. Formal theories, such as those related to the nature of identity and communities of practice, are narrower in scope than paradigms and address
a singular area of human experiences. Substantive theories are the most specific of the three: “They are restricted to features of populations, settings, and times that can be identified concretely (Glaser and Strauss 1967)” (Goetz & LeCompte, 1984, p. 38). Substantive theories that shaped this study are those related to teacher identity, expertise, and teacher knowledge. Each of these elements of the conceptual framework of this study is further explicated below.

**Paradigmatic Approach**

*Holism.* Holism is most easily explained through a maxim asserted by Aristotle in *Metaphysics:* “The whole is something beside the parts” (trans. 1924, book viii, chap. 6). Similarly Miller (2000) claimed that holism is a perspective wherein meaningful connections that exist between all things are sought and acknowledged. This worldview shaped my conception of this study in three significant ways. The first is the belief that expert teacher identity is inextricably linked to knowledge, decision-making, and action. The second is that, although each of these elements is a part of teacher identity, teacher identity is not merely the sum of these elements. Teacher identity must, therefore, be explored as a whole. The last is that although teacher identity is not entirely revealed through the querying of these constituent parts, each of these parts is, in and of itself, a whole worthy of study. In addition to these influences regarding the ways I understood and planned the research questions, the adoption of a holistic stance bore directly on the data analysis and representation. I looked for and emphasized connections, rather than discontinuities.
Social constructivism. Social constructivism is both an epistemological and ontological perspective; both knowledge and reality are assumed to be the result of social interaction and construction (Schram, 2003; Schwandt, 2003). Implicit in my selection of this paradigm as a foundation for this study are the assumptions that people’s knowledge and beliefs about the world are constructed, that much of what is known is shared or co-constructed through processes of social interaction, and that there are also elements of individual perceptions of reality that are idiosyncratic because of unique layerings of social interactions and experiences (Schram, 2003; Schwandt, 2003). These assumptions shaped the way I conceived of this study. One focus of this study was the generation of theory regarding teacher identity, expertise, knowledge, and practice that is grounded in themes and experiences shared across the participants. A second focus of this study was the exploration of that which is particular to each participant. In what ways are teacher identity, expertise, knowledge, and practice distinctive to individual expert teachers?

Formal Theories

*Identity.* Within the literature of psychology, identity is frequently described as residing at the intersection “stability and change,… psychological autonomy and connection, and… intrapsychic and contextual components” (Kroger, 2007, p. 5). These tensions suggest identity can be understood as layered, context-dependent, and fluid. It follows that there are other identities, beliefs, knowledge, and practices imbedded in teacher identity, that teacher identity is shaped by both the other identities a teacher holds and the contexts in which these identities
are enacted. Individuals may, at any given time, experience teacher identity, or elements thereof, as concrete or shifting (Day, Kington, Stobart, & Sammons, 2006).

For purposes of this study, I drew on psychosocial approaches to identity, specifically the theories of Erikson, Kotre, and Levinson. These theories integrate the internal and external influences on personal identity. I assumed these theories would be helpful because they account for teachers’ internal influences, such as their personal experiences, beliefs, and knowledge, as well as their external influences, such as those related to teacher training, school contexts, and relationships with colleagues and students. Additionally, these theories have in common stage-models of identity development (Kroger, 2007). For Erikson and Kotre these stages are organized around a dilemma that must be reconciled. Of particular interest regarding the development and nature of expert teacher identity is the stage characterized by the tension between stagnation or self-indulgence and generativity, a desire to nurture future generations (Erikson, 1963). For Levinson, these stages or eras each have a unique life structure, “the patterning of one’s life at any given time” (Kroger, 2007, p. 26), and they are marked by a primary task. At the beginning of an era, individuals are novices regarding the task and, before transitioning to the next era, they master the task (Levinson, 1986). Regarding teacher identity, this raises the questions: What are the eras and related tasks relevant to the development of an expert teacher identity? How do expert teachers experience the novitiate phases inherent in the transitions from one era to another?
Communities of practice. In his theory of social learning, Wenger (1998) gave a great deal of attention to the roles of identities and communities of practice. He further highlighted the relationships between these two concepts, claiming they are intimately connected. Before exploring communities of practice, it is helpful to explore what Wenger meant by practice. He wrote:

The concept of practice connotes doing, but not just doing in and of itself. It is doing in a historical and social context that gives structure and meaning to what we do…. Such a concept of practice includes both the explicit and the tacit…. It includes the language, tools, documents, images, symbols, well-defined roles, specified criteria, codified procedures, regulations, and contracts that various practices make explicit for a variety of purposes. But it also includes all the implicit relations, tacit conventions, subtle cues, untold rules of thumb, recognizable intuitions, specific perceptions, well-tuned sensitivities, embodied understandings, underlying assumptions, and shared world views. (p. 47)

Communities of practice then are communities, whether formal or informal, that share this kind of nuanced, meaningful practice. Wenger further argued identity rests at the intersection, the “nexus of multimembership” (p. 149), of all of the communities of practice to which a person belongs. This definition of identity is actually synonymous with self. Lemme (2002) defined self as “consisting of all the knowledge, feelings, and attitudes we have about ourselves as unique, functioning individuals” (p. 81). From this perspective a self can be construed as a layering of identities or ways of being in the world. Nevertheless, Wenger's
theory is useful because even if identities are multiple, individual identities can be dependent on memberships in a community or multiple communities of practice. For example, a chemistry teacher’s identity might be contingent upon membership in each of the following three communities: teachers, those interested in chemistry, chemistry teachers. Wenger’s approach is also useful because it highlights the relationship between identity and practice; identity is both revealed and constructed by the practices a person adopts. Extending the previous example, a chemistry teacher’s conception and expression of what this identity means may be grounded in performing practices associated with teachers, chemistry, and chemistry teachers.

Substantive Theories

Substantive theories are those theories that explain the meaning of specific constructs in specific contexts. They are more local than theoretical models and formal theories, and they give meaning to the terms central to the research questions and purpose (Goetz & LeCompte, 1984). The essential concepts for this study are teacher identity, knowledge, decision-making and practice, and expertise. My understanding regarding these terms came directly from the literature related to teaching and teacher education. Furthermore, my understanding of these constructs, their definitions, and the ways in which they are interconnected informed the purpose, questions, and design of this study.

Definitions of Key Terms

In order to clarify the purpose, research questions, and research context, I offer the following definitions for the constructs central to this study.
**Expertise** – Deep and extensive professional knowledge that serves as the foundation for teaching practices resulting in significant student learning, stimulating classroom cultures, and professional development (Barone, Berliner, Blanchard, Casanova, & McGowan, 1996; Bullough & Baughman, 1997; Collinson, 1996; Leinhardt, Young, & Merriman, 1995; Palmer et al., 2005; Shulman, 1987; Shulman & Shulman, 2004).

**Identity** – One way of being in the world; answers to the questions: Who am I now? How do I understand myself in this context? (Danielewicz, 2001; Korthagen, 2004; Lemme, 2002; Wenger, 1998).

**Knowledge** – readily accessible schema, or conceptual information, related to a particular domain (Feldon, 2007b)

**Pedagogical Content Knowledge** – Knowledge that gives shape to and illuminates a means of achieving educational goals related both to particular content and particular students (Andrzejewski & Davis, 2008; Ball, 2000; Chen & Ennis, 1995; McCaughtry, 2005; Nakigoğlu & Karakoç, 2005; Shulman, 1986, 1987, 1988).

**Pedagogical Knowledge** – Understanding related to concepts, theories, and practices of effective teaching and significant learning (Cruickshank et al., 1996; Segall, 2004; Shulman, 1986, 1987).

**Subject Matter Knowledge** – Facts, values, ways of organizing ideas, theories, skills, strategies, understandings, and conceptions tied to a discrete discipline (Chen & Ennis, 1995; Shulman, 1986).

Teacher Identity – A way of being as a teacher; an answer to the question: Who are you when teaching? (Barone et al., 1996; Beijaard, Meijer, & Verloop, 2004; Connelly & Clandinin, 1999; Danielewicz, 2001; Day, Elliot, & Kington, 2005; Lasky, 2005; Palmer, 2003).

Audit Trail

Given that qualitative inquiry is, at least in part, an improvisational endeavor, what follows are an outline of the basic structure for this study and a discussion of the necessary adjustments and additions that surfaced during the recruitment of participants, data collection, and data analysis (Janesick, 2003).

Pilot Study

I conducted a pilot for this study with a college-level dance instructor, whose pseudonym is Anna (Andrzejewski, 2007). It is important to discuss the pilot because the design for this study emerged through the processes of carrying out and reflecting on that mini-study. The data collected for the pilot study were one unstructured observation, two structured observations, and one semi-structured interview. The unstructured observation led me to understand that I was interested in teacher identity and the ways in which it manifests in classroom decision-making and practice. As a result of that discovery and an interest in the relationship between teacher identity and teacher knowledge, I chose to organize my second observation around the categories of subject
matter, pedagogy, and knowledge of students. Having completed my second observation and reflecting on the array of teacher actions I created, I realized sorting Anna’s behaviors into a priori categories told me nothing about how she conceived of herself or her classroom practice. I then decided to reconfigure the last observation and simply record, rather than sort, Anna’s observable classroom decisions and practices. During the follow-up interview I asked Anna to sort those decisions and actions into the categories of subject matter, pedagogy, and knowledge of students. When the sorting process was complete, I asked her to reflect on the resulting arrangement and to talk about what it communicated about who she was as a dance teacher.

I expected this procedure would tell me something about Anna’s teacher identity because I imagined the professional knowledge categories of pedagogy, content, and pedagogical content were reflected in analogous identity categories—teacher, dancer, and dance teacher, respectively (see Figure 1.1). In other words, I imagined that Anna’s teacher identity would be composed of identities directly tied to teacher knowledge categories and that it would be organized in a way that was parallel to the commonly-used taxonomy of teacher knowledge (Shulman, 1987). However, I realized during the process of analyzing Anna’s interview that she instead conceived of her teacher identity as constructed through the layering of identities as trainer, performer, and advocate for dance. I learned through working with Anna that the relationship between teacher identity and knowledge is more complex than I had assumed. In an effort to better understand this relationship and its connection to teacher decision-
making and practice, I revised the sorting and follow-up interview protocol to include a second sort based on identity themes (see Appendix A). I also made the decision to conduct an unstructured interview with each participant prior to conducting observations and follow-up interviews. These interviews allowed me to identify emergent themes related to the participants' teacher identities.

Figure 1.1. Assumed relationship between identity and knowledge, pilot study.

**Sampling Decisions**

In their review of empirical studies, Palmer et al. (2005) identified commonly used indicators of teacher expertise. The first indicator is experience characterized by “deliberate practice” and a “desire for mastery” (p. 15) (see also Berliner, 2004). The second includes both social recognition of expertise and
membership in a group identified as possessing expertise: “Experts are chosen and described by others as ‘experts’ ” (Palmer et al., 2005, p. 15). Other studies have similarly documented that expert teachers can be readily identified by coworkers (see Collinson, 1996; Ellett, Loup, Evans, & Chauvin, 1992). The third and fourth signs of expertise are performance indicators, both normative and criterion-based; those who are experts outperform those who are not, and their performance meets or exceeds established standards of expertise (for examples, see Bond, Smith, Baker, & Hattie, 2000). Expert teachers are best identified through a multi-stage process that includes criteria related to each of these four categories. Accordingly, I developed a multi-stage sampling protocol for identifying expert, secondary teachers (see Appendix B).

Regarding the first category, experience, the teachers recruited for participation in this study had a minimum of five years experience teaching the same subject matter in a high school setting (stage 1). Regarding the second category, social recognition and professional group membership, participants had served as cooperating teachers (stage 2), which requires the maintenance of up-to-date state licenses in their subject areas. They were also nominated by both an administrator in their schools and a university or college teacher education faculty member (stages 3 and 4). Regarding the third and fourth categories, performance indicators, nomination by both school administrators and university or college faculty was contingent upon evidence of effectiveness regarding modeling instruction, intellectual capacities including critical reflection, the ability to articulate reasoning behind action, and student (both 9-12 and student
The fifth stage of the sampling protocol was participating teachers' self-perceptions regarding whether they were expert teachers.

I also considered using high school student nominations of expert teachers to identify potential participants. Although a literature search yielded no studies regarding high school students' assessment of their teachers, there have been many studies regarding the factors that influence college students' evaluations of instruction. Two recent studies, Blackhart, Peruche, DeWall, and Joiner (2006) and Wright and Palmer (2006), reported significant relationships between high student evaluations of instruction and high expected or average grades in the course. Furthermore, Gump (2007), in a review of related literature, found that more than half of the studies regarding the "leniency hypothesis" confirmed the relationship between high grades and high evaluations of instruction. These findings indicate college students may view teachers whose instruction is rigorous and challenging more negatively than their lenient counterparts. Because I believe these findings would likely hold true for high school as well as college students and because I assume many expert teachers will be more demanding than their colleagues, I elected not to include student nominations in the sampling protocol.

Having considered these markers of expertise as well as what I supposed would be required of participants, I chose to sample cooperating teachers. First, including cooperating teachers allowed for nomination by colleagues and also by college or university faculty who utilize different lenses through which to assess teacher expertise. Second, the responsibilities of serving as a successful
cooperating or mentor teacher require comfort with having an observer in the classroom, a willingness to candidly reflect on teaching practices, and the ability to articulate “knowledge-in-practice” (Graham, 2006, p. 1124). These traits also facilitated their participation in this study.

Once I identified potential participants through use of the sampling protocol, I invited them to participate via letter or e-mail (see Appendix C). Those who chose to participate received a letter indicating the agreed-upon date and time of the first interview (see Appendix D). I included a short research proposal and a copy of the consent form (see Appendix E) with this letter.

I initially planned for study participants to include at least four expert, cooperating teachers, each of whom taught a different subject at the high school level. I also planned that half of these teachers would teach a required academic subject such as English, mathematics, science, or social studies and that the others would be teachers of disciplines peripheral to the core curriculum such as visual or performing art. I based this goal on the supposition that teachers of marginalized subjects would view both their subject matter and their teacher identity in ways that differ from teachers whose subject is part of the core curriculum (Paechter & Head, 1996).

Following Institutional Review Board approval (see Appendix F), recruitment began for this study in April 2007. I began asking for nominations from college and university faculty who were familiar with cooperating teachers. I then pursued permission, through the Office of Outreach and Engagement, to conduct research in several local districts. After waiting through the summer, I
was granted permission by one local, suburban district. I then asked administrators in that district for permission to collect data in the school buildings (see Appendix G). I was granted permission, and after these administrators made their nominations of expert teachers, I was able to invite three teachers to participate in the study. The first, a biology teacher, agreed to participate in September. Later that month, the second, a 9th grade language arts teacher, also agreed. Their respective pseudonyms are Sarah and Laura. The third, a music teacher nearing retirement, declined.

After completing the data collection procedures with a science teacher and an English teacher, I was eager to identify two teachers of marginalized content areas. My recruitment efforts continued, unsuccessfully, throughout the fall. Administrators, even one working in an arts magnet high school, nominated very few arts teachers, and those that were nominated by administrators were not nominated by college or university faculty members (see Appendix H). In December, I began reconsidering the target sample for the study. Although I was disappointed given my interest in arts education and my belief that arts teachers are likely to view their identities differently from teachers of required content areas, I revised the target sample to include another language arts teacher and another science teacher. In January 2008, I successfully recruited a 9th grade language arts teacher who was working in an urban school. She chose Marnie as her pseudonym. At that point, I identified an urban, biology teacher who agreed in February to be the last of the four participants. Her self-selected pseudonym is Sue (see Chapter 3 for a more elaborate discussion of the participants).
Emergent Design

Just as some elements of the study’s design emerged as a result of the pilot study (see Appendix I for an outline of the data sources for this study), others emerged as a result of my interactions with the participants in the study itself. During the unstructured interview, Sarah communicated she felt she was different as a teacher depending on who the students in the class were. I consequently decided the two observations with each participant needed to be conducted during different class periods so that I would have an opportunity to observe each teacher teaching somewhat different content to different groups of students.

Similarly, my interactions with Laura and Marnie pressed me to make additions to the data collection procedure. Laura repeatedly mentioned that the process of sorting her behaviors into identity themes reaffirmed that she was enacting her beliefs in her classroom. In other words, she was spending the majority of her time doing what she thought was most important. Her comments prompted me to think about whether alignment between priorities and behavior is a common feature of expert teachers. As a result, I asked each of the participating teachers to rate their identity themes from most to least important. This allowed me to assess the degree to which their time and energy expenditure, during the two classes observed, aligned with their stated priorities (see Chapter 3 for a discussion of related findings).

Marnie talked a great deal about the important role of student teachers in her classroom. Throughout her 34 year career, she has mentored approximately
50 student teachers, and to her knowledge all of them are still practicing teachers. Her comments prompted me to consider the professional legacy of these teachers through their influence on pre-service and novice teachers whom they had mentored. As a result, I determined to ask each of the participating teachers about the number of teachers they had mentored, the number of those mentees with whom they were still in contact, the nature of those relationships, and how many of their mentees were still employed as classroom teachers (see Appendix J). My interactions with Sue yielded no additions or modifications to the data collection procedure, which indicated to me that the procedure was saturated.

Based on my interaction with the four participants, I now believe one element of the data collection procedure may have been unnecessary. As indicated in the post observation interview schedule (see Appendix A), I asked each of the participants to review my observation notes before beginning the sorts. These reviews were made to ensure the observations were accurate and comprehensive. I asked the participants to review my observation notes because I thought there would likely be instances of decision-making and practice I missed during the observation. I presumed I would fail to record these instances for three reasons: 1) they occurred before or after the observation; 2) they were hidden from view because they were implicit (Wenger, 1998); or 3) they were simply overlooked. Over the course of the eight follow-up interviews for this study, the observation notes were only revised twice. Sarah added her practice of preparing for labs the day before, and Marnie deleted one note because it was
inaccurate. Given that less than 0.04% of the notes were changed by the participants, I believe my observation method effectively captured classroom decision-making and practice as the participating teachers conceived of it. Although I believe asking the participants to verify my observation notes was a worthwhile member check, doing so did not substantively change the data collected or the subsequent analysis of it.

Deciding What Stories to Tell

I began by making four theoretically-driven passes through each case, all of the data related to an individual participant. The first was guided by Levinson’s (1986) model of adult identity development. This model asserts that each era of identity development “includes all the roles an individual occupies” (Bee & Boyd, 2003, p. 372). I made this pass in order to identify the emergent identity themes related to each participant. For the second and third passes, I looked for text about the nature and structure of identity and pedagogical content knowledge, respectively. The final theoretical pass was an inductive pass based on my assumption that expert teachers would evidence significant generativity in their professional lives (Erikson, 1963; Kotre, 1998). I made three additional passes through each case based on my subsequent insights. During the first I attended to comments related to teachers’ priorities. The second was through the lens of subject matter, and the third was focused on the school and community environments.

Having completed seven passes through each case, I synthesized across cases and reorganized the data around coding themes, rather than by
participant. Completing this reorganization allowed me to recognize patterns evidenced across all four of the participants. Based on these emergent patterns, I designed a grounded questionnaire (see Appendix K). This questionnaire may be used for future research. For this project, I used it as a member check (Lincoln & Guba, 1985). I sent the grounded survey to each of the participants as a way to verify that my interpretations of the data were well-aligned with their understandings about who they are, what they know, and how they behave as expert teachers. Each of the four teachers returned the questionnaire, and there were no surprises in their responses (see Appendix L). I also asked each of the participating expert teachers to give me feedback on the content and format of the questionnaire. Their feedback will be used to improve the questionnaire before utilizing it in future studies.

Limitations of the Study

As with most qualitative studies, this study was limited primarily as a result of the small sample. The “tradeoff between breadth and depth” (Patton, 1990, p. 184), the choice to deeply investigate an open range of experiences of a few people rather than broadly explore specific experiences of many, limits the ways in which the findings may be used. It necessarily means the products of this study, although inherently useful in understanding the identities of the participating teachers, cannot be generalized to the identities of all expert teachers. Furthermore, even though the findings of this study can shape thinking about teacher identity and point to promising areas for future inquiry, they can only be extended to high school teacher identity, as middle and elementary
school teachers do not typically identify with a single subject. Although the research questions were aimed at understanding expert teacher identity in general, the sample purposefully included only those who volunteer, or have volunteered, to be cooperating teachers, mentors for student teachers involved in field experiences or student teaching. There may be significant differences between the experiences and understanding of those who volunteer and those who do not. Furthermore, this study is reliant on the voluntary participation of the recruited expert teachers. Given that I only had the opportunity to invite five teachers and four of them agreed to participate, I believe willingness to participate in research may be a characteristic of expert teachers. That said, I do wonder about the fifth teacher. What does this study say about her? In what ways are her experiences and understandings represented here?

Lastly, although I am confident the sampling protocol used in this study allowed me to identify expert teachers, I am concerned about expert teachers who were excluded on the basis of this protocol. All the participating teachers are white females. In what ways do the experiences of male or non-white expert teachers differ? And, as mentioned previously, I was unable to include teachers of marginalized subjects in this study. In what ways might their experiences disrupt the findings I present here?

Significance and Contributions

Despite these limitations, this study makes significant contributions to the literature regarding teacher identity, teacher expertise, cooperating teachers,
teacher education, and implementing educational reform. The following reviews these contributions.

**Teacher Identity**

Beijaard, Meijer, and Verloop (2004) stated, “In the last decade, teachers’ professional identity has emerged as a separate research area” (p. 107). Previous studies regarding the characteristics of professional teaching identities have focused on teachers’ perceptions of the qualities of their identities and the extent to which these are related to certain outcomes such as collaboration, teacher burnout, or implementation of reform (Beijaard et al., 2004). The nature of other identities which might be combined in the formation of teacher identities has not often been explored in the teacher identity literature. Given one of the goals of this study was to explore the ways teachers construct their identities, through the layering of other relevant identities, this study commences a new line of inquiry within the study of characteristics of teacher identity.

This study also bridges two as yet unconnected bodies of knowledge: theories of identity development rooted in the discipline of psychology and the study of identity development as it specifically pertains to classroom teachers. Studies of teachers’ professional identity development have been framed by concepts such as active participation, professional community membership, knowledge acquisition, teachers’ implicit theories, and the tension between social expectations and personal values (Beijaard et al., 2004). They have not routinely examined professional teacher identity formation through the lenses of psychological theories of identity development. I analyzed the data for this study
through the lenses of Levinson’s (1986) model of adult identity development and Erikson’s (1963) theory of identity. Regarding the latter, I focused specifically on the generativity versus stagnation stage as elaborated by Kotre (1998).

**Teacher Expertise**

Palmer and colleagues (2005) briefly reviewed the evolution of studies regarding teaching expertise. Early studies followed a ‘process-product’ model wherein teacher quality was measured solely on the basis of student achievement. A second phase of this inquiry “emphasized how teacher cognition and decision-making affected the quality of classroom instruction” (Palmer et al., 2005, p. 13). More recently, researchers have examined the context and task specificity of expertise as well as its relationship to bodies of knowledge relevant to teaching. They have also queried the interpersonal dimensions of expertise, specifically regarding the role of knowledge about students in expert teaching (McCaughtry, 2005). However, they have not investigated the intrapersonal dimensions of expert teaching. It is in this capacity, as a connection between expertise and identity, that this study advances the understanding of what it means to be an expert teacher.

**Cooperating Teachers**

There is pervasive recognition among teacher educators that cooperating teachers play a pivotal role in the professional development of pre-service teachers (Sinclair, Dowson, & Thistlethwaite-Martin, 2006). In fact, many practicing teachers cite interactions with cooperating teachers as the most influential elements of teacher preparation (Clarke, 2001). “Despite this… little is known
about the kinds of teachers who offer to take student teachers” (Sinclair et al., 2006). Indeed Sinclair et al.’s (2006) literature search for studies regarding the characteristics of cooperating teachers yielded only two published articles. Given that the sample for this study was comprised solely of teachers who are or have been cooperating teachers and that its purpose was to understand these cooperating teachers’ identities, it clearly fills a void in the literature regarding the characteristics of cooperating teachers. It also offers valuable information to university faculty and school administrators whose goal is to recruit and retain high quality cooperating and mentor teachers.

Teacher Education Curriculum and Pedagogy

According to Danielewicz (2001), all education should be geared toward the construction of identities, the “transformative reimagining of self” (p. 133). It follows logically that teacher education should result in the construction of teacher identities, which coexist with other strongly held identities—professional or otherwise. Better understanding the processes of classroom identity construction can inform the ways teachers in any discipline or field are educated at every stage of their professional lives by improving understanding of the processes and experiences through which professional identities are constructed.

Implementing Educational Reform

Finally, the success or failure of educational reform movements often hinges on the willingness and ability of teachers to implement related practices in their classrooms. In their research regarding the impact of reform on teacher
identity, Lasky (2005), Flores and Day (2006), and Day, Elliot, and Kington (2005) found teachers’ professional identities are often challenged by their perceptions of a misalignment between the motives and nature of reform efforts and their identities as teachers. A better understanding of the nature of the relationship between teacher identity and practice provides insight into the facilitation and implementation of educational reforms.

Forward

The following four chapters represent a collective investigation of the relationships among teacher identity, knowledge, and practice. Chapter 2 reviews the literature related to teacher practice, knowledge, and identity. The purpose of this chapter is to highlight the need for these three constructs to be holistically examined in concert and to argue for exploring teacher identity through the lenses provided by psychological theories of identity development. Chapter 3 is written in the format of an empirical journal article. It includes a synopsis of the literature presented in Chapter 2; a detailed description of the methods of the study including recruitment of participants, data collection procedures, and data analysis; an explanation of the findings and their data-based justifications, and a discussion of the study’s implications for future research and educational practice. Chapter 4 is a conceptual chapter, which posits four tenets of holistic teacher preparation in the context of dance education. Each of the four tenets is related to teacher identity, teacher expertise, and the ways in which identity and expertise are developed. The concluding chapter, Chapter 5, contains a synthesis of what I learned as I wrote the previous three chapters. It also
includes the future directions suggested by this dissertation in terms of empirical research projects and research methodology.
CHAPTER 2

EXPLORING TEACHER KNOWLEDGE AND IDENTITY
AS THE FOUNDATIONS OF PRACTICE: A LITERATURE REVIEW

In their seminal review of the related literature, Shavelson and Stern (1981) referred to three domains of teacher practice: “preactive, interactive, and evaluative” (p. 456). From this perspective, teacher practice consists of those things teachers do to plan classroom activities, deliver instruction, and evaluate student learning. Others, including Smith and Strahan (2004), have treated teacher practice more broadly to include the things teachers say and do in the course of planning and implementing instruction. This view of practice includes teachers’ observable actions and reactions to classroom events. It also includes the decision-making that underlies these actions. Particular tasks that have been associated with teacher practice include the choice of subject matter, development and implementation of lesson plans, formative and summative assessment of student learning, classroom management, navigation of student-teacher relationships, and self-reflection (Pasch, Sparks-Langer, Gardner, Starko, & Moody, 1991; Shulman, 1987). Ainley and Luntley (2007) suggested teacher practice also includes predetermined and impromptu details such as
particular examples and explanations, spur-of-the-moment revisions, repetition of key ideas, selection of classroom participants, and self-disclosure.

In *Communities of Practice: Learning, Meaning, and Identity* (1998), Wenger offered a more nuanced and holistic conception of practice. He wrote, “Manual activity is not thoughtless, and mental activity is not disembodied” (p. 48). This assertion implies that practice involves the whole person in moments of doing and knowing (see Miller, 2000 for a discussion of the whole person). This also suggests teacher decision-making, which is often conceived of as mental activity, is always coupled with teacher action (see also Shavelson & Stern, 1981). Wenger (1998) further defined practice:

The concept of practice connotes doing, but not just doing in and of itself. It is doing in a historical and social context that gives structure and meaning to what we do…. Such a concept of practice includes both the explicit and the tacit…. It includes the language, tools, documents, images, symbols, well-defined roles, specified criteria, codified procedures, regulations, and contracts that various practices make explicit for a variety of purposes. But it also includes all the implicit relations, tacit conventions, subtle cues, untold rules of thumb, recognizable intuitions, specific perceptions, well-tuned sensitivities, embodied understandings, underlying assumptions, and shared world views. (p. 47)

Although the teacher education literature is rarely explicit regarding the definition of teacher practice, empirical work related to teacher practice tends to focus exclusively on teachers’ observable action and speech. Wenger’s conception of
practice, therefore, extends the commonly-assumed definition in educational literature. This definition classifies practice as being located in places, relationships, and systems of meaning. Teacher practice, therefore, includes all of the things teachers say and do, and it also accounts for the contexts in which teachers speak and act.

In the introduction of their review, Shavelson and Stern (1981) submitted that theories regarding the relationship between teachers’ objectives and their practice are a reasonable basis for teacher education curriculum and pedagogy. Knowing how successful practicing teachers act and why has important implications for the career-long professional development of teachers (see Tom, 1997). A central question arises: How do teachers decide what to do in their classrooms; what is the foundation of teacher decision-making and practice? There is no consensus in the extant literature on the answers to these questions. Some have suggested the answers reside in teachers’ knowledge, and others have looked to teacher identity for the answers. The purpose of this paper is to review the literature related to both of these claims: Teacher knowledge is the foundation of teacher practice, and teacher identity is the foundation of teacher practice. This paper also argues for a more holistic and integrative approach to the investigation of the foundations of teachers’ classroom practice, an approach that positions both knowledge and identity as fundamental to teacher practice.

Procedure

Review procedures began with a focused search for articles specifically dealing with teacher identity and teachers’ professional knowledge in EBSCO
and PsychINFO databases. This search was extended with targeted searches for articles published in prevalent journals in teacher education. Reference lists from literature reviews and individual studies were also consulted. These searches yielded an unmanageable number of articles (more than 1000). In order to narrow the scope of this review, several criteria for inclusion were established. First, articles included in this review are empirical. Second, they were published between 1985 and the present. Third, the articles presented here have a central, rather than peripheral, focus on either teachers’ professional knowledge or individual teacher identity. This required excluding studies focused on other kinds of identity such as those related to race, ethnicity, gender, sexuality, or religion. Studies about the nature of collective identity in teaching were also excluded. Fourth, many studies regarding the knowledge and identities of college or university faculty were found. This review is limited to studies in which the participants were pre-service or practicing P-12 educators. Lastly, most of the empirical studies reviewed here were published in peer-reviewed journals. Relevant dissertations, book chapters, and studies presented at conferences have also been included when they presented novel findings. In addition to these empirical articles, theoretical literature has been included to elaborate and clarify the meaning of relevant constructs.

This review begins with an examination of teacher knowledge, including a brief theoretical discussion of Shulman’s (1986, 1987) taxonomy of teacher knowledge. Subsequent to that discussion is a review of studies related to various domains of teacher knowledge and their influence on teacher practice.
Next, is a review of empirical investigations of the nature, development, and components of teacher identity. Included in the discussion of teacher identity is an overview of four psychological theories of identity development. The application of these theories to the context of teacher identity has been very limited, and this section includes an argument for why they might be useful in understanding the relationships between teachers’ identities and their classroom practices. Following, there is a brief review of the few studies that have linked teacher knowledge and identity as foundational to teacher practice. A case for the need to adopt a more holistic and integrative perspective on the underpinning of teacher practice is interwoven throughout the text, and the review concludes with suggestions for future scholarly work.

Teacher Knowledge

When seeking to understand how teachers make decisions about what to do in their classrooms, many scholars have turned to teacher knowledge. Shulman posited a taxonomy of teacher knowledge that includes content knowledge, pedagogical knowledge, and pedagogical content knowledge (1986, 1987). Many scholars have studied these domains of teacher knowledge with regard to their impact on practice. Table 2.1 includes an overview of these studies. It includes the authors and year of publication, the purpose of the study, the data sources, a description of the participants, and a summary of the findings for each study. The studies are ordered chronologically, and they are representative of the wide range of methodologies employed to explore teacher knowledge. The sample sizes range from one to 446 pre-service or practicing
teachers, and the studies reviewed utilize both quantitative and qualitative research methods. The studies have three primary purposes: 1) explore the nature and development of teacher knowledge; 2) investigate knowledge-based distinctions between novice and expert teachers; and 3) examine the connection between teacher knowledge and classroom practice. In concert, these studies reveal three major themes in the teacher knowledge literature. The domains of teacher knowledge are interrelated. Teachers' practice is related to their knowledge, and expert teachers have more sophisticated and accessible knowledge bases for teaching than novices
<table>
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<tr>
<th>Authors and Years</th>
<th>Purposes of the Studies</th>
<th>Data Sources</th>
<th>Participants</th>
<th>Major Findings</th>
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<tr>
<td>Leinhardt &amp; Smith (1985)</td>
<td>Explore the relationship between teachers’ knowledge of fractions and their classroom practice</td>
<td>Interviews, card sorts, and videotaped lessons</td>
<td>Four expert and four novice fourth-grade math teachers</td>
<td>• In terms of depth of knowledge, participants were organized in three groups: novices, experts with deep mathematical knowledge, and experts who only had knowledge of algorithms.</td>
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<td>Hashweh (1987)</td>
<td>Explore the impact of content knowledge on the practice of science teachers</td>
<td>Interviews, lesson plans, and field notes</td>
<td>Three biology teachers and three physics teachers</td>
<td>• When teaching lessons in their own content area, participants used better examples and explanations. • This text includes a list of categories of knowledge that might describe a knowledge base for teaching. • “Pedagogical content knowledge is the category most likely to distinguish … content [specialists] from … [pedagogues]” (p. 8).</td>
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<tr>
<td>Shulman (1987)</td>
<td>Examine the ways in which the experiences of teachers can shed light on an appropriate knowledge base for teaching</td>
<td>Interviews and field notes</td>
<td>One experienced language arts teacher and a synthesis of participants in several other studies (number not provided)</td>
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<tr>
<td>Grossman (1989)</td>
<td>&quot;Investigate the influence of subject-specific coursework in the development of pedagogical content knowledge in English&quot; (p. 24)</td>
<td>Case studies</td>
<td>Six beginning English teachers (three teacher education graduates, three with master’s degrees in English)</td>
<td>• Those teachers who had completed a teacher education program with strong English content were better prepared to meet students’ needs than those who had master’s degrees in English.</td>
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*Table 2.1. Overview of studies on teacher knowledge.*
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<th>Authors and Years</th>
<th>Purposes of the Studies</th>
<th>Data Sources</th>
<th>Participants</th>
<th>Major Findings</th>
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<tr>
<td>Ojanen (1993)</td>
<td>Examine how student teachers create personal pedagogical knowledge</td>
<td>Personal histories, journals, and small group discussions</td>
<td>140 students in one teacher education program</td>
<td>• Professional development was marked by increases in knowledge that allowed student teachers to bracket their beliefs.</td>
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<td>• Experts and non-experts were troubled by different elements of teaching.</td>
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<td>• Experts were challenged by low student motivation.</td>
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<td>• Non-experts struggled to identify appropriate class activities.</td>
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<td>• Master teachers made decisions on the basis of content knowledge, differentiated PCK, and curriculum goals.</td>
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<td>Manross, Fincher, Tan, Choi, &amp; Schempp (1994)</td>
<td>Investigate the relationship between subject matter expertise and pedagogical content knowledge in physical education</td>
<td>Interviews</td>
<td>10 teachers with expertise in an area of physical education</td>
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<td>Chen &amp; Ennis (1995)</td>
<td>Examine the process whereby high school physical education teachers transform PCK into curricular decision-making.</td>
<td>Field notes, interviews, knowledge importance evaluations, and concept maps</td>
<td>Three master, middle school, physical education teachers</td>
<td>• Master teachers have a clear sense of teachability – what content to include and what content to exclude.</td>
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<td>Stodolsky &amp; Grossman (1995)</td>
<td>Explore high school teachers’ conceptions of their content area</td>
<td>Questionnaires</td>
<td>109 English teachers, 85 social studies teachers, 82 math teachers, 81 science teachers, and 42 foreign language teachers</td>
<td>• “The subject matter features … have curricular consequences in the areas of teacher control of content, standardization, consensus about content, coordination, coverage, and course rotation” (p. 242).</td>
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<td>Authors and Years</td>
<td>Purposes of the Studies</td>
<td>Data Sources</td>
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<tr>
<td>Stodolsky &amp; Grossman</td>
<td>Explore when and how teachers adapt their practice to changing student bodies</td>
<td>Interviews supplemented with questionnaires</td>
<td>2 English and 2 math high school teachers</td>
<td>• Teachers’ understanding about the nature of their content influenced the degree to which they felt able to adapt.</td>
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<td>(2000)</td>
<td></td>
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<td>• The participating teacher’s knowledge about students’ emotions was central to her understanding of the tasks of teaching.</td>
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<td></td>
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<td></td>
<td>• This knowledge shaped her choice of curricular units, the way she interacted with students, and her ideas about student learning.</td>
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<td>• Participating teacher was effective, in part, because she possessed deep and broad knowledge about the lives of her students beyond the classroom.</td>
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<tr>
<td>McCaughtry (2004)</td>
<td>Explore how teachers’ knowledge of their students’ emotions informs their curricular and pedagogical decision-making</td>
<td>Participant observations and interviews</td>
<td>One experienced, middle school, physical education teacher</td>
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<tr>
<td>McCaughtry (2005)</td>
<td>Examine how a teacher’s knowledge of her students shaped her decision-making</td>
<td>Field notes and interviews</td>
<td>One secondary, physical education teacher</td>
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<td>Ainley &amp; Luntley</td>
<td>“Provide evidence of teachers acting on the basis of attention-dependent knowledge, and to explore the role of attention-dependent knowledge and the nature of attentional skills in classroom practice.” (p. 1130)</td>
<td>Field notes, video, and interviews</td>
<td>Six experienced math teachers</td>
<td>• Experienced teachers ‘read’ the goings-on of the class through the use of sophisticated attentional skills.</td>
</tr>
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<td>(2007)</td>
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<td>• Experienced teachers make decisions about how to behave on the basis of knowledge gained from this attention.</td>
</tr>
<tr>
<td>Authors and Years</td>
<td>Purposes of the Studies</td>
<td>Data Sources</td>
<td>Participants</td>
<td>Major Findings</td>
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<td>Hudson (2007)</td>
<td>Explore and describe pre-service teachers’ conceptions of the mentoring they received in elementary science and math</td>
<td>Questionnaires</td>
<td>446 pre-service teachers in Australia</td>
<td>• “The mentor’s pedagogical knowledge is required for guiding the mentee with planning, timetabling, preparation, implementation, classroom management strategies, teaching strategies, content knowledge, questioning skills, problem solving strategies, and assessment techniques” (p. 209).</td>
</tr>
<tr>
<td>Smith (2007)</td>
<td>Examine how the knowledge, practice, and identity of novice primary teacher developed</td>
<td>Interviews, questionnaires, tests, lesson plans, and employment documents</td>
<td>Four primary teachers</td>
<td>• The teachers experienced growth in subject matter knowledge and PCK, although their ability to apply this knowledge to practice was limited. • PCK and sophistication of instructional techniques develop together. • Novice teachers frequently teach in ways that are considered traditional and misaligned with their teacher training. • Professional development is needed to help novices develop increasingly effective PCK.</td>
</tr>
<tr>
<td>Watzke (2007)</td>
<td>Focus on how PCK changes during the first two years of teaching French, German, or Spanish</td>
<td>Reflective journals, field notes, and focus group interviews</td>
<td>Nine novice foreign language teachers (five Spanish, 2 French, and 2 German)</td>
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</tr>
</tbody>
</table>
Table 2.1 (continued)

<table>
<thead>
<tr>
<th>Authors and Years</th>
<th>Purposes of the Studies</th>
<th>Data Sources</th>
<th>Participants</th>
<th>Major Findings</th>
</tr>
</thead>
</table>
| Andrzejewski (2008) | Explore the relationships between expert secondary teachers’ identities, knowledge, and practice | Field notes, participants’ sorts of classroom practices, and interviews | Four expert high school teachers | • Expert teachers resisted prevalent conceptions of PCK. They viewed integration between knowledge of students and pedagogy to be most important.  
• Teachers struggled to align their practice with their knowledge. |
| Boz and Boz (2008) | “Investigate prospective chemistry teachers’ knowledge about instructional strategies” (p. 135) | Vignettes, lesson plans, and interviews | 22 pre-service chemistry teachers in Turkey | • Pedagogical knowledge influenced teachers’ choice of instructional strategies.  
• Teachers relied on knowledge of students, their difficulties, and content when choosing teaching techniques. |
| Gatbonton (2008) | Compare the pedagogical knowledge of novice and expert ESL teachers | Videos, stimulated recall interviews, and findings from other studies regarding expert ESL teachers | Four novice ESL teachers | • Novice and expert ESL teachers have similar pedagogical knowledge.  
• Experts’ knowledge is more detailed.  
• Novices need time to learn to appropriately apply pedagogical knowledge in practice. |
Content Knowledge

Shulman (1986) defined content knowledge as “the amount and organization of knowledge per se in the mind of the teacher” (p. 9). He further explained, using the terminology of Schwab (1978), that knowledge of content includes both substantive and syntactic structures. Substantive structures are facts, concepts, and principles as well as a means of meaningfully organizing them. Syntactic structures are standards used to determine validity and establish hierarchies of ideas. Shulman elaborated further stating teachers must understand what there is to know, why it is as it is, and why it is either vital or secondary.

Following from Shulman’s definition, Hashweh (1987) explored the role of content knowledge in the instructional practices of high school science teachers. His study included six participants: three biology teachers and three physics teachers. Hashweh asked each of the participants to teach one biology and one physics lesson. After analyzing interviews, documents, and observation data, Hashweh determined that stronger content knowledge enabled teachers to use more relevant examples to explain concepts to students. In other words, biology teachers were better able to explain biology content to students. Likewise, physics teachers used illustrations more successfully when teaching physics content.

In a similar study, Manross, Fincher, Tan, Choi, and Schempp (1994) interviewed 10 expert physical education teachers in an effort to ascertain the nature of the relationship between their content knowledge and their practice.
They found teachers struggled with different elements of the teaching task depending on their degree of expertise in a particular content area. Those with considerable content expertise were able to focus their attention on motivating students to learn. Selection of suitable learning activities preoccupied those with less sophisticated content knowledge. Therefore, they were unable to give due attention to students' motivation. Hashweh's (1987) study in combination with the work of Manross et al. suggests content knowledge has a direct influence on teachers' decision-making and practice.

**Pedagogical Knowledge**

Cruickshank et al. (1996) defined pedagogical knowledge as understandings regarding “concepts, theories, and research about effective teaching” (p. 22). Similarly, Shulman (1986, 1987) referred to general pedagogical knowledge as knowledge teachers possess related to classroom management and organization, which goes beyond content. He (1987) elaborated in “Knowledge and Teaching: Foundations of the New Reform” by saying pedagogical knowledge serves to “[make] classrooms places where pupils can attend to instructional tasks, orient themselves toward learning with a minimum of disruption and distraction, and receive a fair and adequate opportunity to learn” (p. 10). Additionally pedagogical knowledge includes understanding of and competence using a repertoire of instructional strategies which may be useful in any classroom regardless of subject matter. They include “lecture, demonstration... seatwork... forms of cooperative learning, reciprocal
teaching, Socratic dialogue, discovery learning, project methods, and learning outside the classroom setting” (Shulman, 1987, pp. 16-17).

Ojanen (1993) and Hudson (2007) focused on the development of generic pedagogical knowledge when they explored pre-service teachers’ evolving pedagogical understandings. By analyzing the personal histories, dialogue journals, and small group discussions of pre-service teachers, Ojanen found that professional development experiences helped students to develop more sophisticated pedagogical knowledge and skill. Moreover, the development of personal pedagogical knowledge enabled pre-service teachers to bracket maladaptive beliefs about teaching. Hudson, on the other hand, examined the role of mentoring in the development of pre-service teachers’ pedagogical knowledge. Using survey methods with a large sample, Hudson found a direct relationship between mentors’ pedagogical knowledge and pre-service teachers’ development of pedagogical skills.

Boz and Boz (2008) explored the impact of pedagogical knowledge on teachers’ decision-making in highly content-specific teaching contexts, such as introducing particulate theory to chemistry students. They found generic pedagogical knowledge shaped teachers’ choices about what instructional strategies to employ. Like Hashweh (1987), they also found teachers relied on content knowledge when making instructional decisions. In addition, teachers’ knowledge of students influenced their pedagogical decisions. The findings of this study suggest it is fruitful to view teacher knowledge holistically because all domains of teacher knowledge, in concert, inform teacher practice.
Gatbonton (2008) compared the pedagogical knowledge of novice and expert ESL teachers. She surmised the pedagogical knowledge of experts and novices was similar, yet the experts’ knowledge contained more detail and was more consistent with best practices in ESL teaching. Furthermore, although novice teachers possessed considerable pedagogical knowledge, they needed experience and time to discover how to make appropriate use of it in classroom practice. These findings echo arguments made by Feldon (2007a, 2007b) about the cognitive and performance-based distinctions between experts and novices.

Knowledge of Students

Shulman (1986, 1987) and others have also argued teachers need to know about students in general. This knowledge should include understandings about child development and developmentally appropriate practice as well as a sense of what students have already learned in school. McCaughtry (2004, 2005) elaborated on this domain of teacher knowledge so that it includes knowledge about particular students: their backgrounds, prior experiences, and emotions. Through an in-depth case study with one physical education teacher, McCaughtry (2004) found successful teaching, in part, relied on making instructional decisions on the basis of extensive knowledge about the lives of individual students beyond the classroom and school. In a previous case study, McCaughtry (2004) found that the experienced, middle grades, physical education teacher with whom he was working was effective because she considered her knowledge of students’ emotions when making curricular and pedagogical decisions.
Because of their mutual interests in student-teacher relationships and the role of the body in teaching and learning contexts, Andrzejewski and Davis (2008) explored teachers’ touch-related decision-making and behavior. They found teachers engaged in touching their students for both pedagogical and interpersonal reasons. They also found that teachers made decisions about when, how, and whom to touch on the basis of “reading” or knowing individual students’ needs, emotions, and personal boundaries. These findings, coupled with those of McCaughtry (2004, 2005), suggest that teachers’ practice is driven, by the knowledge of students in the aggregate as well as by knowledge of individual students.

Pedagogical Content Knowledge

Shulman (1986) defined pedagogical content knowledge (PCK) as “subject matter knowledge for teaching” (p. 9). He went on to state this kind of knowledge also includes knowing in what forms to present content to students so they are best able to learn it (Shulman, 1986, 1987). Put another way, PCK enables teachers to “reshape the [content] knowledge into a teachable form to maximize its comprehensibility for student learning” (Chen & Ennis, 1995, p. 389); it permits teachers “to connect the child with the curriculum” (McCaughtry, 2005, p. 380). PCK also includes the knowledge necessary to predict which concepts will come easily for students, which will prove challenging, and misconceptions students are likely to hold about a topic (Ball, 2000; Shulman, 1986, 1988). Additionally, PCK supports teachers’ decisions regarding inclusion and exclusion of concepts and skills and teaching for mastery as opposed to
teaching to foreshadow for future learning (Chen & Ennis, 1995; Shulman, 1986, 1987, 1988). Moreover, PCK distinguishes expert teachers from novice teachers (Shulman, 1987), and it “differentiates expert teachers in a subject area from subject area experts” (Cochran, DeRuiter, & King, 1993, p. 263).

According the many educational theorists, the transformation of content and pedagogical knowledge into PCK defines the task of instruction (Ball, 2000; Chen & Ennis, 1995) (see Figure 2.1). McCaughtry (2004, 2005) argued this transformation also includes weaving knowledge of students into PCK. Figure 2.1 synthesizes these claims regarding how teachers transform domains of teacher knowledge into teacher action, the outcome of which is student learning. This transformation process involves decision-making and action, specifically clarification, interpretation, choosing representations, and adaptation (Chen & Ennis, 1995). Teachers must clarify and interpret the content for themselves. They must also choose representations or adaptations that will make the content accessible to their students. As a result this process is largely particular to individual teachers. In fact, studies have shown even teachers with very similar content knowledge often teach the same concepts differently (Chen & Ennis, 1995; Grossman, 1989; Leinhardt & Smith, 1985). Correspondingly, Manross and colleagues (1994) found teachers with very similar general pedagogical understandings also chose vastly different instructional techniques. These findings suggest the transformation process and the resulting PCK are, at least somewhat, idiosyncratic.
Figure 2.1. Model of transforming teacher knowledge into practice.
Expertise

Teaching is an inherently challenging due to its multifaceted nature and it occurrence in complex and unpredictable environments (Palmer, Stough, Burdenski, & Gonzales, 2005; Woolfolk Hoy, Davis, & Pape, 2006). Shavelson and Stern (1981) assume, “In order to handle this complexity, a person constructs a simplified model of the real situation. The teacher, then, behaves rationally with respect to the simplified model of reality constructed” (p. 456). What, then, distinguishes expert teachers from novice teachers? Viewing this question through a psychological lens, Feldon (2007a, 2007b) argued there are two main cognitive distinctions between novice and expert teachers. First, experts have developed automaticity regarding some of the tasks of teaching. In other words, they have well-developed routines that require little or no conscious awareness. This automaticity allows teachers to “allocate great attention to subtleties and uniqueness” (Feldon, 2007a, p. 130). Second, experts’ knowledge structure is different from novices’ in that it is more detailed, more sophisticated, and better organized. Thus, expert teachers are better able to access and act on pertinent knowledge than their less experienced counterparts (Feldon, 2007b; see also Gatbonton, 2008).

In much the same way that Feldon (2007b) argued experts possess well-ordered and complex knowledge about the domain in which they are experts, Shulman (1987) argued expert teachers have larger knowledge bases that are better organized than those of novices (see also Ethell & McMeniman, 2000; Palmer et al., 2005). More specifically, he argued PCK differentiates expert and
non-expert teachers. Ainley and Luntley (2007), however, hypothesized that a form of knowledge different from the ones already discussed distinguishes accomplished teachers from novices. They theorized experienced teachers rely heavily on attention-dependent knowledge, “knowledge that enables teachers to respond effectively to what happens during the lesson” (pp. 1127-1128). This study employed observation and stimulated recall interviewing methods, and the participants were six experienced math teachers. The researchers then developed a schematic for describing occurrences to which teachers attended. This schematic includes the observers’ perspective regarding whether the incident was affective or behavioral, represented a cognitive problem, or presented a cognitive opportunity. The schematic also accounts for the teachers’ perspective about whether they were interrogating the incident or merely noting the incident. Lastly, the schematic includes a distinction between conceptual and non-conceptual incidents as well as a notation about the nature of the teacher’s subsequent behavior, whether reactionary or responsive. Based on this small scale study, Ainley and Luntley concluded that attention-dependent knowledge exists in the knowledge bases of experienced teachers and this kind of knowledge is often the foundation for teachers’ decisions in their classrooms with their students.

In their exploration of experienced math teachers’ attention-dependent knowledge, Ainley and Luntley (2007) conjectured that:

Attempts to describe the knowledge base of teachers in terms of subject knowledge and general and subject-specific pedagogical knowledge (e.g.
Shulman, 1987) may offer tools for analyzing particular aspects of practice, but fail to provide a complete and adequate account of what is required to function effectively minute by minute in the classroom. (p. 1127)

Although Ainley and Luntley do not explicitly align their research with a holistic perspective, it is clear they are drawing on holistic conceptions of teacher knowledge and practice in their work. Just as holism “asserts that everything exists in relationship, in a context of connection and meaning” (Miller, 2000, p. 21), Ainley and Luntley emphasized that in order to fully understand the goings-on of classroom teaching, connections beyond those between content knowledge, pedagogical knowledge, PCK, and teacher practice have to be explored. Similar suppositions have prompted scholars to investigate the role of teacher identity in teacher practice. The following section includes a review of the literature related to teacher identity, its development, and its components. This section concludes with brief overviews of four psychological theories of identity development and their potential for illuminating the nature of teacher identity.

Teacher Identity

Just as Wenger’s (1998) work was helpful for conceptualizing the nature of teacher practice, his work serves as a place to begin when defining the construct of teacher identity. In Communities of Practice: Learning, Meaning, and Identity, Wenger (1998) wrote:

An identity, then, is a layering of events of participation and reification by which our experience and its social interpretation inform each other...
the same way that meaning exists in its negotiation, identity exists—not as an object in and of itself—but in the constant work of negotiating the self.

(p. 151)

For Wenger, identity is the “nexus of multimembership,” the structure of who someone is based on the assemblage of the ways of being suggested by their membership in various communities of practice (p. 149). In that it illuminates how we develop identities, Wenger’s definition is useful.

Wenger (1998) wrote about three means of building identity that are of particular interest in the context of teaching. First, identity is a “negotiated experience” (p. 149). Teacher identity comes about through presenting oneself as a teacher in communities of teachers and students and behaving like a teacher in those same communities. Second, identity is relational. We define ourselves relative to others in the communities and in contrast to people who do not belong (Danielewicz, 2001). For example, teacher identity develops through connections with other teachers and through the recognition of dissimilarity with non-teachers. Third, “We define who we are by where we have been and by where we are going” (p. 149). Identity is a “learning trajectory” (p. 149). Within a ‘learning trajectory’ model, the construction of identity rests on what and with whom as well as on the past and on the other identities one already possesses.

Others have addressed the nature of identity in the specific context of teaching. Hamachek (1999) pointed to the importance of teacher identity in the professional lives of teachers when he wrote, “Consciously, we teach what we know; unconsciously we teach who we are” (p. 209). Echoing this point,
Danielewicz (2001) suggested good teaching is contingent on identity rather than on ideology or methodology alone. Palmer (2003) agreed, stating, “Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher” (p. 4). Lasky (2005) elaborated on previous definitions of teacher identity by suggesting teacher identity is not really a state of being; it is a self-definition. Moreover, teacher identity evolves. It is “an answer to the recurrent question: ‘Who am I at this moment?’ ” (Beijaard, Meijer, & Verloop, 2004, p. 108), involving definitions for others and for self. Lasky’s contention teaching identities reside at blurred boundaries between the personal and the professional further explicated this interaction between the self and others (see also Day, Elliot, & Kington, 2005). There are, therefore, components of teacher identity that rest on knowledge and practice, and others that derive from relationships, rapport, and connections with students and colleagues. Others, including Day and colleagues (2005) and Barone, Berliner, Blanchard, Casanova, and McGowan (1996), have also classified teacher identity as a moral construct that entails a teacher’s values and beliefs.

Synthesizing these definitions, teacher identity is a self-definition as well as an assemblage of values. It is a dynamic construct that changes depending on personal experiences, relationships with others, and contexts. Lastly, teacher identity bridges the personal and the professional, the private and the public, the individual and the collective, and the “out-of-classroom place” and the “in-classroom place” (Connelly & Clandinin, 1999, p. 93; see also Day, Kington, Stobart, & Sammons, 2006; Palmer, 1998).
As evidenced in the preceding discussion, many theorists have suggested an important link between teacher identity and practice. Making this connection more explicit, Robert Bullough, a prominent scholar in teacher education, argued that teacher identity is the foundation of teacher practice. He (2005) wrote, “Identity is... a framework for action and the personal grounding of practice” (p. 144; see also Taylor, 1989). However, empirical explorations of this relationship have been rare (Roeser, Marachi, & Gehlbach, 2002). O’Connor (2008) and Oberski and McNally (2007) indicated this rarity may be a result of current constructions of teacher quality (see also Korthagen, 2004). As O’Connor argued, “Technical competencies cohere with the traditional view of professional knowledge as being standardised and scientific (Schön, 1983, p. 23), and ignore the importance of identity in professional decision-making” (p. 119). Oberski and McNally made a similar argument that the use of competencies to assess teachers is inappropriately reductionistic. They went on to write that reducing teacher practice to formulas involving only teacher knowledge and competencies:

[breaks] down what is essentially a continuous process and an unfragmented whole into chunks of skills, bits of knowledge and general attitudinal principles which, taken together, are not adequate in rendering what it means to teach or what it means to be a teacher. (p. 935)

Based on this declaration, Oberserski and McNally called for a holistic approach to understanding teacher development and competencies. This holistic approach should also account for the role of teacher identity in teacher practice.
What follows is a review of the literature related to the nature of teacher identity, its development, and the component identities that contribute to the formation of teacher identities. Table 2.2 presents an overview of empirical studies related to teacher identity. The studies are ordered chronologically. The first column of the table includes the authors and year of publication. Columns two, three, four, and five respectively include the purpose of the study, the data sources, the participants, and a summary of the major findings. Most of the studies reviewed were small-scale qualitative studies involving 20 or fewer participants. However, one larger qualitative study with 59 participants and two survey-based studies with 80 and 109 participants are included. Although all of the studies are exploratory in nature, they represent a range of purposes: to describe the nature and characteristics of teacher identity, to investigate teacher identity development and the impact of contextual elements on it, and to examine the relationships between teachers’ identities and their classroom practices. As a collective, these studies indicate three major themes in the findings related to teacher identity. One is that discourse, narratives, and reflection play a key role in teachers’ identity development. The second is that teaching context profoundly impacts the way teachers see themselves as professionals, and the third is that there is a clear connection between teachers’ identities and the ways in which they conduct themselves in their classrooms.
<table>
<thead>
<tr>
<th>Authors and Years</th>
<th>Purposes of the Studies</th>
<th>Data Sources</th>
<th>Participants</th>
<th>Major Findings</th>
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<tr>
<td>Stodolsky &amp; Grossman (1995)</td>
<td>Explore high school teachers’ conceptions of their content area</td>
<td>Questionnaires</td>
<td>109 English teachers, 85 social studies teachers, 82 math teachers, 81 science teachers, and 42 foreign language teachers</td>
<td>Teachers’ views about the structure of their discipline shaped their teacher identities and how they engaged in teaching practice.</td>
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<td>Paechter &amp; Head (1996)</td>
<td>Explore the experiences of secondary teachers working in two marginalized subjects: design and technology and physical education</td>
<td>Study comparison</td>
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<td>Marginalized subjects are gendered, and the teachers thereof experience their teacher identities differently from teachers of non-marginalized subjects.</td>
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<td>Tucker (1996)</td>
<td>Understand how one teacher navigated a strong identity as a musician and a less well-developed identity as a teacher</td>
<td>Field notes and interviews</td>
<td>One music teacher</td>
<td>Participant struggled to see himself as a teacher. Participant focused only on “talented” students and was unsuccessful with other students. Participant had a limited view of music curriculum. Portfolios served as a location for reflective practice thereby helping participants construct a professional identity.</td>
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<td>Antonek, McCormick, &amp; Donato (1997)</td>
<td>Examine the role of portfolios in the development of novice teachers’ identities</td>
<td>Portfolios</td>
<td>Two students in a foreign language teacher education program</td>
<td>Portfolios served as a location for reflective practice thereby helping participants construct a professional identity.</td>
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<td>Dolloff (1999)</td>
<td>Explore the role of prior images of teaching and teachers in the development of teacher identity</td>
<td>Participants’ stories, metaphors, and drawings</td>
<td>14 pre-service, elementary, music teachers</td>
<td>The more classroom experience student teachers had, the more similar their self description and descriptions of model teachers were. (continued)</td>
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*Table 2.2. Overview of studies on teacher identity.*
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<th>Authors and Years</th>
<th>Purposes of the Studies</th>
<th>Data Sources</th>
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<th>Major Findings</th>
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| Beijaard, Verloop, & Vermunt (2000) | “Investigate experienced secondary school teachers’ current and prior perceptions of their professional identity” (p. 749) | Questionnaires                                   | 80 experienced secondary teachers in the Netherlands | • Most teachers identified “more as subject matter and didactic experts and less as pedagogical experts” (p. 756).  
• Teachers became less content focused and more balanced over the course of their careers. |
| Stodolsky & Grossman (2000) | Explore when and how teachers adapt their practice to changing student bodies       | Interviews supplemented with questionnaires      | 2 English and 2 math high school teachers         | • Teachers whose identities were constructed around multiple teaching goals were more likely to adapt their teaching practice to the changing needs of students.  
• Teachers’ understanding about the nature of their content shaped how they saw themselves as teachers. |
| Drake, Spillane, & Hufferd-Ackles (2001) | Explore the role of subject matter in the constructions of elementary school teachers’ identities as teachers and learners | Participants’ stories, field notes, videotapes, and interviews | 10 urban elementary school teachers               | • Teachers located identity related to literacy in multiple contexts and restricted identity related to math to the classroom.  
• Teachers exhibited consistency between their self-descriptions and their instructional practices.  
• Teachers’ identities related to math varied. They were similar with regard to literacy. |

(continued)
Table 2.2 (continued)

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<th>Authors and Years</th>
<th>Purposes of the Studies</th>
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<th>Participants</th>
<th>Major Findings</th>
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| Estola (2003)     | Examine the formation of student teachers’ identities through analyzing written personal narratives | 35 student essays | 10 pre-service teachers in Finland | • Pre-service teachers documented the development of their identities by recording their own narratives and the narratives of practicing teachers.  
• The essays pointed to the important role of hope in becoming a teacher.  
• Academics and educational policy challenged pre-service teachers’ feelings of hope. |
| Vadeboncoeur & Torres (2003) | Explore the ways in which teachers use metaphors to make sense of their teacher identities | Interviews, questionnaires, course requirements, and group conversations | Four pre-service and four practicing teachers enrolled in a professional development course | • Teachers articulated growth and change across the professional development experience through metaphor.  
• Teachers used metaphor to discuss and challenge binaries inherent in teaching tasks. |
| Day, Elliot, & Kington (2005) | Investigate the impact of contextual factors on teachers’ commitment and identity | In-depth interviews, field notes, and documents | 20 experienced teachers in Australia and England | • Collaboration and professional development support committed teacher identity.  
• Lack of support and appreciation diminish committed teacher identity. |
<p>| Lasky (2005) | Explore the effects of current reform contexts on teacher identity, agency, and vulnerability | Interviews, questionnaires, documents, and e-mail | 59 teachers in an urban school in Canada | • Misalignment between reform movement and teachers’ identities led to decreased agency and increased vulnerability. |</p>
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<td>Flores &amp; Day (2006)</td>
<td>Explore the (re)construction of novice teachers’ professional identities during the first two years</td>
<td>Semi-structured (teachers), grounded questionnaire (staff), student essays, and teachers’ annual reports</td>
<td>14 new teachers in Portugal</td>
<td>• Researchers found teachers’ biographies and their work environment had a strong influence on their teacher identities.</td>
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<td>Freese (2006)</td>
<td>“[Examine] the complexities of learning to teach, as well as the complexities of assisting preservice teachers on the journal to becoming teachers” (p. 100)</td>
<td>Field notes, journals, action research/self-study paper</td>
<td>One pre-service teacher and one teacher educator</td>
<td>• Reflection is a powerful tool for teacher identity development. • Fear, inability to accept responsibility for the classroom, contradictions between beliefs and practices, and closed-mindedness impeded the participant’s professional growth.</td>
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<td>ten Dam &amp; Blom (2006)</td>
<td>Explore “the potential of school-based teacher education” as an environment in which teachers develop professional identities</td>
<td>Documents, questionnaires, and group interviews</td>
<td>Five student teachers, three university-based mentors, two teacher mentors, and two members of the school management team</td>
<td>• School-based teacher education provides opportunities to learn through participation. • Learning through participation facilitates the construction of professional teaching identities.</td>
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<td>Smith (2007)</td>
<td>Examine how the knowledge, practice, and identity of novice primary teacher developed</td>
<td>Interviews, questionnaires, tests, lesson plans, and employment documents</td>
<td>Four primary teachers</td>
<td>• Teachers’ identities evolved along with their practice and professional knowledge.</td>
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<td>Authors and Years</td>
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<td>Andrzejewski (2008)</td>
<td>Explore the relationships between expert secondary teachers' identities, knowledge, and practice</td>
<td>Field notes, participants’ sorts of classroom practices, and interviews</td>
<td>Four expert high school teachers</td>
<td>• Expert teachers saw a clear and salient connection between their teacher identities and their classroom practice.</td>
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<td>• They shared five core identities: advocate for students, challenger, classroom manager, learner, and teacher leader and mentor.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Their identity priorities and practices were well aligned.</td>
</tr>
<tr>
<td>Andrzejewski &amp; Davis (2008)</td>
<td>“Explore practicing teachers’ understandings of human contact, and specifically the role of touch, in their teaching.</td>
<td>Interviews</td>
<td>Four practicing teachers</td>
<td>• Teachers’ identities, including their posture toward the risk of touching students and their personal boundaries, shaped the decisions they made about making contact with students.</td>
</tr>
<tr>
<td>Cohen (2008)</td>
<td>Explore “how explicit and implicit meanings in teachers’ talk functioned” in relation to teacher identity (p. 80).</td>
<td>Participant observations and focus group interviews</td>
<td>Three high school humanities teachers</td>
<td>• Teachers used a range of discourse strategies to construct and enact identity claims associated with their professional identities as teachers.</td>
</tr>
<tr>
<td>O’Connor (2008)</td>
<td>“Explore how individual teachers use and manage emotions to care for and about students in their professional work” (p. 118)</td>
<td>Semi-structured interviews</td>
<td>Three secondary, humanities teachers in Australia</td>
<td>• Caring is both integral to the participants’ professional identities and prescribed by the role of teachers.</td>
</tr>
</tbody>
</table>
The Nature of Teacher Identity

Vadeboncoeur and Torres (2003) investigated teachers’ discourse about and descriptions of their identities and the processes through which they come into being (see also Estola, 2003). Participants included four pre-service teachers and four practicing teachers, and they made use of interview, survey, and documents as data sources. Initially, these two researchers were working on separate projects: one about pre-service teachers and one about practicing teachers. When they realized all of their participants were using metaphors to talk about their teaching identities, they decided to pool their data. Their analysis focused on the ways professional development experiences informed the metaphors teachers use to make sense of their experiences as teachers. Using Schön’s (1993) theory as an analytic lens, Vadeboncoeur and Torres realized their participants used both generative and surface metaphors. The former helped teachers make sense of the overall structure of their identities, and participants used the latter to describe specific roles and contexts related to their teaching.

Lasky (2005) focused her efforts on the relationship between teachers’ identities and contextual factors in her study of the impact of reform on teachers’ feelings of vulnerability. Lasky used survey and interview methods to uncover teachers’ perspectives. She discovered misalignment between the goals of reform movements and teachers’ motives for entering the teaching profession posed challenges to teachers’ identities. Participants also characterized teaching as a deeply moral and emotional task. Because of this characterization,
participants continually contrasted their self-definition as teacher with their beliefs about who ‘good’ teachers are (see also Dolloff, 1999). Moreover, when participants experienced conflict between their ideal of teaching and the motives of reform, they felt “increased guilt, frustration, and inefficacious vulnerability because they saw themselves being less effective as teachers” (p. 911).

Day and colleagues (2005) conducted a similar investigation in an effort to understand the ways in which context tests teachers’ identities and their commitment to teaching as a profession. At first, teachers in their study expressed behavioral conceptions of commitment. Over time, however, they started to talk about it as a matter of dispositions, values, and identity. The researchers also found evidence regarding the characteristics of school environments that promote committed teacher identity and of those that weaken it. Collaboration and meaningful professional development contributed to sustained commitment whereas lack of support and appreciation diminished it.

Flores and Day’s (2006) longitudinal study regarding the stability of teachers’ identities during their first two years in the profession is another such study. It is interesting to note, although their focus was not on efforts of reform, they reported participants’ experiences of similar conflicts between their own visions and assumptions of what teaching should be and the expectations embedded in school cultures. They also found three categories of factors that impact the development of teacher identity. They are prior influences, such as experiences as a student; teacher preparation; and the impact of school contexts, especially classroom practice and the quality of school leadership. This
study, with its focus on novice teacher identity and how classroom practice influences it, suggests there is a link between classroom practices and the development of a teacher identity.

**Teacher Identity Development**

Whereas the aforementioned studies focused primarily on the nature of teacher identity and the contextual factors that shape them, there have also been a number of studies regarding the processes through which teacher identities come to be and evolve. Specifically, ten Dam and Blom (2006) investigated the role of school-based professional development. They conducted interviews with pre-service teachers involved in a school-based teacher education program. They found when pre-service teachers are given instruction on how to reflect and the time and space necessary to do so, school-based teacher preparation helps students recognize the connections between theory and practice and, therefore, encourages the development of effective teacher identities (see also Freese, 2006). Antonek, McCormick, and Donato (1997) have similar findings. They explored the effectiveness of having students create teaching portfolios. Their collective case study involving the analysis of two pre-service, foreign language teachers’ portfolios suggested, as portfolios provide a location for reflection, they serve to both document and facilitate the development of teacher identities (see also Watzke, 2007).

O’Connor (2008) also explored factors that contribute to the development of teacher identity. Through conducting semi-structured interviews with three secondary humanities teachers, O’Connor found that caring plays an integral part
in the development of teacher identity, and caring is also a manifestation of teacher identity. O’Connor’s work suggested a meaningful, cyclical relationship between teachers’ emotions, identities, and classroom practices.

Following an in-depth study involving six pre-service teachers and their quest to establish their own teacher identities, Danielewicz (2001) posited ‘a pedagogy for identity development,’ which is a conceptual framework including “principles [that] can be used by any teacher in any discipline to develop practices that construct identities” (p. 133). Danielewicz’s ‘pedagogy for identity development’ is a useful structure for considering the nature and construction of identities. Her framework includes 10 strategies for building identity. They are discourse richness and openness, dialogue and a dialogic curriculum, collaboration, deliberation, reflexivity, theorizing in practice, agency, recursive representation, authority, and enactment. Of these 10, five have promise for guiding the construction of identities and for serving as indicators of strongly held identities.

One of the hallmarks of possessing a well-developed identity is possessing and using language aligned with that identity (see also Mead, 1934). Danielewicz (2001) explained this concept, which she calls ‘discourse richness and openness,’ when she wrote:

Discourse constitutes self and experience. Through discourse—acts of language that communicate and connect with others—we make our identities and, reciprocally, they are made for us. . . . As everyday practice, discourse refers to transactions between speaker and hearer. . .
As theory, discourse refers to the sets of cultural practices associated with social and institutional contexts that organize social relations and transmit values. . . These regulating discourses—always multiple, some competing, some congruent, some complementary—work continually at shaping the identities of all who are members, or wish to become a member, of any discourse community. (pp. 141-144)

Simply put, learning to become a teacher involves learning to talk like one, and teachers are, at least in part, identifiable because they speak like teachers. Cohen (2008) found when teachers talk to each other, their talk included discussions of particular students, lesson ideas, and administrative worries. Teachers also discussed specific school contexts, professional learning communities, and goals and expectations for themselves and for students. Lastly, they spoke about the tasks related to teaching including planning and implementing instruction and designing assignments and assessments. In his study about the nature of teachers’ in-class discourse, Richards (2006) drew on the foundational work of Bellack, Kliebard, Hyman, and Smith (1966) and Mehan (1979) and found that initiation-response-follow-up or -evaluation sequences continue to be prevalent in teachers’ talk with their students. He also argued, however, that genuine conversation, characterized by all parties having equal opportunities to talk, also occasionally and productively occurs in classrooms. Combined with Cohen’s findings, Richards’ work suggested teachers not only talk about particular things, their talk has particular discursive patterns.
In addition to ‘discourse richness and openness,’ Danielewicz (2001) references three other principles of identity construction. They are reflexivity, agency, and authority. Danielewicz defined reflexivity as, “the act of self-conscious consideration. . . a reexamination or revisiting of a project or an activity, and a questioning of motives, frameworks, assumptions, working strategies, conclusions, beliefs, and actions” (pp. 155-156). Reflective practice is part of becoming and part of being a classroom teacher. Agency is the intersection of empowerment and efficacy, the place where the will to act meets the belief that action will have a desired outcome. Individuals hold agency whereas they use authority. Additionally, authority is relational. Teachers act on their power to speak and be heard. They stand as reliable sources of information, and they strongly influence the behavior of their students. These three characteristics, particularly in concert, are indicators of well-established teacher identities.

Lastly, Danielewicz (2001) stated collaboration is a principle at work in the creation of identities. Collaboration is essential because identity has both individual and collective components. Danielewicz explained:

For instance, in saying “I am a teacher,” I assert a teaching identity in two dimensions. First of all, the emphasis on “I,” as in “I am a teacher,” means that, individually and personally, I see myself as a teacher. The statement denotes my individual identity. Second, in stressing “teacher,” as in “I am teacher,” I declare a collective identity, membership in a group of professionals who are teachers. (p. 149)
As such, collaboration is also a primary component in the maintenance of identity. The successful construction and maintenance of an identity is not a wholly individual process; it involves affiliation with others who are also members of the community of practice (see also Wenger, 1998).

*Components of Teacher Identity*

Beijaard et al. (2004) suggested professional identities reside at the juncture of many other identities. For teachers these component identities may be those related to their subject matter, students, or ways of teaching. They may also be connected to other identities held in other contexts such as mother, volunteer, or person of faith (Andrzejewski, 2008). Sub-identities may align with or stand in contrast to one another. Thornton has written about similar ideas in the specific context of teaching art. He (2005) noted, “The artist teacher identity is one in which three worlds must be straddled or interrelated: the world of art; the world of education; and the world of art education” (p. 167). Thornton further argued artist teachers not only teach art, they engage in making art, and are profoundly committed to this dual practice. Despite the fact that Thornton was writing about art teachers, his perspective is relevant in other teaching contexts. It points to the questions: What does it mean to be a teacher of a particular content area? How do teachers include the worlds of a particular subject matter, education, and education regarding that subject matter in their identities and practices?

A few studies have incorporated the relationship between teacher identity and subject matter (see Drake, Spillane, & Hufferd-Ackles, 2001). Paechter and
Head (1996) explored the identities of teachers working in ‘marginal subjects.’ Particularly, they explored the ways in which marginal subjects tend to be gendered—for example, physical education is considered masculine whereas home economics is considered feminine—and of lower status than other academic disciplines. These realities of marginal subjects informed teachers’ development of identities that were less empowered than their peers’, yet these teachers also experienced deep commitment to the importance of their subject matter.

Tucker (1996) and Dolloff (1999) conducted studies with teachers of music, another subject in which teachers tend to be strongly committed to their discipline. In Tucker’s ethnographic study, she “[examined] the thinking and classroom practices of a teacher whose devotion to music [surpassed] his interest in teaching” (p. 121). The participant in this study had a very well-established identity as a musician and enjoyed a great deal of success as a performer. He subsequently had difficulty developing an identity related to teaching and tended to focus his energy on instructing ‘talented’ students in music performance. As such, he developed a limited view of the music curriculum and was unable to reach the vast majority of his students.

Dolloff (1999), on the other hand, explored pre-service elementary music teachers’ notions of what it means to be a music teacher, notions based largely on the ‘apprenticeship of observation’ (Lortie, 1975) and cultural representations of music teachers. Dolloff also looked at the ways in which these preconceptions shaped pre-service teachers’ own teacher identities. Dolloff had participants draft
stories about their most memorable encounters with music teachers, create metaphors for the teachers they hope to become, and draw pictures of both ideal teachers and their current teaching identities. In so doing, she uncovered a direct relationship between pre-service teachers' classroom experience and the level of similarity between their conceptions of self as teacher and their ideas about model teachers. Her findings suggested teaching experience is pivotal in the development of teacher identity.

Beijaard, Verloop, and Vermunt (2000) used an extensive questionnaire to investigate the evolving nature of teachers' identities. The questionnaire, which the researchers administered to 80 experienced secondary teachers, drew out teachers' perspectives about who they were when they began teaching as well as their ideas about their current teacher identities. In particular, the researchers sought to understand the relationship between teachers' identities and their subject matter, pedagogical, and didactic expertise. Beijaard and colleagues organized participating teachers into five groups: subject matter experts, didactic experts, pedagogical experts, those who reported balance across the three kinds of expertise, and those who reported strength in subject matter and either didactic or pedagogical expertise. Beijaard and colleagues found participants were unclear about the differences between pedagogical and didactic expertise. They also found that teachers who began their careers locating their identity in their content area were likely to shift to a more balanced perspective as they gained experience.
Stage Models of Identity Development

Up to this point, the studies reviewed treated identity as a description of who teachers were in a particular moment or with regard to a particular situation. Only the last study expanded on this view by investigating ways identity changed based on where teachers were in their career (novice or experienced). Inasmuch as Beijaard et al. (2000) identified a common pattern in the development of teachers' identities, their study points to similarities between the ways teachers' identities develop and the ways the field of psychology conceptualizes identity.

The extant literature in education includes many stage models of teachers' development, their careers, and learning to teach (Borko & Putnam, 1996; see Dall'Alba & Sandberg, 2006 for a review of stage models of teacher development). For example, Fuller and Brown (1975) posited a three-stage model based on the predictable ways novice teachers' concerns change (see also Conway & Clark, 2003; Reiman & Thies-Sprintall, 1998). Similarly, Huberman (1989, 1993) theorized teachers' careers are composed of seven chronological phases beginning with a focus on survival and discovery and ending with disengagement from the profession. Although these models shed light on the concerns and perspectives of teachers during the course of a career, there are no models in the educational literature that describe a common, foreseeable trajectory in the development of teachers' identities. What follows is an examination of four psychology theories I believe hold promise in this regard.

Erikson's model. Erikson is often thought of as the father of the study of identity within the field of psychology. He posited a model of ego development
involving eight sequenced stages which cover the human lifespan—from birth to death (see Havighurst, 1953 for another model of lifespan development). Each of these stages is characterized by a task that is, in some way, experienced by everyone (Bee & Boyd, 2003; Lemme, 2002; Kroger, 2007; Taylor, Peplau, & Sears, 2003). In this way, Erikson’s model stands as an essentialist developmental trajectory and is considered to be psychosocial in nature because the resolution of the eight stages, or dilemmas, depends on both “internal drives and cultural demands” (Bee & Boyd, 2003, p. 28). Although each stage is typically associated with a particular phase of life, an individual’s trajectory through them may not be linear. As Lemme (2002) wrote, “Even though an issue has its moment of ascendancy in a particular stage of life, the issue is never resolved for good. Instead, it will reemerge in a different configuration in later stages” (p. 48). For example, a primary task for most adolescents is the development of a consistent picture of the self that is allied with their experiences, attitudes, beliefs, needs, and wants (Woolfolk Hoy, Demerath, & Pape, 2001). This stage is termed identity versus role confusion. Although it is primarily associated with adolescence, it may be repeatedly revisited during adulthood as individuals take on new roles and encounter new contexts. For instance, educational reforms or innovations may challenge teachers’ identities in ways that cause them to revisit this phase. Table 2.3 includes a brief overview of the stages of Erikson’s model. The first column names the stages, and the second offers a description of what individuals experience as they work through the phases.
Stages | Descriptions
--- | ---
1: Trust versus mistrust | Through the development of a relationship with a caregiver, infants come to trust or mistrust those parts of the world they cannot control.
2: Autonomy versus doubt | During this stage, children are working to develop self-care skills. They will develop a sense of confidence or self-doubt about their ability to manage in the world.
3: Initiative versus guilt | Initiative is a willingness to start new endeavors and explore new territory. Guilt represents the fear that what the individual wants to do is never right.
4: Industry versus inferiority | Industry is marked by a desire for productive work. Inferiority, on the other hand, is the sense that one is incapable of working in ways that are as productive as other people.
5: Identity versus role confusion | Adolescents work to create of an unvarying view of the self and an alliance between that view and the individual’s desires, beliefs, attitudes, abilities, and autobiography. Failure to create such a view can result in role confusion.
6: Intimacy versus isolation | Young adults work to build intimate relationships in an effort to avoid feelings of isolation.
7: Generativity versus stagnation | The stage is characterized by the tension between concern for future generations and self-indulgence.
8: Ego integrity versus despair | During late adulthood, individuals come to focus on a sense of fulfillment about their life and life’s work or on sadness about the approaching end of life.

Table 2.3. Erikson’s eight stages of psychosocial development (Erikson, 1963).
Stages five through eight of Erikson’s (1963) model may be the most relevant to understanding the development of teacher identity because they are experienced during adulthood (see Gratz & Boulton, 1996 for a discussion of the ways in which teachers might experience the stages of Erikson’s model). Novice teachers, in particular, may feel the tension between identity and role confusion as they work to develop an understanding of who they are as teachers and how that identity aligns with their work contexts and experiences. Teachers may also go through a period of intimacy versus isolation as they struggle to identify the kinds of relationships they are comfortable having with their students. This tension may be particularly salient for new teachers as they confront the inconsistencies between their teacher preparation and induction, which often emphasize maintaining a ‘professional’ distance from students, and the relational needs of their students. Teachers may also experience the tension between intimacy and isolation as they choose if and how they will collaborate with colleagues and parents.

Pushkin (2001) has written about teachers’ experiences of disillusionment. He cited classroom management struggles, lack of parental involvement, the low status of teaching as a profession, and poor fit between the demands of teaching and other facets of teachers’ lives as sources of disillusionment. These feelings are contributing factors to high teacher attrition rates, and it may be that teachers who feel disillusioned revisit the stage of generativity versus stagnation. They may reconsider whether teaching is their way of making a positive difference for future generations. Similar emotions may be experienced by teachers at the ends
of their careers. Teacher contemplating retirement or who have recently retired may struggle to view their contribution to education in general and their students in particular as sources of integrity rather than despair. Although Erikson’s (1963) model has been used to explore the experiences of college or university faculty (see Côté & Levine, 1992) and to discuss the ways in which teachers can support the development of their students (see Cross, 2001; Hamman & Hendricks, 2005), it has not yet been used in empirical studies that investigate the development of teachers’ identities.

**Kotre’s elaboration of Erikson’s model.** The seventh stage of Erikson’s (1963) eight-stage model is generativity versus stagnation. Erikson defined generativity as, “concern in establishing and guiding the next generation… the concept generativity is meant to include such more popular synonyms as productivity and creativity, which, however, cannot replace it” (p. 267). As generativity is marked by a concern with future generations, it may be central to teachers’ ideas about who they are professionally. In this regard, Kotre’s (1998) elaboration of this phase of Erikson’s model is instructive. Kotre identified four types of generativity: biological, parental, technical, and cultural. Given the parental metaphors teachers often use to talk about their work, the first two may be relevant in the experiences of expert teachers (see Burgess & Carter, 1992; Dixson, 2003 for discussions of “mothering” in education). The relevance of the latter two is more readily evident. Kotre defined the technical domain as connected to the “teaching of skills and procedures” and the cultural domain as connected
to “conserving, renovating, or creating a meaning system and passing it on to others” (p. 2). These, in many ways, are the tasks of teachers.

**Levinson’s model.** Like Erikson, Levinson began with the belief that adulthood is fundamentally different from childhood or adolescence. Unlike Erikson’s, Levinson’s model is focused solely on the development of adult identity (Lemme, 2002). The concept of a life structure is central to this model. A life structure is the combination of all the roles in a person’s life in a given time and space. Life structures change as individuals pass through eras, each of which is comprised of mini-eras and designated by a salient task. The eras of Levinson’s model are different from the stages in Erikson’s because they are individualized, and the tasks associated with them are idiosyncratic. During eras, individuals progress from being novices to masters regarding the salient tasks, whatever they are. Because of this structure, as individuals transition from one era to the next, they experience a sense of mastery over past tasks and a sense of insecurity about the tasks of the impending era (Levinson, 1986). Levinson’s theory holds promise for understanding teacher identity because it provides a framework for understanding how teacher identity shapes and is shaped by the other identities in teachers’ lives. Identifying the tasks teachers have mastered and the ones about which they are uncertain may also be a central concern in understanding teacher identity and its relationship to teacher practice.

**Kegan’s model.** Influenced strongly by Piaget, Robert Kegan posed a constructive-development framework for understanding the evolution of a person’s meaning-making, the foundation of personality and identity, across the
individual’s lifespan. One of several neo-Piagetian frameworks, Kegan’s model rests on a similar doctrine: human beings work to make meaning of their experiences; the meaning systems people hold shape their experiences and their behaviors across a wide variety of contexts; there are remarkable commonalities in the meaning systems people adopt; and “there are striking regularities … to the sequence of meaning systems that people grow through” (Kegan, 1980, p. 374). Additionally, Kegan's framework rests on two unique tenets. First, at the core of the meaning-making systems which comprise personality and identity are ways of distinguishing object from subject (Kegan, 1982, 1994): “Development, therefore, involves a process of redifferentiating and reintegrating this relationship” between self and other (Kegan, 1980, p. 374). Second, the transition from one stage to another is often painful because the relinquishing of one way of making meaning of the world may result in feelings of relinquishing the self (Erikson, 2006; Kegan, 1980). As individuals progress from one stage to another, they experience increased consciousness and a sense of loss for the meaning system of the previous phase. The six stages or phases of Kegan’s model, and the relationship between self and other within them, are outlined in Table 2.4. Notice that the self-consciousness new to one phase becomes an awareness of the reality of others in the next. For example, infants in the Incorporative stage (stage 0) become conscious of their own reflexes while being unaware of others. In the subsequent phase, the Impulsive stage (stage 1), they become conscious of their own impulses and perceptions as well as the reflexes of others.
<table>
<thead>
<tr>
<th>Stage</th>
<th>Consciousness of Self</th>
<th>Consciousness of Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>0: Incorporative</td>
<td>Reflexes (sensing, moving)</td>
<td>None</td>
</tr>
<tr>
<td>1: Impulsive</td>
<td>Impulses, Perceptions</td>
<td>Reflexes (sensing, moving)</td>
</tr>
<tr>
<td>2: Imperial</td>
<td>Needs, Interests, Wishes</td>
<td>Impulses, Perceptions</td>
</tr>
<tr>
<td>3: Interpersonal</td>
<td>The Interpersonal Mutuality</td>
<td>Needs, Interests, Wishes</td>
</tr>
<tr>
<td>4: Institutional</td>
<td>Authorship, Identity, Psychic Administration, Ideology</td>
<td>The Interpersonal Mutuality</td>
</tr>
<tr>
<td>5: Inter-Individual</td>
<td>Individuality, Interpenetrability of Self Systems</td>
<td>Authorship, Identity, Psychic Administration, Ideology</td>
</tr>
</tbody>
</table>

Table 2.4. Kegan’s six stages of identity development (Kegan, 1980).

Kegan (1982, 1994) wrote at length about the promise of his model for improving psychotherapy and workforce development practice. Specifically, he argued for the need to align such practices with the recipients’ stage of constructive development. Furthermore, Kegan argued effective interventions both support the current way of knowing and challenge individuals to move toward the next stage. Erikson (2006) summed this stance up when she stated, “The key is that people’s environments must match them by relating to them from within their currently dominant way of knowing and mismatch them by relating to them from the next potential way of knowing” (p. 291).

Additionally, Erikson (2006) argued for a re-conceptualization of Kegan’s framework (1980) that acknowledges and makes room for the inconsistency inherent in people’s meaning-making systems across life domains. For example, someone could be in the Interpersonal Stage within their family and in the
Imperial Stage in their work environment. It is this version of Kegan’s model that may be particularly useful for understanding the identity development of teachers. In what ways does teacher development involve increasing awareness of self and of students? How do teachers experience the loss associated with transitions between stages? This framework has rarely been applied to the experiences of pre-service and practicing teachers. In fact, a search resulted in finding only two relevant studies. In the first, Berger (2002) found that teachers’ abilities to “withstand socializing forces of their school contexts, to transfer their learning from their [teacher education program] into their classrooms, and to find or create collegial communities” were, in part, related to their current stage of identity development (p. ix). In the second, Marion (2004) found that pre-service teachers evidenced developmental patterns in their feelings of satisfaction, challenge, and support during their methods-focused coursework. These patterns were aligned with Kegan’s model.

Teacher Identity and Knowledge

Korthagen (2004) put forward a holistic model of the different levels at which teachers experience change. He also outlined what that model suggests about the nature and content of teacher education. This model may be equally applicable to research endeavors intended to ascertain the driving forces behind teacher practice and the impact of that practice on classroom environments. Korthagen termed his model an onion model, a model composed of concentric layers each of which influences all of the others. In order from the inner-most to the outer-most, the layers are mission, identity, beliefs, competencies, behavior,
and the environment. This model points out the interrelatedness of identity, knowledge, and practice. If further suggests that exploring the relationships between these elements of teachers may yield increased understanding about why teachers do the things they do. What follows is a discussion of three lines of research that have sought to understand teacher practice in terms of both teacher identity and teacher knowledge.

In many ways the work of Stodolsky and Grossman (1995, 2000) serves as bridge between research emphasizing the role of knowledge in teacher practice and research stressing the role of identity. In their explorations of teachers’ conceptions of their content area (i.e. syntactic knowledge of their academic discipline (Schwab, 1978)), Stodolsky and Grossman found teachers’ had a strong sense of who they are relative to their content. This sense of subject-related identity, in turn, had a profound influence on their classroom decision-making and practice. In particular, they found teachers who had multiple goals and flexible ideas about themselves related to their subject matter were more responsive to the changing instructional needs of students. These teachers were better able to differentiate the curriculum and their pedagogy so students were more likely to succeed. In other words, the teachers’ thoughts about their content shaped their teacher identities within their content as well as their classroom practice.

Smith (2007) conducted a longitudinal study of the ways in which primary teachers’ knowledge and identities develop during their pre-service training and their first year of teaching. Smith, who drew on Wenger’s (1998) framework for
understanding the relationship between identity and practice, conducted in-depth case studies of four novice primary teachers’ science instruction. He found that regardless of whether participants completed a concentration in science during their pre-service teacher education programs, their subject matter knowledge in science grew. Although participants’ PCK also grew, their ability to apply this knowledge in their teaching practice was limited. Smith also found that teachers’ identities evolved and that the stability of these identities varied across the participants. Lastly, Smith’s findings align well with Wenger’s notion of a trajectory model of identity. Participants’ teacher identities evolved as they gained knowledge and experience as teachers. Moreover, Smith argued, “A focus on identity work should be seen as connected to knowledge growth, not as an alternative” (p. 395)

Andrzejewski (2008) investigated the relationship between expert secondary teachers’ identities, professional knowledge, and practice. She found expert high school teachers behave on the basis of both identity and knowledge, and there is a complex relationship between expert teacher knowledge and expert teacher identity. She also found that the theories of Erikson (1963) and Levinson (1986) provided useful frameworks for understanding expert teachers’ identity development, the structure of their teacher identities, and the tasks that held relevance for expert high school teachers, either because they had been mastered or because they were still a source of challenge. This work suggested that teacher identity and practice are related and also that exploring the
combination of professional knowledge and teacher identity as the foundation of teacher decision-making and practice is worthwhile.

Conclusion

Synthesizing the literature already reviewed, researchers have established a clear connection between what teachers know and how they behave. There is also strong and growing evidence to support an analogous conclusion about the relationship between teacher identity and practice, yet, as Smith (2007) pointed out, “These two strands have often been considered separately. And in the policy and practice of teacher education improvement of the knowledge base and the personal development of new teachers have sometimes been seen in opposition rather than as complementary” (p. 378). Put differently, studies have rarely woven investigations into teachers’ knowledge with explorations of teachers’ identities in relation to their classroom decision-making and behavior. Despite mounting evidence that teachers’ identities play a pivotal role in classrooms, teacher education and educational research policy have privileged views that emphasize the role of knowledge and competencies (see also O’Connor, 2008; Obserski & McNally, 2007). The last four studies reviewed here, however, indicate that a complementary or holistic perspective on the relationships among teachers’ identities, knowledge, and practice is called for.

This assertion has direct implications for the ways in which teachers should be sampled for participation in research focused on understanding how they decide what to do in their classrooms. For the sake of clarity, future studies focused on the role of various domains of knowledge in the practice of teachers
should seek to recruit teachers with similar self-definitions and identity development. Otherwise hidden identity differences may help to explain behavioral variations that are blindly attributed to differences in participants’ knowledge. The converse is also true for studies focused primarily on the role of identity in the practice of teachers. Moreover, future studies should systematically investigate the interactions of teachers’ identities and knowledge as well as their shared role in guiding teacher practice.

There are also methodological implications of the adoption of holistic perspectives on teachers and teaching. First, a holistic perspective implies a particular way of thinking about and treating teachers. As Alsup (2005) poignantly put it, “Holistic teacher education advances the radical notion that teachers are people” (p. 19). Extending her supposition, holistic educational research should treat teachers as people, as organic beings who experience teaching contexts in their own ways rather than through the lenses of predetermined knowledge and skills (Obserski & McNally, 2008). Second, researchers working holistically should readily acknowledge the connections between the different elements of teachers’ selves and experiences beginning with, and perhaps extending beyond, the connections outlined in Korthagen’s (2004) onion model.

Accordingly, future studies should adopt a more holistic perspective on the nature of teacher decision-making and action. They should investigate the synergies between teacher identity, teachers’ professional knowledge, and teacher practice, and they should explore the interactions between other components of teachers’ selves and teachers’ actions. Lastly, future research
should broaden the views of teacher identity, knowledge, and practice currently held in education by drawing on psychological theories about these constructs.
REFERENCES


CHAPTER 3

EXPLORING THE IDENTITIES AND CLASSROOM PRACTICES
OF EXPERT HIGH SCHOOL TEACHERS

Teacher practice includes those things teachers say and do (Smith & Strahan, 2004). More specifically, teacher practice includes teachers’ readily observable actions and reactions and the underlying decision-making revealed through them. It includes the tasks of teaching broadly conceived: choosing what content to teach, planning and implementing learning activities, assessing student learning, managing the classroom, negotiating student-teacher relationships, and navigating the intrapersonal dimensions of teaching (Pasch, Sparks-Langer, Gardner, Starko, & Moody, 1991; Shulman, 1987). Teacher practice also includes details, which may be planned or spontaneous, such as offering particular examples and explanations, incorporating instructional technology in a particular lesson, revising an activity, choosing what to foreground about a concept, selecting which student will speak or act next, and revealing personal information to students (Ainley & Luntley, 2007).

In their seminal review of the literature related to teachers’ decision-making and practice, Shavelson and Stern (1981) argued that understanding
teacher practice and the basis for it should serve as the sensible foundation for teacher education. Knowing how teachers, particularly those who are expert, behave and why has valuable implications for the career-long professional development of teachers in terms of both curriculum and pedagogy (see Tom, 1997). A central question, then, is: Why do teachers do what they do in their classrooms?

Many scholars have suggested there is an important relationship between teacher identity and practice, yet the nature and directionality of this relationship is under-explored (Roeser, Marachi, & Gehlbach, 2002). The current study addressed this deficit in the literature by exploring the connections between the identities and practices of expert secondary teachers. In so doing, this study also contributed to understandings of what it means to be an expert teacher, the nature of expert teachers’ identities, and the intersections of expert teachers’ identities and practice. These findings suggest new directions in the training and professional development of teachers. In the following sections I review literature related to teacher identity and the role it plays in teacher practice. I also expand on this literature by including a discussion of identity theories that have not been applied in studies of the context of teaching. I follow these sections with a discussion of teacher knowledge as a proposed foundation of teacher practice and expertise.

Practice

In *Communities of Practice: Learning, Meaning, and Identity* (1998), Wenger relied on a holistic conception of practice. He argued practice involves
the whole person in moments of doing and knowing: “Manual activity is not thoughtless, and mental activity is not disembodied” (p. 48). In the context of teaching, this implies teacher decision-making (commonly thought of as mental activity) is always tied to teacher behavior (see also Shavelson & Stern, 1981). Wenger further defined practice:

> The concept of practice connotes doing, but not just doing in and of itself. It is doing in a historical and social context that gives structure and meaning to what we do…. Such a concept of practice includes both the explicit and the tacit…. It includes the language, tools, documents, images, symbols, well-defined roles, specified criteria, codified procedures, regulations, and contracts that various practices make explicit for a variety of purposes. But it also includes all the implicit relations, tacit conventions, subtle cues, untold rules of thumb, recognizable intuitions, specific perceptions, well-tuned sensitivities, embodied understandings, underlying assumptions, and shared world views. (p. 47)

Wenger’s conception of practice indicates practice is not only about action; practice is situated in particular environments with particular people within particular systems of meaning. In this way Wenger’s definition extends the definition commonly suggested in educational literature about the nature of teacher practice and expertise. Teacher practice includes those things teachers say and do. It also accounts for the context in which they do them. Because teacher expertise is manifest in teacher practice, Wenger’s theory also suggests teacher expertise may be context-dependent.
Identity as the Foundation of Teacher Practice

Robert Bullough (2005), an eminent scholar in teacher education, argued teacher identity is the foundation of teacher practice. Similarly, Hamachek (1999) pointed to the profound importance of teacher identity in the professional lives of teachers when he suggested there are two curricula in every classroom. One curriculum is related to the subject matter that is “prescribed by teachers,” and one is related to who teachers are, the curriculum “inscribed in teachers” (p. 208). Echoing this point, Danielewicz (2001) wrote, “What makes someone a good teacher is not methodology, or even ideology. It requires engagement with identity, the way individuals conceive of themselves so that teaching is a state of being” (p. 3), and Palmer (2003) agreed. He theorized effective teaching is not a technical matter; it derives from identity. These scholars’ claims suggest identity and practice are linked. By using the term “good teacher” Danielewicz and Palmer further implied identity and teacher expertise are related.

Teacher Identity as Self-Definition

Lasky (2005) asserted teacher identity is a definition, a way of defining oneself as a teacher. Moreover, it is “an answer to the recurrent question: ‘Who am I at this moment?’ ” (Beijaard, Meijer, & Verloop, 2004, p. 108). The answer to this question changes over time and involves definitions for others and for self. Lasky’s contention that teaching identities reside at blurred boundaries between the personal and the professional further explicated this involvement of self and others (see also Day, Elliot, & Kington, 2005; Day, Kington, Stobart, & Sammons, 2006). Teacher identity rests on knowledge and practice. It is also interpersonal.
in that it derives from relationships with students and colleagues. Others, including Day and colleagues (2005) and Barone, Berliner, Blanchard, Casanova, and McGowan (1996), have classified teacher identity as a collection of beliefs and values.

Studies have investigated the ways in which teachers talk about their identities and the experiences that shape and reshape them (see also Estola, 2003; Flores & Day, 2006). In their individual studies, Vadeboncoeur and Torres (2003) explored the experiences of four pre-service teachers and four practicing teachers using interviews, questionnaires, and required assignments in a professional development experience. They elected to pool their data regarding these eight teachers when they realized participants in both studies were using metaphors to talk about their identities as teachers. Their inquiry then focused on the ways in which pre-service and in-service professional development informs the metaphors teachers use to make sense of being teachers. Borrowing from Schön's (1993) theory of metaphor, Vadeboncoeur and Torres identified both generative and surface metaphors embedded in the teachers’ discourse. Their participants used generative metaphors to make sense of the structure of their identities as teachers and surface metaphors to discuss particular roles or contexts associated with teaching.

Other studies have focused on the impact of contextual elements on the ways teachers conceive of themselves. Lasky’s (2005) study regarding the effects of reform on teachers’ sense of vulnerability is one such study. Using survey and interview methods, Lasky ascertained teachers’ perceptions of a
misalignment between the motives and nature of reform and their motives for becoming teachers were likely to challenge their professional identities. She also found participating teachers viewed teaching as a highly moral and emotional enterprise. As a result, teachers constantly compared their identities as teacher with their ideas of the ‘good’ teacher (see also Dolloff, 1999). Conflicts between reform movements and participants’ ideal of teaching resulted in feelings of “increased guilt, frustration, and ineffectacious vulnerability because they saw themselves being less effective as teachers” (p. 911).

Day and colleagues (2005) conducted a similar investigation into the ways in which contextual factors, such as reform, challenged experienced teachers’ commitment to the profession and professional identities. Teachers initially described commitment as behavioral, yet over time they began to speak of it as also involving dispositions, values, and identity. The researchers cited collaboration and meaningful professional development as factors that sustain committed teacher identity and lack of support and appreciation as factors that diminish it.

Using an elaborate questionnaire, Beijaard, Verloop, and Vermunt (2000) explored the identities of 80 experienced secondary school teachers. The questionnaire was designed to elicit responses about participants’ current perspectives on their identities and their conceptions of who they were when they first began teaching. The researchers were particularly interested in the roles of subject matter, pedagogical, and didactic expertise in shaping teacher identity. They found participating teachers could be grouped into five categories: subject
matter experts, didactic experts, pedagogical experts, those who reported balance across the three kinds of expertise, and those who reported strength in subject matter and either didactic or pedagogical expertise. They also found participants understood didactic and pedagogical expertise in similar ways and many of those who began their careers with identities grounded in subject matter shifted to balanced perspectives across the three domains of expertise.

Each of these studies treated identity as a description of who teachers were in a particular moment or with regard to a particular situation. Only the last study expanded on this view by investigating ways identity changed based on where teachers were in their career (novice or experienced). Inasmuch as Beijaard et al. (2000) identified a common pattern in the development of teachers’ identities, their study points to similarities between the ways teachers’ identities develop and the ways the field of psychology conceptualizes identity.

In conducting this study, I elected to integrate these definitions and perspectives on identity, rather than focus on the inconsistencies among them. As such, teacher identity is both a who and a where. It is an assemblage of ideals as well as a self-definition as teacher. It is an ever-changing construct that depends on personal experiences, relationships, and context. Lastly, it resides at the muddled and sometimes dilemma-ridden intersections of the personal and the professional, the private and the public, the individual and the collective, and the “out-of-classroom place” and the “in-classroom place” (Connelly & Clandinin, 1999, p. 93; see also Palmer, 1998).
The extant literature in education includes many stage models of teachers' development, careers, and learning to teach (Borko & Putnam, 1996; see Dall’Alba & Sandberg, 2006 for a review of stage models of teacher development). For example, Fuller and Brown (1975) posited a three-stage model based on the predictable ways novice teachers' concerns change (see also Conway & Clark, 2003). Similarly, Huberman (1989, 1993) theorized teachers' careers are composed of seven chronological phases beginning with a focus on survival and discovery and ending with disengagement from the profession. Although these models shed light on the concerns and perspectives of teachers during the course of a career, there are no models in the educational literature that describe a foreseeable pattern in the development of teachers' identities. What follows is an examination of two psychological theories I believe hold promise in this regard.

Levinson’s Stage Model

Levinson began with the belief that “adulthood has its own distinctive character and must be studied in its own right, not merely as an extrapolation from childhood” (Levinson, 1986, p. 10). Following that belief, Levinson modeled adult identity development (Lemme, 2002). His model involves a series of overlapping eras comprised of mini-eras and connected by periods of transition. Each of these eras “includes all the roles an individual occupies, all of his or her relationships, and the conflicts and balances that exist among them” (Bee & Boyd, 2003, p. 372) and progresses from novitiate to culminating. Thus, during
transition periods, there is a sense of mastery regarding the tasks of the previous era and a sense of uncertainty regarding the tasks of the forthcoming era (Lemme, 2002). Levinson’s theory holds promise for understanding the ways expert teachers’ identities may both shape and be shaped by the other identities in teachers’ lives. It may also be helpful in identifying the tasks expert teachers have mastered and the ones about which they are uncertain.

*Erikson’s Stage Model*

Erikson is often referred to as the father of the psychological study of identity. He argued for a model of the development of the ego that involves eight, sequenced stages (Bee & Boyd, 2003; Lemme, 2002; Kroger, 2007; Taylor, Peplau, & Sears, 2003). The eight stages or dilemmas are psychosocial because their resolution depends on both “internal drives and cultural demands” (Bee & Boyd, 2003, p. 28). Although they are most commonly resolved during a particular time in life, the passage through them is not necessarily linear. As Lemme (2002) pointed out, “Even though an issue has its moment of ascendancy in a particular stage of life, the issue is never resolved for good. Instead, it will reemerge in a different configuration in later stages” (p. 48). For example, a central concern for adolescents is the creation of an unvarying view of the self and an alliance between that view and the individual's desires, beliefs, abilities, and autobiography (Woolfolk Hoy, Demerath, & Paper, 2001). Erikson (1963) termed this stage identity versus role confusion, and although it is primarily experienced during adolescence, individuals may revisit it over and over again during adult years as they encounter new contexts. For instance, teachers
may return to this phase when reforms or innovations challenge their teacher identities.

Of the eight stages in Erikson’s model, the one that may be most relevant to understanding expert high school teachers’ experiences and ideas regarding teacher identity is generativity versus stagnation. Erikson (1963) described generativity as consideration for others, especially those in the next generation. Alternatively, a tendency toward egotism marks stagnation (Bee & Boyd, 2003; Lemme, 2002). I believe teachers identified as experts are likely to exhibit a generative posture toward their work.

Knowledge as the Foundation of Teacher Practice

Just as some scholars argue identity is the foundation of practice, others insist knowledge drives practice (see Andrzejewski, 2008 for a review of this literature). Shulman posited a taxonomy of teacher knowledge that includes content knowledge and pedagogical knowledge (1986, 1987). According to Shulman (1986), content knowledge is “the amount and organization of knowledge per se in the mind of the teacher” (p. 9). It includes the facts, values, ways of organizing ideas, theories, skills, strategies, understandings, and conceptions tied to a discrete discipline (Chen & Ennis, 1995). Cruickshank and colleagues (1996) defined pedagogical knowledge as understandings regarding “concepts, theories, and research about effective teaching” (p. 22). This domain of knowledge refers to the knowledge teachers possess related to classroom management, organization, and general instructional strategies, which go beyond content (Shulman, 1986, 1987).
Many scholars have studied these domains of teacher knowledge with regard to their impact on practice. Regarding content knowledge, Hashweh (1987) investigated the impact of content knowledge on the practice of science teachers. Hashweh asked three biology teachers and three physics teachers to each teach a biology lesson and a physics lesson. Drawing on interviews, documents, and observation data, Hashweh concluded when teachers have stronger content knowledge (i.e. when biology teachers teach biology and when physics teachers teach physics) they use more relevant examples and explanations during instruction. In other words, Hashweh found content knowledge has a profound influence on teachers’ classroom practice. This impact may be evidenced in the ways teachers enact specific pedagogies rather than specific pedagogies teachers use (i.e. providing examples and explanations).

Other researchers have explored the impact of pedagogical knowledge on the practice of teachers. Gatbonton (2008) compared the pedagogical knowledge of novice and expert ESL teachers. She surmised experts and novices have similar pedagogical knowledge yet the knowledge of experts is more detailed and perhaps better-aligned with the best practices in ESL teaching. She also concluded although novice teachers possess considerable pedagogical knowledge, they require time and experience to learn to apply it appropriately in classroom practice. Boz and Boz (2008) also explored the role of pedagogical knowledge in teacher practice. They found even in highly content-specific teaching contexts, such as introducing particulate theory to chemistry students,
generic pedagogical knowledge shaped teachers’ choices about what instructional strategies to employ. They also found teachers’ knowledge of students’ background, prior knowledge, and difficulties informed their pedagogical decisions.

Shulman (1986, 1987) and others have argued teachers need to know about students in general. This knowledge should include understandings about child development and developmentally appropriate practice as well as a sense of what students have already learned in school. McCaughtry (2005) expanded this domain of teacher knowledge to include knowledge about particular students. Through an in-depth case study with one physical education teacher, McCaughtry found the participating teacher was successful in large part because she made decisions on the basis of her extensive knowledge about the lives of individual students beyond the classroom and school.

In their exploration of the nature of the knowledge that permits mathematics teachers to effectively teach in complex classroom environments, Ainley and Luntley (2007) operated on the premise:

Attempts to describe the knowledge base of teachers in terms of subject knowledge and general and subject-specific pedagogical knowledge (e.g. Shulman, 1987) may offer tools for analyzing particular aspects of practice, but fail to provide a complete and adequate account of what is required to function effectively minute by minute in the classroom. (p. 1127)
This conjecture led them to explore the role and nature of teachers’ attention-dependent knowledge. It led me to investigate the impact of teacher identity—in addition to professional knowledge—on expert teachers’ practice.

Expertise

Teaching is an inherently challenging task both because it is multifaceted and because it occurs in complex and unpredictable environments (Palmer, Stough, Burdenski, & Gonzales, 2005; Woolfolk Hoy, Davis, & Pape, 2006). Shavelson and Stern (1981) assume, “In order to handle this complexity, a person constructs a simplified model of the real situation. The teacher, then, behaves rationally with respect to the simplified model of reality constructed” (p. 456). What, then, distinguishes expert teachers from novice teachers? Viewing this question through a psychological lens, Feldon (2007a, 2007b) argued there are two main cognitive distinctions between novice and expert teachers. First, experts have developed automaticity regarding some of the tasks of teaching. In other words, they have well-developed routines that require little or no conscious awareness. This automaticity allows teachers “to allocate great attention to subtleties and uniqueness” (Feldon, 2007a, p. 130). Second, experts’ knowledge structure is different from novices’ in that it is more detailed, more sophisticated, and better organized. Thus, expert teachers are better able to access and act on pertinent knowledge than their less experienced counterparts (Feldon, 2007b; see also Gatbonton, 2008).

From an educational standpoint, Shulman and Shulman (2004) theorized there are six traits of the accomplished teacher toward which all teachers should
work. Accomplished teachers are “ready to pursue a vision of classrooms or schools” (p. 259), and they are energetic and persistent about sustaining highly engaged teaching and learning. Accomplished teachers also possess a deep comprehension of the guiding and undergirding theories of their practice, and they “are able to engage in the complex forms of pedagogical and organizational practice needed to transform their visions, motives, and understandings into a functioning, pragmatic reality” (p. 259). Lastly, accomplished teachers actively engage in learning from past experiences and the experiences of others, and they are contributing members to collaborative partnerships and communities of teaching practice (see also Collinson, 1996).

Although these traits are requisite for designation as an expert, they are not sufficient. In fact, many researchers have pointed to the intersection or integration of seemingly disparate entities as the marks of expertise. For example, Shulman (1987) identified teaching expertise as lying at the intersection of managing students and managing ideas in the classroom. Barone et al. (1996) argued expert educators “make informed judgments about the quality of particular practices while abstracting from examples of practice to formulate defensible theoretical positions” (p. 1111). Both of these arguments suggest expertise lies at the crossroads of theory and practice. Leinhardt, Young, and Merriman (1995) and Collinson (1996), however, suggested expertise resides at the integration of various forms of knowledge. Leinhardt and colleagues discussed the importance of integrating declarative and procedural knowledge, whereas Collinson wrote about the integration of professional, interpersonal, and
intrapersonal knowledge. The intrapersonal nature of expertise raises questions related to the extent to which expertise can be a part of teachers’ identities, their self-definitions as teachers. What does it mean for teachers to sanction themselves as experts, and in what ways does this self-endorsement shape classroom practice?

Pedagogical Content Knowledge as the Hallmark of Expertise

Researchers have identified expertise in myriad ways, including teachers’ practices, contributions to the field, and sophisticated knowledge bases. This last category is the one predominantly used by researchers to distinguish experts and novices. In much the same way that Feldon (2007b) argued experts possess well-ordered and complex knowledge about the domain in which they are experts, Shulman (1987) argued expert teachers have larger knowledge bases that are better organized than those of novices (see also Ethell & McMeniman, 2000; Palmer et al., 2005). More specifically, Shulman (1986, 1987, 1988) argued teaching expertise can be defined and assessed in terms of PCK (see also Ball, 2000). Shulman (1986) defined pedagogical content knowledge (PCK) as “subject matter knowledge for teaching” (p. 9). Similarly, Chen and Ennis (1995) defined PCK as knowledge that enables teachers to “reshape the [content] knowledge into a teachable form to maximize its comprehensibility for student learning” (p. 389). In addition to distinguishing experts from novices, PCK also differentiates those who are experts in their subject area from those who are expert teachers of a subject area (Cochran, DeRuiter, & King, 1993).
In my efforts to understand how pedagogical knowledge and content knowledge transform into PCK, which in turn transforms into practice, I developed a model based on the extant literature, my own practice as a teacher, and my observations of other classroom teachers. This model includes the perspectives of McCaughtry (2005), who found teachers act based on knowledge of particular students, and Segall (2004), who argued pedagogy and content are inherently related. This model guided my exploration of expert teachers’ practice and its relationship to their knowledge bases. In this model, I conceptualize content knowledge, knowledge of students, and pedagogical knowledge as already connected. Teachers identify these connections to transform those three domains of knowledge into PCK. Teachers then act on the basis of PCK, and, ideally, their actions result in student learning.
Figure 3.1. Framework for understanding teacher decision-making.
Although the model accounts for the relationship between what teachers know and what they do, it fails to account for the impact of who teachers are and with whom they associate. Next, I briefly discuss the literature that connects teacher identity, and communities of practice, with teacher expertise.

Identity as the Foundation of Expertise

Before beginning this study, I assumed I would find expert teachers construct their identities in ways that are analogous to Shulman’s (1987) conception of expert knowledge. I thought expert teachers would have teacher identities resting at the intersection of identities as pedagogue and content specialist. In part, the work of Stodolsky and Grossman (1995, 2000), who found teachers’ notions of who they are relative to their content area had a strong impact on their classroom practice, guided this assumption. In particular, they found teachers who had multiple goals and flexible understandings about their subject matter were better able to adapt their instructional practices to suit the changing needs of students. In other words, their ideas about the nature of their discipline informed the ways they constructed their identities as teachers. I assumed expert teachers’ identities would be related in similar ways to their conceptions of who they are pedagogically.

Experts as Members of a Community of Practice

Expertise is not merely a matter of superior knowledge or more effective practice. It is also socially constructed in that experts are recognized as such (Palmer et al., 2005). Palmer and colleagues identified two hierarchical forms of social recognition: social selection by a constituency and membership in a group
perceived to possess expertise (see also Agnew, Ford, & Hayes, 1997). According to this framework, all experts are recognized as such by people outside their community of practice. For example, expert teachers are likely to have a constituency that includes colleagues as well as school administrators, college or university faculty, students, or community members. In addition, some experts gain access to a group of experts on the basis of normative or standards-based indicators.

Purpose

The purpose of this study was to explore expert high school teachers' conceptions of who they are in their classrooms and how their identities are related to their classroom practices. In conducting this study I was guided by the following questions: How do expert teachers talk about and organize their identities as teachers, and what is the nature of the relationships between expert teachers' identities and their practice? A secondary purpose of this study was to juxtapose expert teachers' identities and knowledge as foundations of their practice.

Methods

Subjectivity Statement

My work is shaped by a layering of holistic and social constructivist perspectives. My adoption of a holistic posture was based on several assumptions that are well-aligned with this worldview. According to this perspective “everything exists in relationship, in a context of connection and
meaning” (Miller, 2000, p.21). First, I view identity as nonhierarchical. Second, I believe there is a meaningful relationship between expert teachers’ identities, their professional knowledge, and the ways they behave in their classrooms. Finally, my belief in holism as a valid way of seeing the world had a strong influence on the way I approached analyzing and representing the data collected. I attended primarily to connections and meaning in the experiences of the participants and chose not to focus on discontinuities, deficits, or critiques. As a social constructivist, I looked for those experiences and understandings that were shared by the participants. This lens also focused my attention on that which was unique to each participant as the combination of individuals' social interactions and experiences is idiosyncratic (Schram, 2003; Schwandt, 2003).

Participants

I purposefully sampled the participants with an eye toward identifying information-rich cases (Patton, 1990). I established the criteria for sampling and recruitment based on four markers of expertise: years of experience, professional group membership, social recognition, and performance criteria (Feldon, 2007b; Palmer et al., 2005). Each of the participating teachers had completed five or more years of teaching the same high school subject, and they had served as cooperating teachers. I used two strategies to ensure participants met the third and fourth markers of expertise, social recognition and performance criteria: nomination by a college or university teacher education faculty member and nomination by a school administrator (Ladson-Billings, 1997). The sampling
protocol also included a fifth step, participating teachers’ self-description of their own expertise. The four participating teachers’ self-selected pseudonyms, self-description of their expertise, content areas and grade levels, years of teaching experience, and the characteristics of their school context are available in Table 3.1. The teachers are arranged in the chronological order of their participation in the study.

<table>
<thead>
<tr>
<th>Self-Description</th>
<th>Content and Grade Level</th>
<th>Years Teaching</th>
<th>School Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah</td>
<td>Expert Biology - 10th grade</td>
<td>21 years (5 years in preschool)</td>
<td>Suburban, Mid-High SES</td>
</tr>
<tr>
<td>Laura</td>
<td>Expert Language Arts - 9th grade</td>
<td>23 years</td>
<td>Suburban, Mid-High SES</td>
</tr>
<tr>
<td>Marnie</td>
<td>Expert Language Arts - 9th grade</td>
<td>34 years (23 years in middle school)</td>
<td>Urban, Low-Mid SES</td>
</tr>
<tr>
<td>Sue</td>
<td>Expert-in-Progress Biology and Biotechnology - 9th, 11th, and 12th grade</td>
<td>9 years</td>
<td>Urban, Low-Mid SES</td>
</tr>
</tbody>
</table>

Table 3.1. Participants’ characteristics.

Data Collection

The data collection procedure consisted of five phases completed with each participant (see Appendix I). The first phase was an unstructured interview. Phases two and four were classroom observations, and phases three and five were interviews based on the data collected during the classroom observations.
The data were in the forms of interviews, observations, and participants' analysis of their classroom behaviors in terms of teacher knowledge and identity.

Although I defined the general protocols for these five phases of data collection before the commencement of the study, there were additions that emerged through interactions with the participants (Janesick, 2003). The first participant was Sarah. Talking with her made it evident phases two and four, the classroom observations, needed to be conducted during different class periods. She clearly perceived herself differently based on the students with whom she was working, and the only way to capture those differences was to observe two different classes. The second participant was Laura. She commented repeatedly that going through the protocol affirmed her belief she was doing what was important to her. Her comments led me to think about the alignment between expert teachers’ priorities and their expenditure of time and energy in class. Because of this interaction with Laura, I decided to ask each of the participants to rate their identities in order of importance. This allowed me to assess the extent to which they were spending their time and energy being who they felt it was most important to be as teachers. Marnie was the third participant. She spoke a great deal about her student teachers, how their presence framed her practice, and how she was committed to serving as a lifelong support for them. Following her comments, I asked each of the participants to report to me how many teachers they had mentored over the course of their career, with how many of those teachers were they still in contact and the nature of their on-going relationships, and how many of those teachers were still teaching. By the time of
my interaction with the final participant, Sue, the data collection procedure was saturated. In other words, no necessary additions or modifications emerged as a result of working with her.

**Phase 1: Unstructured Interview**

The primary method of data collection for this study was audiotaped in-depth interviews designed to elicit first-person accounts of the participating expert teachers’ experiences and understandings (Creswell, 1998; Schram, 2003). I began the unstructured interview (Arksey & Knight, 1999; Rubin & Rubin, 1995) with the prompt, “Tell me about who you are in your classroom.” I gave follow-up questions and prompts based on participants’ responses (Hollway & Jefferson, 1997). This interview, which lasted between 60 and 90 minutes, served three purposes. First, by engaging with participants in an unstructured, conversational way, I began to build rapport with them (Eisner, 1998). Second, by asking participating teachers to talk about their classrooms, I gained valuable information about what I could expect to see during the subsequent classroom observations. Third, I used insights derived from these open-ended interviews to develop the grounded themes for the sorting protocol used during phases three and five.

**Phases 2 and 4: Classroom Observations**

In order to connect what participating teachers said about their teacher identities during the unstructured interview with their classroom practice, I conducted a series of classroom observations. I carried out the two observations with each participant during different class periods so I had an opportunity to
observe the teachers with different students and teaching somewhat different content. During the observations, I constructed lists of teacher practices. I documented these lists in a running record format that included the participants' actions and reactions. I conducted the observations using a focused questionnaire guided by this question (Glickman, Gordon, & Ross-Gordon, 2007): What has the teacher decided to do? For the duration of one class period, I wrote down, to the best of my ability, everything I saw the participant do or say, and I included as much detail as possible to facilitate the teachers' recollection of the class during the follow-up interview. The aim was for the lists to be sufficiently comprehensive and chronological so that the participants could 'see' their class and their instruction. I observed an average of 66 practices per expert teacher, per 50-minute class period. Between the observation and the subsequent data collection phase, I divided the running record into phrases—each of which contained only one verb. I then numbered the phrases chronologically and transcribed each one on an individual mailing label. Participants used these labels in phases three and five of the data collection.

**Phases 3 and 5: Sorting Protocols and Follow-Up Interviews**

A sorting protocol and audiotaped, semi-structured, follow-up interview lasting between 60 and 90 minutes followed both of the observations (Kvale, 1996). The purpose of the sorting protocol was to generate understanding from the lists of practices generated during the observations by having participants analyze their own practices in terms of who they are and what they know. Inasmuch as these sorts documented teachers' subjective understandings, they
are similar to q sorts (Stephenson, 1953). I asked participants to sort the labels documenting their classroom practices twice. Before the participating teachers began sorting their practices, I asked them to review the list to make certain it was complete and representative of the observed class. During both sorts, participants adhered individual labels, each of which documented one classroom practice, to a large sheet of paper marked with one identity or knowledge theme. The first sort was according to grounded themes regarding teacher identity that emerged as a result of the unstructured interview. Table 3.3 includes a list of identity themes, their definitions, an example practice associated with each theme, and an indication of which participant or participants talked about possessing that identity. The second sort was aligned with a priori categories of teacher professional knowledge: subject matter knowledge, pedagogical knowledge, and knowledge of students. Having the teachers sort their practices twice allowed me to better understand the relationship between the teachers’ knowledge and identity and the ways in which these form the foundation for their practice.

After participating teachers completed the sorts, we discussed what the arrays communicated about who they were as expert teachers. We also talked about what the sorts omitted regarding how they understood themselves as teachers. Following each sort I asked the participants, “What does this array say about who you are? Is it accurate? What is overlooked or left out? How did you come to be this teacher? What was your experience of sorting your behaviors into these categories like? How good is the fit, and why do you say that?” Having
completed both of the sorts, participants were asked to comment on what they noticed when they compared the two arrays, which array seemed best aligned with the way they saw themselves, what the combination of the two arrays communicated that could not be gleaned from either of the arrays, and any comments they had about the process of sorting their practices into these themes. The primary objective of these interviews was to make sense of the descriptive data collected during the observations and the ways the teachers had sorted that data according to identity and professional knowledge themes.

*Emergent Phases 6 and 7*

As mentioned previously, I added two phases of data collection to the protocol based on what I learned from the participants. For phase six I asked each of the participating teachers to rank their identity themes in order of importance. For Sarah and Laura, this occurred via e-mail because we had completed phases one through five before I decided to incorporate this phase into the data collection procedure. Marnie and Sue rated their identity themes in person at the conclusion of the final follow-up interview. Table 3.2 includes the participants’ identity priorities and an exemplary quote representing each of the identity themes.

For phase seven I asked the participating teachers to report how many teachers they had mentored, with how many of their mentees they were still in contact, the nature of those relationships, and the number of their mentees still working as classroom teachers. Sarah, Laura, and Sue responded to these
questions via e-mail. Marnie chose to speak with me on the phone, and I made notes documenting our conversation (see Appendix J).

Data Analysis

The process of data analysis overlapped with data collection. Analysis began during the unstructured interview as I took notes and considered follow-up questions and prompts. Analysis continued with the transcription of each of the twelve interviews. As Lapadat and Lindsay (1999) argued, the decisions of how and what to transcribe are themselves acts of analysis. To the best of my ability, I transcribed each of the interviews verbatim. I also transcribed each interview and observation before moving on to the next phase of data collection with each participant.

After transcribing each interview, I began further analysis by open coding the transcripts of the unstructured interviews (Strauss & Corbin, 1990). The first pass through the interviews was guided by the question: What is this teacher saying about her identity? Codes generated for each of the participants during open coding were reviewed and condensed for parsimony. I used the condensed versions of the coding schemes in the axial coding of the transcripts. During this pass through the data, I made sure the entire unstructured interview was accounted for by the axial coding scheme. Following this pass, I engaged peer debriefers to verify these coding schemes before moving onto phase two of data collection with each participant (Lincoln & Guba, 1985). Peer debriefers read the transcripts, assessed the explanatory value of the coding scheme, and made suggestions regarding deleting or adding codes. Because my teaching
experience is in the fields of mathematics and dance, I asked content experts in science and language arts to serve as the peer debriefers. Additionally, a member check with each of the participants during the first follow-up interview, phase three of data collection, verified the axial coding schemes (Lincoln & Guba, 1985). We rarely disagreed (approximately 7%). When disagreements arose we discussed and reconciled them.

Subsequent to each of the sorting protocols, I transcribed the participating teachers’ sorts. I did this by adding the name of the identity or knowledge theme onto which the participants adhered each label to the electronic version of the observation data. I also made tables wherein I cross-referenced the location of each practice in the identity theme sort with the location of the practice in the professional knowledge sort. Creating these tables allowed me to see the connections between identities and kinds of knowledge. For example, participants associated some identity themes with only one kind of professional knowledge, whereas they connected others to all three knowledge categories. Creating these tables also made it easy to tally the number of practices sorted into each category. I aligned these tallies with the participating expert teachers’ self-reports regarding their priorities. Table 3.4 contains the number of practices each participant sorted into each identity category in rank order from most important to least.

After I transcribed all the data and coded the follow-up interviews using the axial coding scheme, I made six passes through each case, which is composed of all the data related to an individual participant. Three of these passes were
theoretically driven, and three were based on emergent themes. The first two theoretical passes were based on the original research questions. I was guided by the questions: What is this expert teacher communicating about the nature and structure of her identity in her classroom, and what is this expert teacher saying about her PCK? The third pass I made through the data was a deductive pass looking for evidence of the final stage of Erikson's stage model of identity development, generativity versus stagnation (1963). I assumed expert teachers would evidence significant generativity in their professional lives.

Following these three passes, I made three additional passes based on insights resulting from engaging with the participants and developing increased familiarity with the data. For the first I used the lens of teachers’ priorities. During this pass, I continually asked: What are these expert teachers saying about their priorities in their classrooms? For this pass I only coded portions of the interview transcripts where the teachers were discussing what they valued and viewed as important in their classrooms. The second and third passes were based on an observation that some teachers were more likely to discuss their subject matter even as others were more likely to mention the characteristics of their school and community environments. I therefore made the final two passes through the data related to each case: one through the lens of content area and the other through the lens of school and community context.

It is important to note each of these passes resulted in the same portion of data being coded multiple times. There are two reasons for this. The first is the axial coding pass based on emergent identity themes accounted for 100% of the
data in each case so any data coded through these six passes was coded for at least a second time. The second is these passes were not mutually exclusive. For example, there were times when teachers made comments that were related to their conceptions of their teacher identities, their PCK, and their professional priorities. I coded 22% of the total data during these six passes.

Having completed these six passes through each of the cases, I began synthesizing across cases. First I identified the identity themes shared across participants. I then read through the data coded at each of these themes, as well as the behaviors associated with them, to ensure participants were talking about them in similar ways. Based on this data, I created definitions for each of the identity themes (see Table 3.3). I then reorganized the data coded during the six passes around coding themes, rather than by participant. Completing this reorganization allowed me to recognize patterns common among all four of the participants.

Findings and Discussion

The following section presents the findings of this study. They include a brief profile of each participant, an exploration of the five identity themes shared across all four participants, and the structure and make-up of expert teachers’ identities. Additionally, I discuss the location of expertise as experienced by the participants, the ways the participants exhibited generativity, and the relationship between expert teachers’ identity and knowledge. This section concludes with a discussion of the intersection of expertise, identity, and teacher practice.
Levinson’s (1986) perspective on identity and identity development guided my first pass through each case. Levinson’s model begins with the notion that identity is based on a life structure, the assemblage of all the roles someone occupies at a given time and in a given space. Identity changes and can be thought of as progressing through eras, each of which is marked by a salient task. During an era, the individual experiences mastery regarding the tasks of previous eras and feelings of insecurity about the task of the current era. Based on this pass, I concluded the participating expert teachers organized their identities in two different ways. They shared some identity themes related to teacher identity, and although they each had a strong sense of mastery regarding past tasks, there were tasks they had yet to master.

Participants’ Life Structures and Tasks

What follows is a discussion of each participant as an individual. I have focused on the tasks over which they evidenced a strong sense of mastery and the tasks with which they were struggling. Information regarding the teachers’ professional backgrounds is available in Table 3.1.

Sarah. Sarah was committed to her content area, biology. Of her ten identity themes, she ranked Science Teacher as the most important. She also readily identified herself as an Inquiry Facilitator and was very interested in activity-based learning, so much so she ranked this identity as the second most essential (see Table 3.2 for a prioritized list of Sarah’s ten identity themes and a quote representative of each theme). Before my interaction with her, Sarah had
developed a sophisticated understanding of the content and mastered designing interactive lessons and effectively managing the classroom. At the time of the data collection, she was working through two additional tasks. She expressed concern about her ability to successfully teach ESL students and was actively experimenting with different instructional strategies to help them master the biology material, develop English language proficiency, and build test-taking skills. She commented, “I’m now teaching ESL biology, so I have growth to do.” She was also concerned with finding ways to integrate volunteerism and service learning into her teaching. Prior to her own children starting school, Sarah volunteered in several contexts. She had since stopped doing because teaching required so much of her time. She was hoping to “satisfy [her] need” to volunteer by having her students engage in service-oriented projects.

Laura. Like Sarah, Laura had a strong sense of her own expertise in teaching her content. She clearly had mastered teaching the content of the ninth grade curriculum. In fact, she boasted, “I am about as expert as anyone could get at teaching 9th grade language arts…. I think I’m the goods.” Her commitment to being a Language Arts Teacher was second only to her drive to be an Advocate for Students (see Table 3.2 for a prioritized list of her identity themes and exemplary quotes). Laura also exhibited this commitment through her mastery of several related tasks: building rapport with students, making the content relevant to ninth graders, and challenging students to do high quality, sophisticated work. During our conversations, Laura talked a great deal about the pressure put on students and teachers as a result of high stakes, standardized tests. She said, “I
want my students to do real well on that test, so I have to bone it up. I think that's
a weakness for me, and I’m working on it.” Although she was confident in her
ability to assess student learning, she was unsure her assessment strategies
adequately prepared students for the content and structure of standardized tests.

Marnie. Urban Classroom Activist was at the heart of Marnie’s teacher
identity. She prioritized this identity above all others (see Table 3.2), and she had
mastered the related task of providing effective instruction for urban 9th graders.
She had also mastered the requisite reflection and classroom management skills.
Additionally, Marnie expressed a great deal of confidence in her ability to be a
Mentor for student teachers. She was good at putting student teachers to work in
such a way that they were able to help meet the needs of students and learned
about the realities of urban classrooms. During our conversations, Marnie
mentioned several times that her strength as an instructor was located in direct
instruction. She had a clear sense of how to be a “Sage on the Stage.” She also,
however, recognized cooperative learning and inquiry-based activities had an
important role to play in her classroom. As such, “more and more, [she was]
trying to be the ‘bard on the side.’ ”

Sue. Ericsson, Krampe, and Tesch-Römer (1993) argued becoming an
expert requires a minimum of ten years of deliberate practice in a domain. Given
their findings and the fact the Sue had the least experience of the four
participants (see Table 3.1), it is unsurprising she insisted on being referred to as
an expert-in-progress rather than an expert. Like Laura, Sue’s first priority was to
be an Advocate for Students, and one of the ways she achieved this was to
present the content in ways that made students want to learn (see Table 3.2). Her strategies for doing that included serving as an Inquiry-Facilitator and a Relevance-Maker for her students. Although Sue was recognized as a highly effective teacher, when I met her she was challenged by the misalignment between her students’ reading ability and the demands of the state biology standards and, by extension, the material covered on standardized student achievement tests. She said, “When you have students in your classroom that have a third grade reading level versus a tenth grade reading level … it’s very challenging.” Sue’s primary task at the time of our work together was to find and master creative strategies for making the content accessible to her students while adequately preparing them for the demands of the state test.
Sarah: Identity Themes in Ranked Order

<table>
<thead>
<tr>
<th>Rank</th>
<th>Role/Theme</th>
<th>Exemplary Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Science Teacher</td>
<td>“You get two questions per lab group per day.... We’re really aiming for good science questions.”</td>
</tr>
<tr>
<td>2</td>
<td>Inquiry-Facilitator</td>
<td>“It needs to be interactive.... I think it needs to be inquiry-based. I’m definitely into... constructivism.... Putting those kinds of main ideas together would be my philosophy of what a good educator would do.”</td>
</tr>
<tr>
<td>3</td>
<td>Classroom Manager</td>
<td>“If these are the rules, these are the rules, and you’d really have to have a great sob story before the rules would bend.”</td>
</tr>
<tr>
<td>4</td>
<td>Advocate • for Students • for Science</td>
<td>“They know I would be there at a sporting event.... I’ve been a class advisor for years.” “Lab’s important. I mean that’s what science is. Science isn’t lecture. Science is doing.... They need to do science.”</td>
</tr>
<tr>
<td>5</td>
<td>Challenger • with Community Experts • of Students</td>
<td>“I bring in experts from the field. I’m not an expert on doing echocardiograms. We’ll bring someone in who is.” “For the most part, homework is done because you need to be prepared for class. You need to know what’s going on.”</td>
</tr>
<tr>
<td>6</td>
<td>Preparer for High-Stakes Tests</td>
<td>“I don’t technically teach to the test, but I guarantee... every topic we cover between now and March has an indicator tied to it.”</td>
</tr>
<tr>
<td>7</td>
<td>Learner</td>
<td>“I think you really need to be able to keep up on your profession and what’s changing.”</td>
</tr>
<tr>
<td>8</td>
<td>Teacher Leader and Mentor</td>
<td>“I belong to the national biology teachers. I have chaired the convention when it was here. [I was] the project chair. I’ve written an article that was published by them.”</td>
</tr>
<tr>
<td>9</td>
<td>Mother</td>
<td>“I think being a mother is very helpful. I can relate to what’s going on in their life.”</td>
</tr>
<tr>
<td>10</td>
<td>Performer • Actor • Comedian</td>
<td>“I’ve learned I have to be an actor for my ESL class.” “Willing to laugh at myself, I will say that. I’ll make fun of myself. I’m okay with that.”</td>
</tr>
<tr>
<td>11</td>
<td>Technology-User</td>
<td>“I use a lot of technology to engage the students. I use smart boards. I use interactive CDs.”</td>
</tr>
<tr>
<td>12</td>
<td>Community Member</td>
<td>“I could instill in my students how important volunteering in your community is and giving back.”</td>
</tr>
</tbody>
</table>

(continued)

Table 3.2. Participants’ identity priorities and exemplary quotes.
Table 3.2 (continued)

<table>
<thead>
<tr>
<th>Laura: Identity Themes in Ranked Order</th>
<th>Exemplary Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Advocate</td>
<td>“I think they perceive me as someone who... cares about her students and wants them to do well.”</td>
</tr>
<tr>
<td>• for Students</td>
<td>“I’m very supportive of my colleagues…. I think everybody kind of has to find their own niche with teaching.”</td>
</tr>
<tr>
<td>• for Teachers</td>
<td>“I’m very supportive of my colleagues…. I think everybody kind of has to find their own niche with teaching.”</td>
</tr>
<tr>
<td>2 Language Arts Teacher</td>
<td>“I do feel like as much of an expert as someone could be, teaching at that grade level with that curriculum.”</td>
</tr>
<tr>
<td>3 Classroom Manager</td>
<td>“I am prepared. I’m planned ahead of time. I know how to gauge how much I’m getting done.”</td>
</tr>
<tr>
<td>4 Relevance-Maker</td>
<td>“I think I get my passion through making things relevant for kids because I share who I am, as a person. They see me as real, and I let them be real.”</td>
</tr>
<tr>
<td>5 Performer</td>
<td>“Like one of my groups for their Greek myths presentation was teaching a line dance to the kids, and I was up there doing it with them.... I joke and sing.”</td>
</tr>
<tr>
<td>6 Challenger</td>
<td>“I believe kids can achieve, and so you hold up the bar.... People say ‘dumb-it-down,’ I probably smart-up.”</td>
</tr>
<tr>
<td>7 Mentor</td>
<td>“I've wanted to help the other teachers, the younger teachers in my building... things that work for me ‘cause a lot of that was just time, ten years of doing it, me learning it. So, why not save them the time?”</td>
</tr>
<tr>
<td>8 Learner</td>
<td>“You just don’t sit there and do the same thing over and over again. You try to make stuff better.”</td>
</tr>
<tr>
<td>• Experimenter</td>
<td>“I remember... when I student taught I taught 10 weeks, and I mean it was a full load.”</td>
</tr>
<tr>
<td>• Mentee</td>
<td>“I’m an avid reader obviously, and I love to read.”</td>
</tr>
<tr>
<td>• Reader</td>
<td>“I’m an avid reader obviously, and I love to read.”</td>
</tr>
<tr>
<td>9 Risk-Taker</td>
<td>“I do feel like I take a lot of risks, but I think I can take more because of my comfort level.”</td>
</tr>
<tr>
<td>10 Preparer for High-Stakes Tests</td>
<td>“I hate to say it, but I’m gonna have to start teaching a little bit more to the test too because they’re putting so much emphasis on data with the [graduation exam]. So I need to improve.”</td>
</tr>
<tr>
<td>11 Mother</td>
<td>“My daughter has ADHD and has a hard time on tests, and I’m a little more sympathetic about things.”</td>
</tr>
<tr>
<td>12 Person of Faith</td>
<td>“Well, my faith does [enter into it]. I know it’s public school, but I do. I’m very active with Bible studies and my church.”</td>
</tr>
<tr>
<td>Marnie: Identity Themes in Ranked Order</td>
<td>Exemplary Quotes</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Urban Classroom Activist</strong></td>
<td><em>I want what I teach them to be competitive with what is taught in any suburban school.</em></td>
</tr>
<tr>
<td><strong>Reflective Practitioner</strong></td>
<td><em>I really am very reflective everyday... It's constantly, 'What worked? What didn't work?/</em></td>
</tr>
<tr>
<td><strong>Lover of 9th Graders and Student Teachers</strong></td>
<td><em>I just totally love all that nonsense. I love kids.</em></td>
</tr>
<tr>
<td><strong>Learner</strong></td>
<td><em>If I went into somebody's classroom who taught 9th grade and they were doing something better than I was doing, I'd do it.</em></td>
</tr>
<tr>
<td><strong>Advocate for Students</strong></td>
<td><em>Well, I've certainly been fortunate enough that people have given me a second chance... If you can get that F up to a C, I'll go back and change your first quarter F to a C.</em></td>
</tr>
<tr>
<td><strong>Classroom Manager</strong></td>
<td><em>I'm never off point... I have a real good idea about 90 or 95% of everything that's going on.</em></td>
</tr>
<tr>
<td><strong>Life Skills Developer</strong></td>
<td><em>I think that's a real important skill to learn in the big world is to know those nonverbal cues and so I teach them.</em></td>
</tr>
<tr>
<td><strong>Teacher Educator</strong></td>
<td><em>Okay, this is something I'm inordinately proud of... 100% of my interns are teaching.</em></td>
</tr>
<tr>
<td><strong>Autonomy Supporter</strong></td>
<td><em>They have a lot of choices. They have a choice of whatever they want to read.</em></td>
</tr>
<tr>
<td><strong>Challenger</strong></td>
<td><em>I always like to be that prod, push a little more, go a little harder... So I do see myself... challenging the kids.</em></td>
</tr>
<tr>
<td><strong>Inquiry-Facilitator</strong></td>
<td><em>More and more I'm trying to be the bard on the side.</em></td>
</tr>
<tr>
<td><strong>Performer</strong></td>
<td>*How could you possibly make that instruction happen in a magical way for 160 youngsters?/</td>
</tr>
<tr>
<td><strong>Optimist</strong></td>
<td><em>I'm an optimist, but I think I've also learned to protect myself, take care of myself, have my pedicure once a month.</em></td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Sue: Identity Themes in Ranked Order</th>
<th>Exemplary Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Advocate</td>
<td>&quot;Some of it is just school pride, wanting kids to know what it was like, what they could have.&quot;</td>
</tr>
<tr>
<td>• for the School</td>
<td>&quot;They're our customers. They're our stakeholders. We've got to serve them.&quot;</td>
</tr>
<tr>
<td>• for Students</td>
<td></td>
</tr>
<tr>
<td>2 Inquiry-Facilitator</td>
<td>&quot;I try to stay hands-on with the kids as far as doing activities. I'm a hands-on teacher. That's me.&quot;</td>
</tr>
<tr>
<td>3 Relevance-Maker</td>
<td>&quot;It needs to be real life to them... You need to try and find some sort of relationship to what they're doing now.&quot;</td>
</tr>
<tr>
<td>4 Learner</td>
<td>&quot;You learn to be creative. I would say I'm a very creative teacher.&quot;</td>
</tr>
<tr>
<td>• Creator</td>
<td>&quot;We've tried everything... Certain things worked better than others.&quot;</td>
</tr>
<tr>
<td>• Experimenter</td>
<td>&quot;You need to learn how to be flexible, change with technology, try to learn something, adapt to changes.&quot;</td>
</tr>
<tr>
<td>• Flexible Teacher</td>
<td></td>
</tr>
<tr>
<td>5 Mentor</td>
<td>&quot;I was also mentoring students and my student teacher as far as science fair went.&quot;</td>
</tr>
<tr>
<td>6 Community Member</td>
<td>&quot;Try and help our community. I can't sit here and gripe if I'm not willing to help to try to do something.&quot;</td>
</tr>
<tr>
<td>7 Optimist</td>
<td>&quot;I'm generally positive, most of the time.&quot;</td>
</tr>
<tr>
<td>8 Classroom Manager</td>
<td>&quot;I'm not one to stay behind my desk. I'm usually... moving through the classroom.&quot;</td>
</tr>
<tr>
<td>• Mover</td>
<td>&quot;[We] looked at the [exam] schedule ... to decide what we could tweak or move to have a better flowing calendar.&quot;</td>
</tr>
<tr>
<td>• Scheduler</td>
<td></td>
</tr>
<tr>
<td>9 Preparer for High Stakes Tests</td>
<td>&quot;Because of the [graduation exam]. Because you're trying to meet benchmarks.&quot;</td>
</tr>
<tr>
<td>10 Challenger</td>
<td>&quot;If nothing else I'm at least gonna sit there and tell you a hundred million times, 'You need to write this.'&quot;</td>
</tr>
<tr>
<td>11 Counselor</td>
<td>&quot;I've had a couple students in crisis, and we've dealt with that, got them help.&quot;</td>
</tr>
<tr>
<td>12 Mother</td>
<td>&quot;I would sit there and go, 'Well, I hope somebody would step up and do that for my children.'&quot;</td>
</tr>
<tr>
<td>13 Technology-User</td>
<td>&quot;You've got to figure out how to use technology because they're used to video games and TVs.&quot;</td>
</tr>
</tbody>
</table>
Shared Identity Themes

All four of the participants shared five identity themes. They were Advocate for Students, Challenger, Classroom Manager, Teacher Leader and Mentor, and Learner. Column one of Table 3.3 includes all of the identity themes, including these five, and a definition for them. Column two includes an example practice associated with that identity theme. The practices were either recorded during an observation or talked about during an interview. I only included practices discussed during an interview in instances where participants did not sort any practices into that identity theme during phases three and five of the data collection. The last four columns indicate which participants spoke about possessing that identity.

Advocate for Students. Each of the four participants spoke about Advocate for Students as a central feature of their teaching identity. Moreover, they aligned much of their observed practice with this identity theme. Practices connected to Advocate for Student were related to making the classroom environment conducive to learning (e.g. Laura asked students to be quiet because, “Some students are desperately trying to think.”). They were also interpersonal, driven by teachers’ knowledge of and relationships with students. Participating teachers encouraged students who experienced self-doubt and praised students for quality work (e.g. Marnie said to her students, “I was really proud to be with you yesterday.”). They expressed care and concern for students, and they supported students’ learning by responding to their questions and concerns and offering strategies for successfully completing a learning
activity (e.g. Sarah read quiz items aloud to her ESL students.). Given the robust literature indicating the importance of positive student-teacher relationships and teacher responsiveness to students’ needs (Davis, 2003, in press), it is not surprising expert teachers are committed to relating to and advocating for their students.

*Challenger.* Brophy and Good (1986) argued it is important for teachers to express and hold students accountable to high expectations. Similarly, Middleton and Midgley (2002) and Murphy, Weil, Hallinger, and Mitman (1982) found pressing students for understanding and engaging students in challenging tasks correlate with positive outcomes for students. These outcomes include improved academic efficacy and adaptive learning strategies. Taking these findings into account, it was expected expert teachers would possess identities as Challengers. The practices associated with this identity theme included pressing students for details and pushing them to give explanations for their answers. Participating teachers also aligned practices intended to maintain a rigorous pace (e.g. Sue said, “Okay group. This doesn't take that long. Chop, chop.”) and encourage students to teach one another with the Challenger identity.

*Classroom Manager.* The participants had a view of classroom management that was well-aligned with Doyle’s (1986) definition. From his perspective, classroom management includes all teacher practices intended to establish and maintain order in the classroom. The participants aligned four basic kinds of practices with this identity theme. They were making expectations of students transparent, pacing the lesson, monitoring students and their learning,
and dealing with class materials. Emmer and Gerwels (2006) argued classroom management is complex and important in high school classrooms, and for these reasons it was anticipated those recognized as expert teachers would possess and rely on well-developed identities as Classroom Managers.

*Teacher Leader and Mentor.* Given that serving as a cooperating teacher was a requirement for eligibility to participate in this study, it follows logically that all of the participants defined themselves as Mentors. Although mentoring was requisite, I did not require participants to talk about their identities as Mentors or Teacher Leaders. Nonetheless, each of the participants did. I did not, however, observe many practices the participants aligned with this identity theme during the sorts in phases three and five of data collection. Those I did observe were related to mentoring students. For example, Laura wrote recommendation letters for students to assist them in college admissions and scholarship applications. Similarly, Sue provided opportunities for students to engage in biology-related activities beyond school such as the county-wide science fair and national contests.

*Learner.* As previously mentioned, Shulman and Shulman (2004) theorized accomplished teachers are necessarily “more capable of learning from their own experiences and others’ experiences” than novices (p. 259). As such, it was likely all of the participants would refer to themselves as Learners. Like Teacher Leader and Mentor, I did not observe practices associated with the participants as Learners during the classroom observations, yet the participants did mention practices aligned with this identity theme during the interviews. They
included trying to be innovative in instruction, experimenting with new teaching strategies and assignments, and borrowing ideas from colleagues. In addition, Laura referenced the practice of reading, and as indicated in Table 3.2, Sue mentioned that as an expert teacher, “you need to learn how to be flexible, change with technology, try to learn something, adapt to changes.”
<table>
<thead>
<tr>
<th>Themes and Definitions</th>
<th>Practices</th>
<th>Sarah</th>
<th>Laura</th>
<th>Marnie</th>
<th>Sue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advocate for Students</strong> – Loving students; supporting them; meeting their needs; making sure their voices are heard.</td>
<td>Projected model note-taking so ESL students can see (Sarah)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Challenger</strong> – Pushing students to do more sophisticated work; having high expectations regarding academic work and school behavior; requiring students to take responsibility for their own learning.</td>
<td>Had students make predictions, based on foreshadowing, about the plot of the play (Laura)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Classroom Manager</strong> – Organizing classroom space; planning instruction and assessment; establishing expectations regarding student behavior; completing administrative tasks.</td>
<td>Posted agenda entries on news print for last week, this week, and next week (Marnie)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Leader and Mentor</strong> – Taking on both formal and informal leadership positions within schools, the community, and the profession of teaching; serving as a mentor and model for teachers.</td>
<td>Talked with student teacher about what to do tomorrow (Sue)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Learner</strong> – Continuing to collect teaching strategies; building content knowledge; learning about students; experimenting with instructional strategies; being mentored by other teachers; reading.</td>
<td>Disclosed to students you were trained in using foldables during 3rd period today (Sue)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Performer</strong> – Engaging in behaviors such as storytelling, acting, and comedy in an effort to engage students; working to find ‘magical’ ways to present material; doing unexpected things to regain students’ attention.</td>
<td>Danced a court dance from Romeo and Juliet with a student (Laura)</td>
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<tr>
<td><strong>Preparer for High-Stakes Tests</strong> – Preparing students for graduation exams and other high stakes tests; making decisions on the basis of the state standards; helping students to develop test-taking strategies.</td>
<td>Emphasized how to read test questions (Sarah)</td>
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<tr>
<td><strong>Mother</strong> – Allowing experience as a parent to inform teaching practices and interactions with students.</td>
<td>Asked a student, “Are you alive today? You look like you’re melting into your desk.” (Sue)</td>
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<tr>
<td><strong>Inquiry-Facilitator</strong> – Engaging in constructivist pedagogies; having a highly interactive classroom; encouraging students to learn by completing activities and projects.</td>
<td>Encouraged students to discover what canola is during the lab (Sarah)</td>
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<tr>
<td><strong>Content Area Teacher</strong> – Focusing on the role of the subject matter in teaching.</td>
<td>Reviewed literary terms (pun, irony, motif, foreshadowing) while recapping the plot (Laura)</td>
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(continued)
Table 3.3 (continued)

<table>
<thead>
<tr>
<th>Themes and Definitions</th>
<th>Practices</th>
<th>Sarah</th>
<th>Laura</th>
<th>Marnie</th>
<th>Sue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technology-User</strong> – Using classroom technology such as video, PowerPoint, smart boards, interactive CDs, and computer programs to enhance the instruction and keep students engaged.</td>
<td>Created PowerPoint slides to accompany lectures (Sarah, interview)</td>
<td>X</td>
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<tr>
<td><strong>Community Member</strong> – Volunteering in the community and in the school; working with colleagues and taking on additional work to improve school and community conditions.</td>
<td>Reminded students who are on the prom committee about the meeting tomorrow (Sue)</td>
<td>X</td>
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<tr>
<td><strong>Advocate for Teachers</strong> – Working to improve the professional lives of colleagues; working to improve the status of teachers; offering intellectual and emotional support to other teachers.</td>
<td>Gave colleagues and mentees a copy of all curricular materials (Marnie, interview)</td>
<td></td>
<td>X</td>
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<tr>
<td><strong>Relevance-Maker</strong> – Working to make the content relevant to students; sharing personal information with students in an effort to demonstrate how the content relates to real life.</td>
<td>Discussed with students the human experience of heart versus head struggles, similar to those in <em>Romeo and Juliet</em> (Laura)</td>
<td>X</td>
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<tr>
<td><strong>Optimist</strong> – Maintaining a positive outlook; having a positive attitude with students; believing teaching does make a positive difference.</td>
<td>Smiled at students to communicate a positive attitude (Sue, interview)</td>
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<tr>
<td><strong>Challenger with Community Experts</strong> – Providing challenging opportunities for students to interact with and learn from experts.</td>
<td>Brought in the eye doctor to talk about myopia and presbyopia (Sarah, interview)</td>
<td></td>
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<tr>
<td><strong>Advocate for Content Area</strong> – Communicating the importance of subject matter.</td>
<td>Told students about science-related summer work opportunities (Sarah)</td>
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<tr>
<td><strong>Risk-Taker</strong> – Engaging students in conversations about taboo topics.</td>
<td>Talked explicitly with students about sexual themes in <em>Romeo and Juliet</em> (Laura)</td>
<td></td>
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<tr>
<td><strong>Person of Faith</strong> – Allowing beliefs about God to inform teaching practice and interactions with students.</td>
<td>Played song about God’s perspective on September 11 (Laura, interview)</td>
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<tr>
<td><strong>Urban Classroom Activist</strong> – Recognizing the unique needs of urban students and working to meet them; working to counteract the context-related disadvantages of urban students.</td>
<td>Talked openly about race and racism with students (Marnie, interview)</td>
<td></td>
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<tr>
<td><strong>Sage on the Stage</strong> – Engaging in direct instruction.</td>
<td>Lectured on the history of plays at The Globe (Marnie)</td>
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### Themes and Definitions

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<tr>
<th>Themes and Definitions</th>
<th>Practices</th>
<th>Sarah</th>
<th>Laura</th>
<th>Marnie</th>
<th>Sue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflective Practitioner – Consciously interrogating teaching practice in an effort to improve it.</td>
<td>Talked with mentees between bells about how the previous period went (Marnie, interview)</td>
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<tr>
<td>Life Skills Developer – Helping students to develop social and self-regulation skills that will serve them in any context.</td>
<td>Introduced the observer in the class (Marnie)</td>
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<tr>
<td>Book Pusher – Constantly encouraging students to read; working to help students develop a love of books.</td>
<td>Told student not to waste time, “get something to read.” (Marnie)</td>
<td></td>
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<tr>
<td>Autonomy Supporter – Providing opportunities for students to make appropriate choices.</td>
<td>Had volunteer students read aloud using the microphone (Marnie)</td>
<td></td>
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</tr>
<tr>
<td>Counselor – Listening to students personal concerns; seeking out appropriate help when students are in crisis.</td>
<td>Got help for students in crisis (Sue, interview)</td>
<td></td>
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<td>X</td>
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<tr>
<td>Advocate for the School – Taking pride in the school; working to improve the image of the school in the community.</td>
<td>Countered stereotypes attached to graduates of the school (Sue, interview)</td>
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</table>
The Structure of Expert Teachers' Identities

Sarah and Laura both talked about their teacher identities as mosaics composed of several related identities. Although the ‘mosaics’ contained ‘tiles’ representing “any hat [they’ve] ever worn” as a teacher, the frame and structure of the ‘mosaic’ “[depended] on what the topic” was for the day (Laura). It also depended on the students in the class. Sarah noted, “I am a totally different type of teacher for my ESL students than I am for my honors students.” Similarly, Laura said she “[tweaks] a little bit” depending on who the students in the class are, their interests, their prior experiences, and their abilities.

Marnie and Sue, however, spoke about the organization of their teacher identities as being similar to inverted pyramids or funnels. In contrast to my belief that identity is nonhierarchical, these two teachers organized their teacher identities according to very explicit hierarchy. They had identities that formed the foundation or funnel for all of the others regardless of the content for the day or the students in the class. For Sue, the identities through which all others funnel were Advocate, Community Member, and Optimist; through these three, the others “[come] together in a cohesive way.” Marnie described Urban Classroom Activist as serving as the apex of the inverted pyramid. For her, the next level included Reflective Practitioner, Lover of Ninth Graders and Student Teachers, and Teacher Educator. All the others rested on those.

When asked about whether expert was another identity, the participating teachers replied it is not. Like teacher, expert is a combination of the others.
Sarah commented, “I suppose you could really do a bunch of those things and not put it together well. Maybe the expert’s when you can put the whole package together well.” She went on to suggest, referring again to the ‘hat’ metaphor for identity, expertise is like a good hall tree that organizes hats and makes them accessible. Furthermore, these teachers perceived expertise to be highly context-specific. Laura summed this up well when she said, “I’m an expert in my own classroom.”

Where Is Expertise?

Before beginning this study, I assumed expert secondary teachers would manifest teaching expertise, content expertise, and expertise in teaching their content. Having taken on that lens, I realized some teachers were more likely than others to talk about their content. In order to further explore attention to content, I made a pass through the data specifically coding moments when the participating teachers talked about their content. Coded passages included comments about specific topics or strategies (e.g. Marnie boasted, “You can go all the way through a Ph.D. by the way I’m teaching how to write.”), feelings about their content area (e.g. Sue avowed, “Genetics is probably my favorite unit to work with.”), opinions about ways to best communicate their content to students (e.g. Laura said, “I’ve... tied in historical things, tied in comparison essays and creative pieces.”), or the nature and structure of their discipline (e.g. Sarah declared, “Science changes so much.”). Although all of the teachers made such comments, none of the teachers claimed expertise in their content area. In
other words, none of the teachers claimed to be a language arts or a science expert. What is more, only Sarah and Laura located their expertise in teaching their content. They claimed respective identities as Science Teacher and Language Arts Teacher and were more likely than Marnie and Sue to make comments about their subject matter.

I also coded moments when the participating teachers talked about the contexts in which they work: students’ backgrounds and life experiences, school characteristics, and the community. For example, Marnie repeatedly mentioned the “fractured lives” of her students, and Sue talked about the declining enrollment in her school, her students’ home lives, and the economic characteristics of the community her school served. When looking at the proportion of these kinds of comments, Laura and Sarah, who worked in suburban districts, were far less likely to discuss contextual elements than Marnie and Sue who worked in urban schools. Laura and Sarah respectively made one and five comments related to context whereas Marnie and Sue respectively made 11 and 26. This suggested Marnie and Sue located their expertise in the context in which they work. They were, or were becoming, expert urban teachers.

Channels of Generativity

Generativity versus stagnation is the seventh stage of Erikson’s (1963) eight-stage model of ego development. Erikson described generativity as being “concern in establishing and guiding the next generation… the concept
generativity is meant to include such more popular synonyms as productivity and creativity, which, however, cannot replace it” (p. 267). Stagnation, on the other hand, involves a proclivity toward self-indulgence and self-absorption (Bee & Boyd, 2003; Lemme, 2002). In grounding my assumption that expert teachers would evidence generativity, I drew on Kotre’s (1998) elaboration of this phase of Erikson’s model. Kotre identified four types of generativity: biological, parental, technical, and cultural. Given the parental metaphors teachers often use to talk about their work, the first two may be relevant in the experiences of expert teachers (see Burgess & Carter, 1992; Dixson, 2003 for discussions of “mothering” in education). The relevance of the latter two is more readily evident. Kotre defined the technical domain as related to the “teaching of skills and procedures” and the cultural domain as connected to “conserving, renovating, or creating a meaning system and passing it on to others” (p. 2). These, in many ways, are the tasks of teachers.

Indeed, the expert teachers in this study evidenced generativity. Furthermore, they spoke about four distinct channels for their generativity: students, pre-service teachers, their colleagues and the profession of teaching, and the community. I have chosen the metaphor ‘channel’ because it communicates there are distinct ways in which teachers are generative, those ways have a clear direction, and those ways can merge and diverge. The following quote from Laura points to each of the four channels:
My goal is to help give something back to the world, to these kids; give them thoughts, knowledge, sensitivity, compassion, or help them be better people. That is my number one goal in teaching. It’s not for them to be better writers; it’s for them to be better people. And so, if that’s my number one reason why I went into teaching, then why wouldn’t I want to share my stuff that’s been successful with other [teachers]?

Clearly, Laura worked to make a positive difference in the lives of her students, and through that, in the community. This quote also suggests her desire to make a difference within her profession by sharing successful materials with student teachers and colleagues.

**Students**

Each of these four teachers strove to make a difference for their students; they would “do anything… to help students succeed” (Sue). This focus manifested in these teachers’ efforts to make sure students receive a quality education, have their needs met, want to learn, find the content relevant, and know their teachers are there to support them both in and beyond the classroom. When talking about her commitment to providing a “level playing field” for her urban students, Marnie noted, “I could only make sure that they had the best quality education in my classroom, when they were with me, that I could give them. And so that’s really everything about me. Anything that I do swirls around that.” She went on to say, “I don’t bow down and worship content. I bow down and worship kids.” Sue expressed a similar sentiment when she stated:
My day revolves around them, but that's how I feel it should be. That's who I'm here for. I'm not employed for the city schools. I'm an employee for those students. They need certain things from me, and I've got to try and deliver for them.

Regarding relevance and hoping students want to learn, Laura talked about her childhood desire of becoming a teacher. She said, "I did want to be an advocate. I think I did want to make education relevant, relevant for them so that they want to learn," and Sarah commented on the importance of supporting students in other contexts—attending sporting events, serving as class advisor, pitching in during fundraisers, and helping students “grow as leaders.”

*Pre-Service Teachers*

As dictated by the sampling protocol, each of these four participating expert teachers served as a cooperating or mentor teacher for pre-service teachers. The sampling protocol did not, however, predetermine the participants would invest so much in this role. Sue spoke about doing a good deal of work ahead of time to prepare the students and the classroom. She said, "[I] want everything to go well for them. [I] want their experience to be good." Laura, on the other hand, mentioned giving time to mentees beyond the duration of their formal mentoring relationship. She stated, "My student observer just got a job… and he had to use almost all of my unit plans. I've met, on my own, with him for two or three hours because he's just a great guy and a hard worker." As indicated by Marnie's quotes included in Table 3.2, she was “serious about her
role as a cooperating and mentor teacher." She had been serving as a cooperating teacher since her third year of teaching, and she often had as many as four or five pre-service teachers observing in her class. Most impressive was her commitment to being a life-long support for her mentees if and when they needed her. Her mentees, in turn, exhibited a strong commitment to the profession. She shared the following with me about her experience in an administrator licensure program:

    My instructor… said, “If you are a principal you can impact the lives of thousands and thousands more children than if you’re in the classroom.”
    And that really haunts me down the corridors of time. I couldn’t do it in the classroom, but I can with my interns.

As this quote indicates, Marnie’s dedication to mentoring future teachers was a form of generativity in and of itself. It was also another way to exhibit generativity toward students. She had made a difference for potentially thousands of children by helping pre-service teachers learn to teach effectively (see also Stevens, 1995).

*Colleagues and Teaching as a Profession*

Sarah made a difference in the profession of teaching by taking on several leadership roles. She chaired her department and worked on the professional development committee for her district. She also contributed to the field of biology education more broadly by attending conferences, helping to organize conventions, and publishing articles in journals for biology teachers. Though only
Sarah talked about serving in teacher leadership positions outside of school, all three of the others spoke about wanting to work with their colleagues, collaborate on curriculum and instruction, and share materials. Sue met routinely with colleagues and former student teachers to “bounce ideas off each other” and coordinate the science calendar. Laura readily shared her packets, activities, resources, and assessments with new teachers. She said, “I think the other, younger teachers appreciate me that I’m willing to share, that I’m not stingy.” Similarly, Marnie said, “I organized all the stuff that I have: lesson plans, students’ hand-outs, transparencies, tests on my desktop in folders, and I always tell my young teachers to just bring a flash [drive] and take everything I have.” She continued to have this kind of relationship with these teachers even after they transitioned from being her interns to being practicing teachers with their own classrooms.

Community

Sue and Sarah both talked about their identities as Community Members and having a drive toward volunteerism (see Table 3.2 for quotes from Sue and Sarah related to this identity theme; see Table 3.3 for a definition of this identity theme). For Sarah, these interests manifested in attention to service learning and looking for opportunities for her students to “give back.” Sue, on the other hand, invested in service for the sake of students. She worked to challenge negative stereotypes attached to her town, her school, and her students so her students would have more positive interactions in the community. She volunteered in a
community garden, and she worked tirelessly to organize the city-wide science fair. Additionally, she sponsored and chaperoned students from other schools who wanted to present at the science fair and did not have an advising faculty member in their school. Her efforts were specifically for the purposes of providing opportunities for students and improving community opinions of her district. Although Laura and Marnie did not talk specifically about doing work in the community beyond the walls of their schools, they expressed the desire to make a difference on a broad scale. Laura said, “I’m trying to give back to society in some way.” Similarly, Marnie referred to the impact the Civil Rights Movement had on her and said, “I decided that I would make a difference for the rest of my life.”

Stagnation

Each of the teachers also expressed uncertainty or unwillingness in regard to pursuing these channels of generativity. With regard to pre-service teachers, Sue expressed hesitation about allowing a student teacher to take over in her class. She said, “It’s hard for me to let go of control. I’m much better with observers.” Sarah also pointed to an area of stagnation when she commented that her work as a teacher prevented her from working in the community as she once had. She said, “Almost everything I was a part of I gave up when I came back to teaching…. I didn’t have the time to do that, if it occurred during my months that I was teaching.” Laura and Marnie also expressed stagnation, primarily regarding the ability of colleagues to teach students and mentor pre-
service teachers as well as they did. Their critiques of their colleagues were not overt, yet they were implicitly imbedded in their discourse. Laura said with regard to being asked to teach a section of junior and senior Contemporary Literature:

That’s one thing that kind of does make me mad…. I really do feel like my expertise is where it’s at, and so I do think it’s kind of sad that I have one extra class to teach… and then I can’t teach another group of freshmen.

On the one hand, this remark expressed Laura’s confidence in teaching ninth grade language arts. On the other, it suggested students are better off in her class than in the classes of her colleagues. Similarly, Marnie commented about pre-service teachers:

I worry about those people who are not with me for the full, big part, and they go somewhere else. But the other part of that is that if I keep them the whole year, then there are other people who don’t get to be with me.

Like Laura’s, Marnie’s statement indicated her confidence in and her commitment to serving as a Mentor for pre-service teachers. It also implied a lack of faith in other teachers’ capacities to adequately prepare them for the realities of classroom teaching.

Stagnation as presented here and written about in the literature tends to have a negative connotation. Through getting to know these teachers, I have come to believe, however, some stagnation may be necessary in the lives of teachers. Marnie expressed this well. She was talking about how the “fractured lives” of her students broke her heart in her first years of teaching when she said:
I would go home just miserable everyday. I was just miserable, and I just had this mantra, “This is something I've wanted to do all my life. This is something I've always wanted to do. I'm gonna do it.” And at some point I had to divorce that fact that I could not do anything about their lives outside of school. I couldn’t do anything about it…. What I do is teach…. It's every day, every single day for 34 years in my classroom.

Marnie had to “divorce” herself from the things about her students’ lives that she had no control over and focus her attention on what she was empowered to do: be an excellent teacher every day for 34 years. It may be useful for teachers to “divorce” themselves from the things they cannot change in order to stave off the disillusionment teachers often experience (Pushkin, 2001). Perhaps they cannot improve every element of the lives of their students, mentor every new teacher, entirely revamp the nature of the profession or the contexts of schools, or solve every problem in their communities. Teachers, even those who are experts, may need to find strategies for delimiting what they cannot do in order to focus their attention on the positive differences they are able to make.

*Integrated Professional Knowledge*

Each of the four participating expert teachers evidenced an integrated professional knowledge base. Given the extant literature on the nature of PCK, it is not surprising expert teachers would talk about making decisions on the basis of knowledge integrating pedagogy and content (Ball, 2000; Chen & Ennis, 1995; Shulman, 1986, 1987, 1988). The teachers in this study, however, resisted
Shulman’s hierarchy. Whereas he prioritized the integration of subject matter and pedagogy, the participants emphasized integrating what they know about their students with what they know about effective teaching. Although the extant literature does mention the inclusion of knowledge of students in teachers’ PCK (see Andrzejewski & Davis, 2008; McCaughtry, 2005), it does not refer to the primary coupling of pedagogy and knowledge of students. I found evidence supporting knowledge that is integrated in this way in both the participants’ sorts of their classroom practices and their interviews.

When the participants completed the sorts of their observed practices, I cross-referenced where they located practices in the sort based on identity themes with where they located practices during the sort based on knowledge categories. Participating teachers associated nearly all of the identity themes with more than one professional knowledge category. This suggests there is no one-to-one relationship between knowledge and identity. Furthermore, knowledge is integrated across the identity themes the participants associated with their teacher identities. For Sarah, four identity themes aligned with all three categories of knowledge, and the remaining eight aligned with two. Likewise, Laura sorted her practices in such a way that four identity themes linked to all three knowledge categories; two connected to both knowledge of students and pedagogy, and one identity theme, Risk-Taker, connected only with knowledge of students. Sue’s sorts were similar to Sarah’s and Laura’s. Eight of her identity themes aligned with all three forms of professional knowledge; two connected to
both knowledge of students and pedagogy, and Mother only corresponded with knowledge of students. With regard to alignment between identity themes and knowledge categories, Marnie was exceptional in that all twelve of the identity themes into which she sorted behaviors corresponded to all three of the knowledge categories: subject matter, knowledge of students, and pedagogy.

Each of the participating expert teachers also spoke about integrating their pedagogical knowledge with what they knew about their students. They also spoke about how these kinds of knowledge inform each other. Sue believed her students taught her how to teach and stated, “Pedagogy-wise, I don’t think I would be as strong if I didn’t know my kids.” Sarah made a similar remark when she said, “The way you teach is based on your knowledge of your students, and sometimes knowledge of students in based on previous years of pedagogy.”

Participants also talked about having difficulty sorting their practices according to knowledge categories because of this integration. As Sarah worked through a knowledge sort, she asked, “Do I do it because it’s my pedagogy or do I do it because I know… my students?” Laura made a similar comment: “There still would be cross-overs, like I said. There still would be things that I do for the purpose of pedagogy and knowledge of students combined.” Due to experiencing the same struggles, Marnie refused to align her practices with only one kind of knowledge, stating, “I’m using all three things at every moment of the day, at every minute. They don’t generally function independently of one another.” Accordingly, she aligned 97% (154/158) of her practices with both pedagogy and
knowledge of students and 58% (92/158) of her practices with all three knowledge categories. Marnie’s sorts point to the role of subject matter knowledge in expert teachers’ integrated professional knowledge, and Sue echoed her sentiments: “A lot of the subject matter and pedagogy, I thought, could go hand in hand.”

The Intersection of Expertise, Identity, and Practice

Having completed the data collection with Sarah and Laura, I realized they both mentioned the process of analyzing and sorting their behavior confirmed they were spending their time doing what was important. After seeing long lists on Advocate for Students, Language Arts Teacher, and Relevance-Maker, Laura commented, “It really is actually making me feel pretty good because it is reflecting that I’m doing what I want to do and what I intend to do as a teacher.” Correspondingly, Sarah said, “I understand why I have more in some areas than others,” when she realized the identity categories with few or no behaviors attached to them were not as central to who she was inside the classroom with her students. These comments prompted me to go back and ask Sarah and Laura to rank order their identity themes in order from most to least important; I asked them to think about who they wanted and needed to be in their classrooms. I also included this process at the conclusion of the data collection with Marnie and Sue.

Table 3.2 organizes each participating expert teacher’s identity themes in the order participants ranked them, from most to least important. This table also
includes an exemplary quote for each of the themes. These quotes typify the data from which the themes emerged. Having established the rank order of each participant’s identity themes, I then counted the number of practices each participant associated with each theme during phases three and five of data collection. Table 3.4 aligns the ways the participants prioritized their identity themes and the number of practices sorted into each theme. The first row indicates the rank order of identity themes from one, the most important, to 15, the least important (see Table 3.2 for the identity themes associates with the participants’ rankings). Rows two through five align the number of practices sorted into each theme for each participant. This table shows a general trend that these expert teachers spent the majority of their time and energy enacting the identities they believed to be the most important. Marnie, for example, placed every behavior under the three identity themes she determined to be most important: Urban Classroom Activist, Reflective Practitioner, and Lover of Ninth Graders and Student Teachers. She also commented, “It always goes back to those first things. I’m an urban teacher, an urban activist, and I’m a reflective practitioner. I mean, it’s every day, every minute.” Likewise Sue sorted all of her behaviors into her top priority, Advocate for Students and for the School. This trend suggests the intersection of teacher expertise, teacher identity, and teacher practice resides in enacted priorities.
For each of the participating teachers “it was so plainly obvious which categories [were] at the heart” (Laura). There was also, however, some misalignment between these teachers’ priorities and their practice. Sue and Marnie both sorted all of their behaviors into identity categories that were not at the top of their priority lists: six and seven, and nine, respectively. Sarah acted as Mother more frequently than its ninth position would indicate, and Laura spent the most time enacting the identity she ranked as third in importance, Classroom Manager. What does it mean for expert teachers to expend a great deal of time and energy engaging in practices that are not aligned with their priorities? Furthermore, what would it mean for teachers to consistently align their practice with their priorities; what would it mean for school environments and policies to make that possible?

Table 3.4. Priorities and practices.

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<td>Laura</td>
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This study makes several novel contributions to the literature. Through overlapping educational and psychological perspectives on identity and identity development, this study broadens the discussion of teacher identity. In so doing, this study draws on conceptions of identity as both a description of self and as a

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place in a developmental sequence. Furthermore, this study demonstrates adopting both of these perspectives is fruitful. Participating expert teachers shared five core descriptive identities, which has important implications for the nature and content of teacher education. Drawing on Levinson’s (1986) theory, it is important to recognize that, although these expert teachers have mastered many tasks related to their teaching identities, there are still tasks with which they struggle. Being an expert teacher is not an endpoint in the professional development of teachers. It is a guidepost from which teachers can identify and tackle new tasks. Finally, Erikson’s (1963) model proved to be a productive way to make sense of expert teachers’ identities. The teachers who participated in this study evidenced significant and varied generativity. They also evidenced some stagnation implying generativity and stagnation may not be mutually exclusive for teachers. Instead, they may be paired in meaningful and productive ways.

This study also broadens the understanding of expertise in education. As mentioned, it points to five core identities related to expert teaching. Moreover, this study indicates a new feature of teaching expertise: the alignment of teachers’ priorities and classroom practices. It also expands the conventional view of PCK by challenging the priorities put forth in Shulman’s (1986, 1987) theory of teacher knowledge. Lastly, the findings of this study raise questions about how expertise may be different in urban and suburban settings. Although it is unreasonable to generalize to all urban or suburban teachers on the basis of
the experiences of the four participants in this study, the question of where expert teachers locate their expertise warrants further investigation. Do urban expert teachers view themselves as expert teachers of urban students whilst suburban expert teachers see themselves as expert teachers of their content?

_Implications_

Fundamentally the value of this study resides in its heuristic nature. As such, practitioners and theorists should engage with it in ways that shape their thinking and behavior. For teachers, this study suggests reflecting on teacher identity and its relationship to classroom practice is worthwhile. It also suggests teachers should strive to identify channels of generativity, recognize their teaching priorities, and work toward aligning what they do with what they care about. For administrators and those working in professional development for teachers, it is important to help teachers identify the current salient tasks with which they are struggling, develop strategies for moving toward mastering those tasks, and discover the next tasks in their professional growth. This study also suggests professional development designed to help teachers develop identities as student advocates, classroom managers, challengers, teacher leaders and mentors, and learners is important. Lastly, it would be advisable for school administrators to come to know their staff in terms of their current and desired channels of generativity. This information may prove invaluable when seeking volunteers for school-based activities beyond classroom teaching. Perhaps teachers who are or want to be generative toward the community should be
asked to take responsibility for the school food drive, and those who are passionate about making a positive difference for students should be solicited to sponsor the student government or chaperone at the prom. Only teachers who feel strongly about making a positive difference for student teachers should be recruited as cooperating teachers, and only those who want to channel their generativity toward their colleagues and profession should be enlisted to be on school improvement teams or serve as mentors for novice teachers.

Limitations and Recommendations

Although I am confident the sampling protocol used for this study (see Appendix B) did help me to identify expert teachers, I am concerned about the teachers who were left out or overlooked. Although recruitment for this study went on for eight months, I was unable to recruit teachers of marginalized subjects, performing and visual arts in particular (see Appendix H for a catalog of nominated teachers). I continue to believe arts teachers may view their identities differently from teachers of required, academic subjects (Paechter & Head, 1996). In part, this is because I think arts teachers may be more likely to possess identities related solely to their content area (i.e. identities as artists) than their counterparts in English, mathematics, social studies, and science. I also believe their priorities may be different simply because their subjects are not central to the curriculum; they may be more likely to prioritize advocating for the place of their art form in education. Lastly, I imagine expert arts teachers evidence a fifth channel of generativity; they may view their art-making as a means of making a
significant contribution. Research investigating the experiences and understandings of these teachers is a logical next step.

Additionally, I am uncomfortable with the fact that the sample for this study is comprised solely of white, female teachers. I wonder why no male or non-white teachers were nominated by both teacher education faculty and school administrators. I realize this may be a function of the school districts I targeted. I realize it may also be a function of the demographics of the teaching population as a whole. I fear, however, it also communicates something about the ways expertise is perceived by college and university faculty and school administrators. Future studies exploring the expertise and identities of these teachers are needed. Moreover, studies involving bigger, more diverse samples should be conducted in an effort to ascertain the extent to which the findings of this study map onto the experiences and understandings of a broader population of expert teachers.

Finally, although I expected to find expert teachers who viewed themselves as experts in their content area, that was not the case for the participants of this study. The teachers in this study located their expertise in teaching a particular group of students or in teaching their content. Who are the teachers who claim to be experts in their content? In what ways are their teacher identities and practices different from those of the participants in this study? Cochran and colleagues (1993) suggested PCK differentiates those who are content experts from those who are expert teachers of a subject area. What
distinguishes teachers who are both? Future research should address these questions.
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CHAPTER 4

TOWARD A MODEL OF HOLISTIC DANCE TEACHER EDUCATION

The purpose of this paper is to offer a conceptual framework for holistic P-12 dance teacher education. First, I review the literatures related to teacher education, dance education, identity, and holistic education. Second, I examine how to holistically educate future dance educators and put forward four tenets of holistic dance teacher preparation. Last, I explore what these four tenets imply in practice and offer suggestions for how they can be implemented in new or established dance teacher education programs.

Becoming a Dance Teacher

Before considering how future dance teachers can be holistically prepared for the tasks of teaching dance, it is important to consider both what dance teaching entails and what the essential components of teacher education are. What follows are explorations of the landscapes of teacher education and dance education respectively. These explorations map what teachers need to know, believe, and be able to do.
Although not explicitly defined as such in the literature, I have come to think of teacher knowledge as the collection and intersection of professional orientation, intellectual capacities, and professional knowledge of teachers. In other words, teacher knowledge is the union of teacher affect, evaluation, knowledge, and know-how. The combination of these three spheres of teacher knowledge serves as a foundation for teacher decision-making and teacher practice. Therefore, the accumulation of experiences that lead to the acquisition and creation of teacher knowledge in each of these three spheres should also serve as one of the foundations of teacher education.

The first of the three spheres, *professional orientation*, is the constellation of a teacher’s affective traits that gives aim, direction, and focus to educational decision-making and practice (Smylie, Bay, & Tozer, 1999). These affective traits include attitudes, values, beliefs, priorities, preferences, positions, and dispositions. One important component of professional orientation is what Korthagen (2004) referred to as mission. In his examination of the levels at which teachers can be influenced, Korthagen identified *mission* as the innermost level of change and describes it as being “concerned with such highly personal questions as to what end the teacher wants to do his or her work, or even what he or she sees as his or her personal calling” (p. 85). A well-developed sense of mission and a positive professional orientation focused on helping all students
learn should be outcomes of teacher preparation (Collinson, 1996; Korthagen, 2004).

Additionally, teacher preparation should be designed to facilitate the growth of pre-service teachers’ intellectual capacities. Central to these capacities is the ability to evaluate, or analyze and make supported judgments about, teaching practice in terms of student learning and the outcomes of student learning in the classroom, school, community, and society (Shulman, 1998; Smylie et al., 1999). The evaluation of practice necessarily incorporates the assessment of the teacher knowledge and decision-making that lead up to and are part of that practice. Moverover, the evaluation of outcomes requires recognizing they exist for individual students, groups of students, whole classes, the community beyond the classroom, and for teachers themselves (Shulman, 1987). Additionally, intellectual capacities involve truly understanding and querying the complexity of teaching and learning tasks and how contextual elements affect them. Furthermore, a teacher’s intellectual capacities include competence in analyzing their teaching with regard to multiple and nested structures: a learning activity, a lesson, a unit, a term, a school year, and a career; individual students, groups, classes, schools, and all the students ever taught by a teacher; and discrete facts, ideas, skills, theories, courses, and disciplines.

Lastly teacher preparation should serve to impart and create professional knowledge regarding teaching. Professional knowledge is declarative and
procedural knowledge related to students; schools and school systems; the foundations of education; and curriculum, instruction, and assessment that is enacted in the fields of teaching and learning (Leinhardt, Young, & Merriman, 1995; Shulman, 1998; Smylie et al., 1999). Curriculum, instruction, and assessment, which comprise the final domain of teacher professional knowledge, include subject matter knowledge, pedagogical content knowledge, and generic pedagogical knowledge (Collinson, 1996).

Dance Teaching Landscape

First, it may be helpful to clarify the context of dance teaching to which I am referring. Although I realize a significant amount of dance teaching occurs in private studios and conservatories, dance teacher licensure programs are focused on preparing teachers for the needs of P-12 students in public schools. Therefore, I have chosen to focus on college- and university-based P-12 dancer teacher education. I also believe, however, that the recommendations I make here are relevant to the preparation of all dance educators.

According to the terminology often used in teacher education programs and literature, generic pedagogical knowledge involves understanding of and competence using a repertoire of instructional strategies that may be useful in any classroom regardless of content or subject matter (Cruiskshank et al., 1996; Fortin, 1993; Shulman, 1986, 1987). The other two areas of knowledge regarding curriculum, instruction, and assessment have particular meanings for dance educators. Fortin (1993) suggested there are three areas of subject matter
knowledge in dance. They are “performance, choreography, and theatrical studies,” and they include such things as “knowledge of the body and movement vocabulary, knowledge of the creative process, and knowledge of the art and dance milieu” (p. 34). In addition, theatrical studies include costume, lighting, scene, and sound design as well as the use of technology in production as most P-12 school teachers are responsible for every element of producing dance performances for their students (Bonbright, 1999; Stinson, 1993). Fortin also elaborated what pedagogical content knowledge means in dance. She included such things as the ability to assess student comprehension of dance subject matter, understanding and being able to explain why dance concepts are important and how they are related, the ability to present dance material in a variety of ways so students are more likely to learn, and knowledge regarding the availability and appropriateness of resources for dance instruction (see also National Dance Education Organization [NDEO], 2005a).

In the dance education standards there is consensus regarding what dance teachers should know, believe, and be able to do. There is also alignment between the National Association of Schools of Dance ([NASD], 2004) standards for P-12 dance teacher preparation at the baccalaureate level and the NDEO (2005a) Professional Teaching Standards for Dance in Arts Education. Both of these organizations place a strong emphasis on knowledge of theoretical and studio-based dance content and knowledge of effective teaching practices. In addition, they both stress teachers must have an understanding of how dance
relates to other disciplines. NASD requires a liberal arts component to the teacher preparation program which emphasizes connections between dance and other subjects, and NDEO requires professional teachers to have the knowledge and skills required to “collaborate with academic teachers to integrate the arts and other academics in education” (p. 13) (see also Stinson, 1993). Similarly, Bonbright (1999) wrote:

Qualified instructors [of dance] should be both artists and educators. As artists, they understand the content, process, and methodology of creating, performing, and responding to dance as an art form. As educators, they understand the content, process, and methodology of developing and delivering curricula, syllabi, and assessments; in addition, they are capable of using the creative process in integrated and interdisciplinary education. (p. 35)

This sentiment is echoed and extended by Gilbert (2005) who wrote at length about how dance teachers need to master applying learning and child development, pedagogical knowledge, and classroom management strategies. They need these understandings in addition to dance content including “dance techniques, choreographic principles and processes, somatic practices, dance history, cultures, and philosophy” (p. 33).

Dance teachers should also possess the professional orientations and intellectual capacities to continually improve their practice. This practice includes facilitating students’ progress as dancers, dance-makers, and appreciators of
dance as an art form (Lord, 1993). These three categories of dance education—technique, creation, and understanding of the place of dance in society—are echoed by the National Dance Association ([NDA], 1994) standards for dance education and by the NDEO (2005b) *Standards for Learning and Teaching Dance in the Arts: Ages 5-18*. They both emphasize movement elements, dance as a means of communication, skills for observing and responding to dance, and the cultural and historical roles of dance as an art form. NDEO calls for teachers to offer instruction in anatomy, and the NDA content standards include a connection between healthful living and dance.

Finally, dance educators should feel compelled and know how to advocate for dance as an art form in society, dance as a discipline in schools, and dance education as a profession (Stinson, 1993). Standards six and seven of the NDEO (2005a) professional teaching standards refer specifically to the need for teachers to advocate for dance by influencing art education policy, collaborating with artists and educators in the community, contributing to the status and development of the profession of dance teaching, and seeking grants and other forms of additional funding to support dance instruction. Similarly, NASD (2004) requires the professional education of future teachers to include studies in arts advocacy.
Identity

My understanding of the term ‘identity’ grows directly from the work of Etienne Wenger. In his text, *Communities of Practice: Learning, Meaning, and Identity* (1998), Wenger wrote:

An identity, then, is a layering of events of participation and reification by which our experience and its social interpretation inform each other... In the same way that meaning exists in its negotiation, identity exists—not as an object in and of itself—but in the constant work of negotiating the self. (p. 151)

Wenger used identity to represent the “nexus of multimembership,” the construction of who somebody is based on the intersection and overlapping of the ways of being implied by the various communities of practice to which they belong (p. 149). Although I use the term ‘identity’ a bit differently, to indicate one way of being in the world among many (Danielewicz, 2001), I find Wenger’s definition helpful because it sheds light on how identities are constructed.

Wenger (1998) wrote about many methods of building identity. Three are of particular interest in the context of dance teaching. First, identity is a “negotiated experience” in the sense that identity is largely defined by the ways in which the self is experienced while participating in a community of practice and by how the self is presented in those communities (p. 149). For example, teacher is an identity that is defined by acts of teaching in communities of teachers and
students. It is also defined by the presentation of self as a teacher in that community.

Second, identity is grounded in “community membership” (Wenger, 1998, p. 149). It is relational, and we define ourselves relative to others in the community of practice as well as relative to those who do not belong (Danielewicz, 2001). Identity is constructed both in terms of what it is and what it is not. For example, ‘performer’ becomes an identity through association with other performers as well as through the identification of those who are not performers.

Third, Wenger (1998) stated identity is a ‘learning trajectory’: “We define who we are by where we have been and by where we are going” (p. 149). I find this definition particularly useful because it provides a holistic framework wherein the construction of identity rests on what and with whom as well as on the past and on the other identities one already possesses. For example, the construction of a choreographer identity can be viewed as part of the construction of a dance teacher identity. In the ‘learning trajectory’ model, there is room to acknowledge the parallel nature of the relationships between identities and the ways in which the existence of one can serve as the starting point, impetus, or model for the construction of another.

Beijaard, Meijer, and Verloop (2004) suggested it is likely professional identities are composed of many ‘sub-identities.’ For teachers these sub-identities may be connected to the subject taught, the students taught, or
pedagogical expertise. For dancers they may be related to performance and choreography (Andrzejewski, 2005). These sub-identities have the potential to support or conflict with one another. With respect to teaching art, Thornton (2005) wrote, “The artist teacher identity is one in which three worlds must be straddled or interrelated: the world of art; the world of education; and the world of art education” (p. 167). Furthermore, an artist teacher is someone who teaches art, engages in making art, and is deeply dedicated to this double practice. Although Thornton wrote about teachers and makers of visual art, I sense his points are equally relevant in the context of dance education. It is critical dance teachers have established identities as dance artists and teachers of dance. Therefore, I propose the use of the term ‘dancer teacher’ because it emphasizes the necessary dual commitment to the practices of dancing and teaching (Bonbright, 1999; Gilbert, 2005; NASD, 2004; Stinson, 1993). Given the multiplicity involved in becoming a dancer teacher, I am encouraged by the implication in Wenger’s (1998) framework that the constructions of dancer, teacher, and dancer teacher identities do not have to be distinct processes. In fact, they can be co-constructed in so that the practices of dance-maker and teacher reciprocally inform each other.

Teacher Identity

“Consciously, we teach what we know; unconsciously we teach who we are” (Hamachek, 1999, p. 209). In this simple declaration, Hamachek pointed to the profound importance of a teacher identity in the professional lives of all those
who teach. Echoing this point, Danielewicz (2001) wrote, “What makes someone a good teacher is not methodology, or even ideology. It requires engagement with identity, the way individuals conceive of themselves so that teaching is a state of being, not merely ways of acting or behaving” (p. 3). Lasky (2005), however, claimed teacher identity is not really a state of being. It is a definition, a way of defining oneself as a teacher. It is an evolving construct, “an answer to the recurrent question: ‘Who am I at this moment?’ ” (Beijaard et al, 2004, p. 108), and it involves definitions for others and for self. This inclusion of self and others is further explicated through Lasky’s contention teaching identities reside at blurred boundaries between the personal and the professional (see also Day, Elliot, & Kington, 2005). There are components of teacher identity that rest on knowledge and practice, and there are others that derive from relationships, rapport, and connections with students and colleagues. Day and colleagues (2005) and Barone, Berliner, Blanchard, Casanova, and McGowan (1996) defined teacher identity as an assemblage of beliefs, values, ethics, and morals.

I sense it is most useful to consider the integration of these definitions, rather than the disparities among them. Consequently, I believe teacher identity is a collection of values as well as a way of defining oneself as and being a teacher. It is an evolving construct dependent on context, experiences, and relationships, and it rests at the jumbled intersections of the personal and the professional, the concealed and the exposed, and the individual and the
collective (Connelly & Clandinin, 1999; Day, Kington, Stobart, & Sammons, 2006; Palmer, 1998).

*Dancer Identity*

Although there is little in the literature on the subject, I believe dancer identity is similar to teacher identity in many ways. It too is connected to practice: how one makes dances, analyzes movement, performs in technique class, engages in the study of dance history, etcetera. It is a way of conceiving of oneself in the contexts of dance: the classroom, the stage, and the studio. It likely encompasses sub-identities such as mover, technician, critic, performer, maker, interpreter, communicator, improviser, and even writer (Durham, 2003). It also rests at crossroads: those of individual as dancer and dancers as a community, the emotional and the emotive, and the rehearsal and the performance.

*Dancer Teacher Identity*

Thornton’s (2005) characteristics of artist teachers are instructive regarding dancer teachers as well. Translating his hallmarks, dancer teachers are marked by “motivations and convictions based upon their [dance] practice and exposure to [dance]…. drives that make them amenable to supporting the nurturing of children… and a philosophical belief in the value of education” (p. 168). Additionally, they mirror the interrelationship of education and dance, and they view teaching and dance practices as mutually important and influential aspects of each other. This manifests in distinct identities as dancers and teachers as well as integrated identities as dancer teachers. The subsequent
question is: How does such integration occur? I turn to holism and holistic perspectives on education for the answer.

Holistic Dancer Teacher Preparation

There is an ongoing debate in teacher preparation over the use of the terms ‘education’ and ‘training.’ As someone who is proud of having trained as a dancer since early childhood, I am not offended by the reference to teacher preparation as training. I also wholeheartedly believe preparing for the complexity of professional teaching may require both training and education, as these two terms connote somewhat different things.

When I considered my dancer training and attempted to generalize that term to other contexts, I determined training is essentially practice intended to build skill and stamina. Teacher preparation should consist of just such practice. Educators most assuredly make use of skills such as planning, instruction, classroom management, communication, reflection, and assessment. All of these can be improved through practice. Furthermore, teaching tasks require a tremendous amount of energy. I further argue teaching requires various kinds of energy including, yet not limited to intellectual, physical, spiritual, creative, and emotional energy. Therefore, effective teacher preparation helps teachers to build stamina in each of these domains.

Moreover, teacher preparation is an education in the sense that it involves the acquisition of knowledge and know-how as well as the shaping of a worldview or professional orientation. I am not arguing ‘training’ and ‘education’
suggest totally different experiences which, when combined, equal excellent or even adequate preparation for teaching as a profession. What I am suggesting is each of these terms sheds light on different yet overlapping and necessary perspectives on the holistic preparation of teachers.

Humphreys and Hyland (2002) and Alsup (2005) argued most currently used methods of preparing teachers rely on some conception of the Cartesian binary, privileging the mind over the body, stressing cognition while deemphasizing or ignoring affect and conation. Hargreaves (1995) critiqued this stance as one that disregards the emotional nature of teaching. Fenstermacher (1990) also critiqued this perspective for its failure to recognize the inherently moral nature of teaching (see also Lasky, 2005).

A similar duality that privileges the body over the mind exists in the preparation of dancers. There is training of the body in technique, conditioning, and performance classes, and there is education of the mind in history, criticism, analysis, and body science classes. As Fraleigh (1987) pointed out, this dualism: encourages the all too common view that the training of a dancer is the training of the body, simply understood as physical. The body is conceived mechanistically… But in reality the whole self is shaped in the experience of dance, since the body is besouled, bespirited, and beminded. (p. 11)

Consistent with Fraleigh’s conception of dance as an art form, holistic education does not rely on these dualities or hierarchies. It also does not privilege any one
element of a person over another; it serves to interrelate and unify each of the elements.

Miller (2000) wrote, “Holism asserts that everything exists in relationship, in a context of connection and meaning” (p. 21). He also admitted this maxim is of little practical usefulness on a global or universal level; it is very relevant, however, at the level of the whole person. Miller asserted the whole person is comprised of layered elements including the intellectual, emotional, physical, social, aesthetic, creative, and spiritual. Becoming a teacher and becoming a dancer require drawing on and strengthening each of these elements. As Alsup (2005) poignantly put it, “Holistic teacher education advances the radical notion that teachers are people” (p. 19). Holistic dancer teacher education, therefore, addresses all of these elements of the self and their interconnected nature in an effort to help pre-service dancer teachers build cohesive, effective dancer teacher identities (Alsup, 2005; Johnson, 2005). Holistic dancer teacher education also recognizes the connections among various components and levels of dance education curriculum and pedagogy. In other words, holistic dancer teacher education exhibits a commitment to holism in all of its facets: program design, curriculum design, course design, lessons, and individual learning activities.

The relevant questions emerging from this literature and these claims are: How can dancer teacher education be organized more holistically to assist teacher candidates in their development of dance artist, teacher, and dancer
teacher identities? How dancer teacher candidates be aided in the establishment of membership in each of the relevant communities of practice (e.g. performers, teachers, dancer teachers, etcetera)? How can dancer teacher preparation be reconceptualized to facilitate the navigation and understanding of pre-service dancer teachers’ unique learning trajectories?

Tenets of Holistic Dancer Teacher Education

Based upon a synthesis of the previously referenced literature and reflection on the preceding questions, I propose the following four tenets of holistic dancer teacher education (see Figure 4.1).

1. Holistic dancer teacher preparation focuses on whole person development—intellectual, emotional, physical, social, aesthetic, creative, and spiritual development.

2. Holistic dancer teacher preparation features an integrated curriculum. This requires teaching various aspects of dance content together, and highlighting their relationship to other disciplines. Content and pedagogy (as well as pedagogical content) are not disparate. Therefore, holistic dancer teacher education emphasizes the interrelatedness and interdependence of them beginning on the first day. Additionally, theory and practice should be treated as two halves of the same whole. Students should engage in practice that is grounded in theory, and they should refine or develop theory based on their practice.
3. Holistic dancer teacher education encourages students to develop effective and efficacious identities as dance artists, as teachers, and as dancer teachers.

4. Holistic dancer teacher education establishes meaningful apprenticeships in all relevant communities of practice (dancers, teachers, dancer teachers, etcetera) for students. These apprenticeships should be established early in the program and maintained throughout.

Figure 4.1. Model of holistic dancer teacher education.
These tenets, although written about as though distinct, should not be considered as such. They should be understood in concert, for only when they are considered and applied together can truly holistic dancer teacher education be achieved.

An exploration of what these tenets mean in the practice of preparing dancer teachers follows. This exploration includes a discussion regarding how adhering to them would shape and reshape dancer teacher education program structures, pedagogy, and curriculum.

**Tenet 1: The Whole Person**

I suggest as dancer teacher preparation requires coursework in dance as well as pedagogy, it necessarily recognizes future dancer teachers as physical and intellectual beings. Moreover, because dance-making is by definition a creative act and dance criticism is a process of enacted aesthetics, dancer teacher preparation also necessarily includes endeavors related to the creative and aesthetic elements of whole persons. What remains in Miller’s (2000) conception of the whole person are the emotional, social, and spiritual elements. I believe the issue of student dancer teachers’ social development is in large measure addressed through the practices related to tenet four, communities of practice. What I turn to now are emotions and spirit.

Senge (2000) suggested the professional development of teachers should begin by having students state a vision for their professional future. By asking student dancer teachers to do so and by repeatedly asking them to reconsider,
revise, and rearticulate this vision, teacher educators address that which is “deep inside [them] that moves [them] to do what [they] do” (Korthagen, 2004, p. 85). Korthagen (2004) referred to this as addressing the level of the mission of the student. Others have called it the spirituality level, the calling level, or the transpersonal level. Regardless of what it is called, the acknowledgement and development of this often overlooked essence of student dancer teachers is an essential component of preparing the whole person.

Korthagen (2004) made additional suggestions for teacher education that addresses the spirit. He suggested engagement with core reflection. Core reflection involves reflecting on teacher practice and then asking core questions: Does this practice align with who I want to be as a teacher? Am I willing to compromise my desired identity when it is misaligned with the teaching context? How do I feel about my practice and the results thereof? And, given what I know now, do I still want to be a teacher? I believe core reflection provides for the acknowledgement and growth of students’ emotional states. I sense it can also be productively used regarding students’ dancer identities and their dance-making practice.

In order to prepare dancer educators, it may also be useful to organize course offerings so students have longitudinal contact with individual dance education faculty members. As Danielewicz (2001) observed, students' attitudes, beliefs, and knowledge can change drastically over the course of a quarter or semester. Long-term contact may better enable faculty to see where students are
struggling and help them resolve issues, dilemmas (Smylie et al., 1999), and concerns about becoming dancer teachers (Alsup, 2005).

**Tenet 2: Integrated Learning Experiences**

Barone et al. (1996) asserted learning is most meaningful when it crosses subject matter boundaries. This, however, is not the way dance instruction typically occurs. Even those elements of dance which seem intimately connected and which naturally coexist in common dance education practice, such as technique and performance, are often talked about as if distinct in postsecondary dance curriculum. As a result students perceive them as disparate and fail to develop skills for allowing one to shape the others (Durham, 2003; Nagrin, 1997). Stinson (1993) agreed, and in her call to reform dance education and dancer teacher preparation, she suggested:

> We need to look at dance more holistically, rather than as divided into so many separate courses. Public school dance teachers must find ways to integrate dance technique, choreography, history, criticism, and body science because they do not have the luxury of separate courses. University-level dance faculty must do the same. (p. 47)

Although I disagree with Stinson’s statement that separate courses are a luxury—as the notion of separation is antithetical to a holistic conception of dance education—her point is well-taken. All forms of dance content can and should be integrated. Moreover, dancer teacher educators should work to make commonly-occurring curricular overlaps explicit to students.
Similarly, Segall (2004) argued, “Content... is always pedagogical and pedagogies... are always content-full” (p. 492). Content and pedagogy would each be meaningless without the other. Because content and pedagogy are symbiotic, it makes sense instruction in content and pedagogy for future teachers should also be symbiotic (Bonbright, 1999). This relationship, however, has not historically been emphasized in dance. As Fortin (1993) pointed out, “Many teachers have experienced dance in a very specialized way and consequently, do not have a wide knowledge base allowing for the development of instructional strategies” (p. 36). Moreover, most dancer education students in colleges and universities experience a strong curricular emphasis on dance technique and performance while their preparation as teachers takes on a secondary or minor role (Gilbert, 2005). Even when future dancer teachers are exposed to instructional strategies, it is typically offered in three distinct phases: content, pedagogy, and practice teaching (Fortin, 1993). Fortin further argued this does not serve pre-service teachers well; content, pedagogy, and teaching experiences should be interwoven throughout teacher preparation.

Just as it is important to integrate content in various areas related to dance and dance education, it is also key to facilitate the integration of theory and practice, or as Leinhardt et al. (1995) put it, to “integrate knowledge learned in the academy with knowledge learned in practice” (p. 402). Student dancer teachers first have to become familiar with the prevalent research-based and philosophical theories related to teaching, dance, and dance teaching. They
should also be encouraged to build their own practices in dance teaching and
dance-making on the foundation of such theory. Moreover, they should be
couraged to refine these theories, or develop new ones on the basis of their
own discoveries related to their practice. Lastly, and perhaps most importantly,
student dancer teachers must be granted outlets whereby their theoretical
understandings and practical applications can be widely shared with other
dancers, teachers, and dancer teachers (Shulman, 1998).

There are some simple strategies that can be implemented in courses to
accommodate the integration of dance content and pedagogy. First, the various
areas of dance content can be treated as parts of a whole. In fact the distinctions
between them are truly arbitrary when considering what dancers and dance
scholars actually do. Subject matter related to dance-making, technique,
production, analysis, criticism, history, and body science can become an integral
part of the curriculum of any dance-related course (Stinson, 1993). For example,
dance history classes should include choreography and criticism, and dance
technique classes should place emphasis on movement analysis, improvisation,
and performance. Second, instructors of dance classes can model quality
teaching and share the rationales behind their instructional choices with students
as a means of integrating content and pedagogy (Collins, Brow, & Newman,
1989; Fortin, 1993). Third, dance education students must be required to spend a
great deal of time observing excellent teaching both in university and in P-12
school settings. They should be encouraged to observe (Humphreys & Hyland,
and to “predict, critique… and analyze component practices in the teaching [performances]” they witness (Leinhardt et al., 1995, p. 405). This observation and analysis should serve as the starting place for dialogue that marks programs of dancer teacher education as environments “where students and faculty are encouraged to develop together” (Haynes, 2006, p. 20). Fourth, dance education students must have numerous and varied teaching experiences, preferably accompanied by expert cooperating and supervising faculty who offer substantive feedback (Barone et al., 1996; Fortin, 1993; Humphreys & Hyland, 2002; Lord, 1993; NASD, 2004; Stinson, 1993). These experiences should also include opportunities for peer teaching after which pre-service teachers receive and respond to constructive feedback from their classmates. This not only serves to offer students teaching experience, it affords all students the opportunity to develop and hone their assessment and feedback skills as well as their ability to reflect on and apply feedback to revise their practice (Gilbert, 2005; Leinhardt et al., 1995). This cycle of feedback, reflection, and revision should also serve as the guiding structure of composition, technique, and performance classes (Lavender, 1996).

Some might argue these strategies are only appropriate for future teachers because many dance students in postsecondary settings are not pursuing careers as educators. The reality, however, is “the majority of dance performers must teach to survive” (Hayes, 1980, p. 62). It is, therefore, completely appropriate to offer integrated instruction regarding the components
of the discipline of dance, the connections of subject matter and pedagogy, and
the cycle of theory and practice to all postsecondary dance students.

**Tenets 3 and 4: Identity Development and Communities of Practice**

I have chosen to write about these two tenets together, because I believe identities emerge, at least in part, through membership in communities of practice. I have also chosen to emphasize Danielewicz’s (2001) framework because it sheds light on the nature of identities and offers strategies educators can use to help students develop them.

Danielewicz (2001) wrote at length about ‘a pedagogy for making selves,’ about “principles [that] can be used by any teacher in any discipline to develop practices that construct identities” (p. 133). I suggest Danielewicz’s ‘pedagogy for making selves’ is a very useful structure for teacher educators to consider when (re)designing dancer teacher education in ways that foster the construction of both artist and teaching identities. Within this framework, the identity-constructing principles that are most valuable when rethinking dancer teacher education are ‘discourse richness and openness,’ deliberation, reflexivity, agency, and collaboration. I sense these are most useful because they help students develop identities, they are aligned with an emphasis on membership in relevant communities of practice, and they are in many ways analogous to the processes of dance-making.

Danielewicz (2001) provided a thorough explanation of ‘discourse richness and openness’ when she wrote:
Discourse constitutes self and experience. Through discourse—acts of language that communicate and connect with others—we make our identities and, reciprocally, they are made for us. . . . As everyday practice, discourse refers to transactions between speaker and hearer . . . As theory, discourse refers to the sets of cultural practices associated with social and institutional contexts that organize social relations and transmit values. . . These regulating discourses—always multiple, some competing, some congruent, some complementary—work continually at shaping the identities of all who are members, or wish to become a member, of any discourse community. (pp. 141-144)

Therefore, I am what I say, and what I say determines who I am. This is true of teachers in general and dancer teachers in particular. It is also true of dance artists in the sense they have adopted the discourses, both those enacted in speech and those enacted in movement, of the community of dance artists. They have acquired the talk and the walk of those who belong. This ability to acquire discourses not only helps dancer teacher candidates identify as teachers and as artists, it is a hallmark of acts of performance. Performing dance is taking on a discourse devised by the choreographer and making it one’s own. In this way instruction in performance process can also serve as instruction in discourse acquisition, an important element of identity construction.

Student dancers must also develop rehearsal skills. I believe rehearsal is synonymous with what Danielewicz (2001) termed deliberation. She described
deliberation as “a productive, real act but one without permanent repercussions” (p. 153). The freedom from permanent repercussions allows individuals to try things they might not ordinarily try and to have the potential for those moments to become a part of the identity in progress. Performers are necessarily adept at the deliberation process. Pre-service dancer teachers also need opportunities to rehearse their other emerging identities such as classroom managers, choreographers, curriculum developers, instruction and assessment planners, improvisers, etcetera (Humphreys & Hyland, 2002). As Danielewicz put it, “although ‘teaching’ is not anything that guarantees ‘being a teacher,’ it helps” (p. 116).

Dance artists as choreographers and performers must become familiar with two other principles of identity construction, reflexivity and agency (Andrzejewski, 2005). Danielewicz (2001) defined agency as “the quality of an individual that makes doing possible; it means believing that one’s self is capable of action” (p. 163). Reflexivity is defined as, “the act of self-conscious consideration. . . a reexamination or revisiting of a project or an activity, and a questioning of motives, frameworks, assumptions, working strategies, conclusions, beliefs, and actions” (pp. 155-156). Both of these elements are inherent in dance creation, rehearsal, and performance processes. Dancing requires a sense of agency, a belief one can dance, move, emote, perform, embody, and connect. Reflexivity is also an integral component of the dance-making process; without it rehearsal and revision would be moot. Therefore,
instruction in performance processes should serve the dual purpose of providing instruction for future teachers regarding their professional orientations.

Finally, Danielewicz (2001) stated collaboration is a principle at work in the creation of identities. Collaboration is essential because identity has both individual and collective components:

For instance, in saying “I am a teacher,” I assert a teaching identity in two dimensions. First of all, the emphasis on “I,” as in “I am a teacher,” means that, individually and personally, I see myself as a teacher. The statement denotes my individual identity. Second, in stressing “teacher,” as in “I am teacher,” I declare a collective identity, membership in a group of professionals who are teachers. (p. 149)

The successful construction of an identity is not a wholly individual process; it involves acceptance by others who have already achieved membership in the community of practice.

Dance-making is a highly collaborative art. At the very least dance-making involves collaboration between performers and choreographers. However, it typically entails collaboration with set designers, visual artists, actors, composers, musicians, and lighting and costume designers (Andrzejewski, 2005). These interactions prepare pre-service dancer teachers to engage in the collaborative elements of constructing a teaching identity and become part of the communities of practice of teachers and dancer teachers.
In addition to the ‘pedagogy for making selves’ principles, Danielewicz (2001) wrote about the importance of collective identity in the formation of individual identities. She stated, “Collective identities, then, are contingent on two things: first, that the intern is involved in actual teaching situation [sic] with a professional teacher, and second, that affiliation between intern and mentor occurs” (p. 114). Although she wrote about the specific context of student teaching, her comments do have implications for the construction of dancer teacher identities. Her statement could be written as, ‘Joining the collective identity of dancer teachers, then, is contingent on two things: first, that the teacher is involved in the practice and discourse of teaching dance, and second, an affiliation, perhaps through a collaborative process, occurs between the new teacher and established members of the community of dancer teachers.’ I believe affiliation is not wholly contingent on collaboration; it can begin through observation or the exchange ideas. Furthermore, I see no benefit in waiting to establish affiliation during student teaching; the affiliation processes should begin when teacher preparation begins.

Dance education students must have ample and meaningful interactions with those working in the fields of dance, teaching, and dance education. They “must be enabled to act as if they are insiders” (p. 118). This first and foremost necessitates “networks... be established between primary and secondary schools, private schools of dance, and universities” (Lord, 1993, p. 39). I would
add this network should include local dance companies, working artists, and artists working in other fields such as visual art, theatre, and music.

In terms of managing the dual and overlapping identities of teacher and dance artist, Thornton (2005) suggested people are best able to do this when “they exhibit their artwork, are regularly involved in the world of [dance] beyond the education system and are supported by other [dancers] and [dancer] teachers” (p. 169). This necessarily requires they have occasions to become members of dance and dance teaching communities of practice within and beyond the college or university boundaries. Additionally, Thornton suggested dancer teachers are best served when “they are supported by teaching colleagues and senior management in the education institutions in which they work” (p. 169). Experiencing this support necessarily requires that dancer teachers become a part of school-related communities of practice.

Beyond working and interacting with dancers and teachers in the community surrounding the college or university, another means of having student teachers engage with the communities of practice of working professionals is to have them attend conferences held by local, regional, and national organizations dedicated to teaching, dancing, or dance education (Lord, 1993). In so doing, students not only have opportunities to form affiliations with professional dancers and teachers, they participate in dialogues and other activities that reinforce and advocate for the status of dance, teaching, and dance teaching as professions.
Conclusion

I am concerned about the divided structure of the model I have mapped out; I am discontented with the apparent necessity of presenting a holistic model is such a decidedly unholistic way. That said, I believe this is based on a failure of language—our syntax and vocabulary do not lend themselves to holistic discussions of concepts that are themselves holistic—rather than a failure of ideas. I am convinced that although holistic language is difficult, if not impossible, to realize, holistic practice is very achievable. The application and integration of the four tenets I put forth is a means of making dancer teacher education a more holistic, and therefore more effective, process. Furthermore, in arguing for and outlining means of preparing dancer teachers in a holistic manner, I hope I have begun to do the same for teacher education in general. My proposal regarding dancer teacher education is easily generalized to the preparation of all teachers. All future teachers, and presumably their future students as well, can benefit from a focus on the whole person, an integrated and interdisciplinary curriculum, pedagogies intended to facilitate the exploration and development of identities, and engagement with relevant communities of practice throughout their training and education.
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CHAPTER 5

DISCUSSION

The purpose of this study was to explore expert high school teachers' conceptions of who they are in their classrooms and how their identities are related to their classroom practices. I was guided by these questions: How do expert teachers talk about and organize their identities as teachers? And, what is the nature of the relationships between expert teachers' identities and their practice? A secondary purpose of this study was to juxtapose expert teachers' identity and knowledge as foundations of their practice.

This study makes significant contributions to the literature regarding the nature of teacher identity and its relationship to teacher behavior, what it means to be an expert, and what teachers know and how that knowledge informs their practice. Whereas each participant's self-definition included identity themes that were unique, they also included five identity themes that were shared among all of the participants. They are advocate for students, learner, classroom manager, challenger, and teacher leader and mentor. This finding suggests that teacher
education, for both pre-service and practicing teachers, should facilitate the development of these five identities.

In addition to these shared themes, two of the teachers, Sarah and Laura, organized their identities like mosaics, the structures of which were determined by the content being taught and the students in the class. The other two participants, Marnie and Sue, viewed their teacher identities as a funnel or inverted pyramid. Their teacher identities were formed around a central identity, and all other identities related to teaching rested on or were filtered through that core self-definition. These identity themes and the ways in which they were organized had a direct influence on the participating teachers' behaviors. This connection was so apparent to the participants that they easily aligned their classroom practices with their teacher identity themes. The teachers who participated in this study all had a crystal clear sense of how their identities were enacted through their practice.

This study also identified three principal characteristics of expert teachers. The first was alignment between priorities (i.e. who the teacher most wanted and needed to be) and expenditure of time and energy. In other words, expert teachers spent most of their time in class enacting identities that were most important to them, those that were most closely connected to their mission (see Korthagen, 2004 for a discussion of mission in teaching). Part of my adoption of a holistic stance at the outset of this study was that I viewed identity as nonhierarchical. Because I had this conception, my ideas about holism and the
holistic treatment of identity were challenged when participants talked about their identities in terms of priorities. I have come to see, however, that priorities and holism are not incompatible. First, these teachers established their own identity hierarchies, and they did so considering their own needs and the needs of their students, rather than externally imposed priorities. Moreover, because these teachers saw meaningful connections between their identity priorities and their practice as teachers, I now view their engagement in teaching as perhaps more holistic than a nonhierarchical conception of their identities would have permitted. On the basis of this finding, teacher educators should focus on helping teachers come to know and develop their own teacher identities and identity priorities through activities designed explicitly for these purposes and through facilitating membership in relevant communities of practice (Danielewicz, 2001; Wenger, 1998).

Second, these expert teachers were generative. They were highly productive, and they viewed their lives as having meaning and impact beyond themselves. Participating teachers talked about four distinct, yet interwoven, channels of generativity. The first was advocating for P-12 students, a channel to which all of the participants were profoundly committed. The second was mentoring pre-service teachers (see also Stevens, 1995). The third involved taking on leadership roles within the teaching profession, and the fourth was working to make a positive difference in the community. Teaching should be an inherently generative undertaking because it is primarily focused on helping the
next generation grow (Hamman & Hendricks, 2005). This study indicates there are multiple ways for teachers to experience generativity. Teacher educators and school administrators, therefore, should help teachers identify and work in the channels that have the most personal meaning.

Third, participating expert teachers made decisions based on the integration of pedagogical knowledge and knowledge about students. This finding challenges the common view of the structure of teacher knowledge. Whereas the extant literature suggests the primary integration is one between pedagogy and content, the participating teachers saw a more important connection between their knowledge of teaching and their knowledge of students. This is not to suggest that they did not consider their content. In fact, these expert teachers acted on the integration of three domains of teacher knowledge. They combined what they knew about teaching strategies, what they knew about their students, and what they knew about their subject matter. This finding on the knowledge of expert teachers implies an integrated curriculum in teacher education is vital.

The most significant contribution of this study was that it demonstrated examining identity and knowledge together is fruitful; the combination of identity and knowledge provides a better platform for understanding what teachers do than identity or knowledge alone. In this way, this study aligned with theories posited by Bullough (2005) and Danielewicz (2001), which indicate identity is strongly connected to teacher practice, as well as claims made by Leinhardt,
Merriman, and Young (1995) and Shulman (1998) about the role of knowledge in teacher practice. Moreover, this study showed that although identity and knowledge are related, they are not synonymous or even analogous as I assumed at the outset of the pilot study (Andrzejewski, 2007). Their relationship is complex, and I worked throughout this study to better understand this complexity. My analysis resulted in three significant discoveries. First, participating teachers struggled to align each of their classroom practices with only one kind of professional knowledge. Their knowledge was integrated, and their practice was shaped by the intersections of their knowledge about teaching, their knowledge about their students, and their knowledge about their subject matter. Second, participating teachers were very clear about who they were as teachers, and their teacher identities were comprised of many other (between 15 and 20) identities. For these experts, identity was not diffuse, and it was in most cases easy to connect individual practices with individual identity themes. Third, there is not a one-to-one relationship between identity and knowledge. Although some participating teachers had a few (not more than three) identities that were related to only one form of knowledge, most of the identity themes participating teachers possessed were connected to at least two categories of professional knowledge.

Another significant contribution of this study was that it demonstrated it is worthwhile to explore teacher identity through the lens of psychological theories of identity development. Each of the participating teachers evidenced generativity
in a variety of ways. They also evidenced some stagnation, which I believe was a
delimiting mechanism (Erikson, 1963; Kotre, 1998). These expert teachers had to
reach some conclusions about what they could not change in order to focus their
energies on things they could improve. This raised questions regarding the
binary nature of the stages in Erikson’s model. Perhaps they are more useful for
understanding teachers if they are treated as symbiotic pairs.

Through conducting this study, I found at least as many new questions as
answers. The following is a discussion of future projects—empirical, conceptual,
and methodological—that I perceive to be natural outgrowths of this study.

Empirically-Driven Future Work

Bridging Psychological and Educational Theories on Identity

I have argued that the educational literature has largely overlooked
psychological theories related to identity. This may be because these theories
are viewed as essentialist and relevant only to the totality of individuals’ life
experiences. I take a more post-modern view of these theories. By that I mean
that I believe them to be applicable to specific life contexts and roles. This study
demonstrated adopting this view is helpful when working to make sense of data
related to teacher identity. As such, I believe the connections between the
experiences of teachers related to their identities and the insights psychological
theories offer about the nature of identity and its development are worthy of
further study. In particular, future research should investigate what the other
seven stages of Erikson’s (1963) psychosocial model can tell us about teacher
identity and the ways in which it develops. Future studies should explore how trust versus mistrust, autonomy versus shame, initiative versus guilt, industry versus inferiority, identity versus role confusion, intimacy versus isolation, and ego integrity versus despair play out in the lives of teachers. They should also explore the nature of these pairs in the lives of teachers. Do they coexist, as I have found that generativity and stagnation do, or are they true binaries teachers must resolve?

Future research should also explore the extent to which other identity theories can shed light on the nature and construction of teacher identity. Studies should continue to explore the relationships among psychosocial perspectives on identity development, such as those espoused by Levinson (1986) and Marcia (1966), and the development of teacher identities. Educational researchers should also examine the explanatory potential of sociocultural approaches to identity such as those espoused by Mead (1934), Côté (1996), and Shotter and Gergen (1989). Finally, comparisons among the contributions of different theories to our understandings about becoming a teacher are needed.

Lastly, given that looking for evidence of generativity and stagnation in the identities of the four participating teachers enabled me to see interesting patterns in the data, I plan to conduct a more in-depth look at that relationship. Specifically, I am interested in the implications of Kotre’s (1998) elaboration on Erikson’s theory to include four types of generativity: biological, parental,
technical, and cultural. Which of these kinds of generativity do teachers evidence, why, and in what contexts?

*Expert Teachers’ Legacies*

Reflecting on my findings regarding generativity, I have become increasingly interested in the legacies expert teachers create. Marnie has mentored more than 50 student teachers, each of whom is still teaching. I assume many of these teachers have themselves had student teachers. Marnie’s enormous influence on teaching practice and the lives of students is difficult to document. Similarly, Laura has mentored teachers who were once her students thereby having a dual impact on their professional development. Sarah served on a local professional development committee and consequently influenced the professional development of every teacher in her district. Finally, Sue chose to return to her high school alma mater. She had a positive impact on that community when she was a student, and she chose to continue to shape that community through her teaching. What would maps of these teachers’ influences look like? Future studies should find a way to chart the legacies of these and similar teachers.

*Continuing to Query the Data Collected for This Study*

I believe there are number of useful insights that can be gleaned from the data I collected for this study, and I plan to develop additional manuscripts highlighting these facets of this study. First, I believe there is a manuscript to be written on these teachers’ experiences of generativity and the directions in which
their generativity is channeled. Second, there was insufficient room in this document to provide a detailed account of individual participants' experiences. I intend to write additional documents in the form of case studies that emphasize each participant's unique attributes. Last, I will continue to query what is shared by teachers with common content—what is shared by the science teachers that is not shared by the language arts teachers—and what is shared by teachers who work in similar environments—what is shared by the urban teachers that is unique to them.

Conceptually-Driven Future Work

*Construct Validity of Expertise*

During my defense, Dr. Lynley Anderman asked me about whether or not I believed expertise is a valid construct. I interpreted this question to be about whether or not it is possible to create a list of characteristics of expert teachers that is both sufficiently inclusive and sufficiently exclusive. My honest response is that I do not know but that, based on my experiences working to identify expert teachers, I am inclined to say ‘no,’ and that maybe it does not matter. Maybe expertise can be a real thing and not be a valid construct. Moreover, as a result of working with the four participating teachers in this study, I believe expertise is not just content-dependent, it is also context- and relationally-dependent. In other words, what makes someone an expert teacher depends on what, where, and who they teach. Given this complexity, I do not think a unifying definition is possible, but I will continue to work toward clarifying what it means to be an
expert, how expertise is perceived by others in the teaching field, and how experts experience their own expertise.

Similarly, Dr. Antoinette Errante asked me about the relationship between expertise, identity, and practice. Although I do feel my theory about expert teachers being those who align their practice with their identity priorities begins to address the question of how these constructs interact, I do not think it is wholly explanatory. For example, it does not clarify the directionality of these relationships. In other words, does practice lead to identity, which then evolves into expertise, or does being an expert shape a teacher’s identities and practices? I am unsure, yet I do believe it is likely to not be quite that simple. A holistic perspective supports this belief, and I plan to continue fleshing out, from a holistic view, how these constructs influence one another.

A final related question has to do with Danielewicz’s (2001) assertion that “What makes someone a good teacher is not methodology or even ideology. It requires engagement with identity” (p. 3). In some ways I agree; identity is central to teaching. Although I agree engagement with identity is likely to be a necessary component of good teaching, it may not be sufficient. I say this because I can imagine teachers who delude themselves about the quality of their work; they may possess an identity as an expert teacher but fail to practice expert teaching. Again, continuing to clarify the concepts of expertise, identity, and practice, as well as the relationships among them, is a worthwhile endeavor.
Holism in Teacher Education and Research

In my dissertation defense, questions from Norah Zuniga-Shaw and Dr. Seymour Kleinman pushed me to think more deeply about the nature of holism and the practical implications of adopting a holistic philosophy. I was asked about the level at which holistic practice should be considered within teacher education. My response referred to fractal geometry as a good metaphor for how I think holism can and should operate within teacher education. Fractals are shapes that have self-similarity, meaning that parts of the whole resemble the whole. By making this reference, I suggested that teacher educators should consider holism at various levels of curriculum and pedagogy: departments, programs, courses, lessons, and learning activities. This discussion seemed to make sense when we spoke specifically about dance teacher education, but it broke down when we shifted the discussion to a more global view of teacher education. I am interested in exploring this fractal analogy more deeply in the hopes that it will help me describe, and practice, holistic teacher education.

I was also asked about the distinction between researching wholly and researching holistically. My sense is that the distinction has to do with the very practical concern of delimiting research topics and goals so that individual research projects are manageable and realistic. In that sense, maybe holistic research is feasible whereas researching wholly is not. That said, I am not ready to give up on the possibility of doing both. Therefore, I plan to keep mining these
ideas, working to find their distinctions and similarities, and trying to sort out how they apply to research practice.

Methods-Driven Future Work

Identifying Expert Teachers

Although I am confident the sampling protocol used for this study did enable me to identify expert teachers (see Appendix B), I wonder about what students could have contributed to the nomination procedure that would have been unique. I am also concerned about the teachers who were left out or overlooked (see Appendix H for a catalog of nominated teachers). As mentioned in Chapter 1, I worked for eight months to recruit teachers of marginalized subjects, performing and visual arts in particular. Despite this investment, only one arts teacher qualified for the study, and she declined to participate. I remain convinced that arts teachers view their identities differently from teachers of required academic subjects (Paechter & Head, 1996). I think they are more likely to possess identities related solely to their content area (i.e. identities as artists) than their counterparts in English, mathematics, social studies, and science. I also believe their priorities may be different simply because their subjects are marginalized; they may be more likely to prioritize advocating for their art form's place in education. Lastly, I believe expert art teachers may evidence a fifth channel of generativity, viewing their art-making as a means of making a significant contribution.
Only one art teacher qualified for participation in this study. This occurred despite specifically asking for nominations at an arts magnet high school. I wonder about school administrators’ perceptions of expertise and whether their perceptions are restricted to teachers in required content areas. I also wonder if school administrators are unlikely to nominate arts teachers as experts because their subjects are marginalized and not included on high-stakes state tests. In what ways do administrators view teacher expertise, perhaps implicitly, as related to students’ performance on high-stakes tests?

Additionally, I am concerned that the sample for this study is comprised solely of white, female teachers. I wonder why no male or non-white teachers were nominated by both teacher education faculty and school administrators. I realize this may be a function of the school districts I targeted, or a function of the demographics of the teaching population as a whole. I fear, however, it also communicates something about the ways in which expertise is perceived by college and university faculty and school administrators.

Appendix H reviews the teachers that were nominated for this study by either school administrators or teacher education faculty members (116). The tables in Appendix H disaggregate nominated teachers by content area and gender. The tables indicate which teachers were nominated by school administrators (37), which were nominated by college or university faculty (87), and which were nominated by both (8). They also indicate which teachers had the opportunity to receive two nominations (57). Through developing these
tables, I discovered nearly half (47%) of the nominated teachers were male, yet no male teachers received nominations from an administrator and a teacher education faculty member. I also discovered that 36% of the nominated teachers taught a non-required subject, although only one of those qualified to participate in the study, a music teacher who declined. This suggests that expertise may be defined differently by P-12 school administrators and teacher education faculty working in institutions of higher education.

Grounded Questionnaire

At the conclusion of the data analysis for this study, I developed a questionnaire grounded in the findings (see Appendix K). I distributed this questionnaire to the four participating teachers and asked that they complete it as a member check (Lincoln & Guba, 1985; see Appendix L for a summary of the findings). Each of the four participating teachers returned the questionnaire, and there were no real surprises in their responses. This suggests that the questionnaire has face validity, meaning it captured what it was designed to capture (Ary, Jacobs, & Razavieh, 2002). I also asked that the participants provide feedback related to the questionnaire’s content and format. Three of the four teachers offered this kind of feedback. They made a total of six suggestions for rewording the items and one suggestion to clarify the instructions. This feedback will be considered as I continue developing the questionnaire so that it can be used it in future research. It may be useful in determining the extent to which the findings of this study generalize to other expert or experienced
teachers. It may also help to identify participants for future studies who share these teachers’ perspectives.

Data Collection Procedure

The observation and interview protocol (see Appendix H) used with participants following the unstructured interview was developed during a pilot study (Andrzejewski, 2007). The pilot participant, a university dance teacher, found the experience of reflecting on, sorting, and discussing her decision-making, and by extension her identity, to be a worthwhile professional development experience. Similarly, the participants in this study, without exception, commented on the value of going through the data collection protocol. They said that it facilitated their reflection on what happened in class, it confirmed they are who they want to be with their students, and it affirmed that their classroom practice is well-aligned with their priorities. Here are comments from each of the practicing teachers regarding their experiences as they went through the protocol:

“This has been interesting. It really has, especially when I looked at all the things I do in 49 minutes. That just amazes me. If you had asked me what I had done, I mean, yes, I would have remembered I took the trash out of the room. I would have remembered some of that stuff, but some of it, I just do. It’s just very interesting.” (Sarah)

“It’s just good. It’s interesting, introspective. It’s kind of neat. I’m glad. It reaffirms for me that I am keeping in mind constantly knowledge of my students as far as their needs, being an advocate for them. That I am heavy on subject matter, I feel good about the content and all that. I wish I had more time to, these sheets made me realize I wish I had more time to be the risk-taker, story teller, you know, those things that I love to do but don’t have time because of the little peon stuff I have to get done.” (Laura)
“You know, it’s fun because, I guess it’s fun because it validates. That’s what it is. It validates. I believe that I’m an expert teacher, but it validates, and that’s fun. It’s just nice to know that there’s some- You know, as I said, teachers of the year are people who do things outside the classroom, but you’re validating what I do in the classroom, and that’s fun. That’s good. That’s a good thing.” (Marnie)

“From a person who is frustrated and unsure of where to go professionally or what I would like to do with my career, it was very refreshing to know that I’m still, I’m trying to stay positive, and I’m trying to help get kids in the right direction. Sometimes, you’re wondering, am I just going up a dead end? Am I beating my head against a wall? Is it really working?” (Sue)

Given this feedback, I believe this protocol could be developed for use with expert or experienced teachers. In particular, future studies should include working through this protocol with arts teachers, male teachers, non-white teachers, and elementary and middle grades teachers. Regarding elementary and middle grades teachers, I assume the various constructions of their teacher identities will differ from those of high school teachers. They may have identities related to the multiple content areas they teach, and the nature of who they are with their students may differ because their students are younger and have different needs than high school students. This protocol might also facilitate the professional development of teachers; it could be used with pre-service and practicing teachers as a form of non-evaluative feedback and as an exercise in reflexivity about their decision-making and evolving classroom identities.

Lastly, it would be productive to replicate this study with teachers who perceive themselves to be experts yet are not recognized as such by their
profession (e.g. teacher education faculty, school administrators, or colleagues). This interest came about during a discussion with a school administrator. I asked her for nominations of expert teachers working in her school, and she asked whether I meant those she believed to be experts or those who believed themselves to be experts. I told her I was interested in the former, yet I have been considering the implications of her comment ever since. What does it mean for teachers to self-identify as experts? On what basis do teachers make this claim, and what does it mean for the teaching community to disagree?

Conclusion

The process of conducting this study has taught me a great deal about the nature of teacher identity and expertise as well as their relationship to teacher practice. As a result, I have developed a clearer understanding of the kind of teacher educator I want to be, the kind of teacher educator I believe teachers need me to be. I will strive to be a teacher educator who helps teachers build a professional knowledge base and also helps them become who they want and need to be in their class with their population of students. Moreover, this study has fortified my conviction that teacher education should adopt a holistic perspective. The participating expert teachers taught me that there is no unifying model of expert teaching; there are many ways to exhibit expertise just as there are many ways to be generative. They also taught me that teaching well requires many facets of a whole person. For these reasons, teacher education should treat teachers, pre-service and practicing, as uniquely whole people (Korthagen,
Specifically, I have become more committed to the tenets of holistic dance teacher education I put forward in Chapter 4, and I continue to believe these tenets hold for teachers of other disciplines as well.

I have also learned, through completing this study, that my identity as a teacher educator is strongly related to my identity as an educational researcher. Although I teach courses primarily designed for pre-service teachers, I am inclined to orient my research toward practicing teachers. I believe enhanced understanding regarding their experiences should guide pre-service teacher education curriculum and pedagogy. I can learn how to better prepare my students for the realities of the classroom by investigating the lives, identities, knowledge, and behaviors of practicing teachers.

Additionally, completing this study has helped me to solidify my identity as a qualitative methodologist. This study presented unanticipated challenges that made me doubt my competence as a methodologist. Through resolving these challenges in ways that, I now see, enriched the data and findings, I have actually become more efficacious as a researcher. I am now confident in my ability to design and implement rigorous, ethical, and worthwhile qualitative research projects. I am also confident in my ability to provide constructive consultation regarding colleagues’ and students’ qualitative research endeavors.

Solidifying my identity as a qualitative methodologist has positioned me to think about the pedagogies I will use and the curriculum I will emphasize when I teach qualitative methods coursework. Through conducting this study, I have
established some values as a methodologist. First, I have come to believe that there is insufficient emphasis on pilot studies in most qualitative methods courses. I am so grateful for having completed a pilot study, and I have no doubt having done so drastically improved the quality of this study in terms of conceptual clarity and methodological sophistication. Unlike the role of pilot studies, the importance of keeping an accurate and reflective audit trail was emphasized in my methods training. My experience working on this study has confirmed the importance of this practice for me. As a practical matter, I cannot imagine trying to draft an accurate account of the data collection and analysis if I had not been diligent in keeping an audit trail. I simply would not have been able to recall all the relevant details. As an ethical matter, my audit trail was a place where I recorded the alignments and misalignments of my own assumptions and beliefs with the themes that emerged from the data. Without this very explicit juxtaposition, I do not think I would have realized that I had to give up, in some sense, my previously held notions about what it means to view teacher identity holistically in order to represent the contradictory truths my participants held. Also related to representation and from a social constructivist perspective, I am committed to the practices of peer debriefing and member checks. I have more confidence in my findings because I talked about them with colleagues and the participants. Moreover, involving others in the analysis of my data made it possible for me to sort out my hunches, which are perhaps worthy of future study, from the findings I could substantiate with data. Lastly, following a
question from Dr. Heather Davis, I have been thinking a great deal about the role of tables and figures in presenting qualitative findings: What is the purpose of making them? I have come to believe that tables and figures serve a somewhat circular function. I made them before I began writing as a way to organize my ideas, but I tend to look at them after I have read the prose as a way to clarify what I have just read. In other words, tables help authors organize for writing, and they help the audience clarify after reading. I anticipate that encouraging students to adopt these practices, as well as modeling them for students, will be at the heart of my methods teaching.

Finally, I enjoyed conducting this study, especially the processes of building relationships with the participating teachers, working with them to create and analyze the data, and determining what findings to share. I can now envision a comprehensive research program focused on teacher identity in many contexts and through many lenses, and I look forward to pursuing these investigations.
APPENDIX A

POST OBSERVATION INTERVIEW SCHEDULE
POST OBSERVATION INTERVIEW SCHEDULE

Script:
I have given you a stack of labels. On each label is a practice, which I presume to be indicative of decision-making, I observed while watching your class.

Please look them over and make any additions you feel are necessary so that the complete stack represents your actions in your class.

When you are satisfied with the list, please organize the labels according to the following chart. Consider the primary motive(s) behind each behavior. This chart is divided into categories that emerged from our first interview.

<table>
<thead>
<tr>
<th>Grounded Theme I</th>
<th>Grounded Theme II</th>
<th>Grounded Theme III</th>
<th>…</th>
</tr>
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<tbody>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These questions, as well as follow-up questions based on participant responses, will be asked when the participant has completed the arrangement:

5. What does this array say about who you are as a teacher?
6. How accurately does this array communicate who you are?
7. How did you come to be this teacher?
8. Tell me about your experience of sorting your behaviors into these categories? How good is the fit? Why do you say that?

Script:
The next chart is divided into categories that are commonly used in teacher education. Do your best to disregard the ways you sorted them the first time and focus only on these categories.

<table>
<thead>
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<th>Subject Matter</th>
<th>Pedagogy</th>
<th>Knowledge of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These questions, as well as follow-up questions based on participant responses, will be asked when the participant has completed the arrangement:
9. What does this array say about who you are as a teacher?
10. How accurately does this array communicate who you are?
11. How did you come to be this teacher?
12. Tell me about your experience of sorting your behaviors into these categories? How good is the fit? Why do you say that?

Script: Now please compare the two arrays.

13. What do you notice when you compare the two sorts? What stands out and why?
14. Which of these seems best aligned with how you perceive yourself as a teacher? Which sorting process seemed more natural?
15. What does the combination of these two arrangements communicate about who you are as a teacher? What is overlooked or left out?
16. Is there anything else you would like to share?
17. Do you have any other comments about this process?
APPENDIX B

PROCEDURE FOR SAMPLING EXPERT SECONDARY TEACHERS
PROCEDURE FOR SAMPLING EXPERT SECONDARY TEACHERS

Stage 1: Screening for Experience
Criteria: Minimum of five years experience teaching the same subject matter in a high school setting

Stage 2: Screening for Recognition and Performance Indicators
Criteria: Nomination by supervising faculty based on effectiveness as a cooperating teacher (model instruction, intellectual capacities including critical reflection, the ability to articulate reasoning, and student teacher achievement)

Stage 3: Screening for Professional Group Membership
Criteria: Cooperating teacher*

Stage 4: Screening for Recognition and Performance Indicators
Criteria: Nomination by administrator based on evidence of effectiveness (model instruction, intellectual capacities including critical reflection, the ability to articulate reasoning, and student achievement)

**Stage 5: Screening for Self Perception
Criteria: Self-definition as an expert, secondary teacher

* It was assumed cooperating teachers would possess an up-to-date state license in their subject area.

** Stage 5 was used to determine whether a participant claimed to be an expert or was working toward becoming an expert.
APPENDIX C

LETTER / E-MAIL OF INVITATION TO PARTICIPATE
LETTER / E-MAIL OF INVITATION TO PARTICIPATE

Exploring the Intersections of Expert Secondary Teachers’ Identities and Classroom Practices

I am a Ph.D. student in the College of Education and Human Ecology at Ohio State University and am inviting you to consider participating in my dissertation research about the classroom experiences and identities of high school teachers.

Rather than having you fill out a survey or answer a few short questions, I want to learn by observing in your classroom and listening to the stories that you tell about your teaching life.

Your involvement will include participating in three audiotaped interviews with me, each lasting from one to two hours and two classroom observations during what you would consider to be typical class periods of instruction. I hope that you will also review summaries of your interviews and help me think about what we’re learning from the study.

By participating in this study, you will have the opportunity to share your experiences and understandings of teaching with me, a non-judgmental listener. I hope you will find this to be a rewarding experience that allows you to better understand how the various parts of yourself come together to shape who you are in your classroom. Your participation will also help teacher educators and administrators better understand important issues for classroom teachers.

Discussing identity and life experiences has the potential to be very personal. You need only discuss with me topics that you are comfortable discussing. Also, please be assured that I will take great care to treat all information confidentially and that whenever I write or talk about this study, I will not use your name or describe you in a way that renders you recognizable. Your participation is voluntary and you may discontinue at any time without penalty.

If you are interested in participating please e-mail me at andrzejewski.9@osu.edu, and I will contact you to schedule the initial interview for the study. This research is supervised by Dr. Heather A. Davis. You can contact her at davis.2087@osu.edu.

If you have any questions, please e-mail me. I am excited about this study and eager to get started. I hope to hear from you soon. Thanks for your time!

Sincerely,
Carey E. Andrzejewski &
Dr. Heather A. Davis
Dear Participant,

Thank you for agreeing to participate in *Exploring the Intersections of Expert Secondary Teachers’ Identities and Classroom Practices*, the exploratory, qualitative study we are conducting in an effort to ascertain teachers’ own understandings of classroom identity.

Attached please find a copy of the proposal for the study and a copy of the consent form for your consideration. We will be happy to address any questions or concerns you have regarding the study prior to the initial interview.

Also, be reminded that participation in this study is completely voluntary and that you may, at any time, withdraw your participation without penalty. You may also, without penalty, elect to omit from the data any portion of the interviews or observations.

It is our hope that you will continue your participation and we look forward to meeting with you on **date at time at place**.

Feel free to contact me at (614) 746-4503. This project is being supervised by Dr. Heather A. Davis. You can reach her at davis.2087@osu.edu or (614) 292-0449.

Sincerely,

Carey E. Andrzejewski &
Dr. Heather A. Davis
Educational Policy and Leadership
APPENDIX E

CONSENT FORM
Protocol # 2007E0312

CONSENT FOR PARTICIPATION IN RESEARCH

I consent to participating in research entitled “Exploring the Intersections of Expert Secondary Teachers’ Identities and Classroom Practices.”

Dr. Heather A. Davis, Principal Investigator, or her authorized representative, Carey E. Andrzejewski, has explained the purpose of the study, the procedures to be followed—in-depth interviews and classroom observations—and the expected duration of my participation. Possible benefits of the study have been described, as have alternative procedures, if such procedures are applicable and available.

I understand that in this study I will be expected to discuss my perspectives and experiences regarding:

- My understandings regarding my teacher identity in my classroom;
- My perspectives on my subject matter, pedagogy, and relating to students;
- My philosophy of teaching and relating to students;
- The reasoning behind my classroom practice; and
- What this reasoning communicates about who I am as a teacher.

I consent to the use of audiotapes. I understand how the tapes will be used for this study.

I acknowledge that I have had the opportunity to obtain additional information regarding the study and that any questions I have raised have been answered to my full satisfaction. I understand this research is being supervised by Dr. Heather A. Davis, Educational Policy and Leadership. I can contact the investigators at (614) 746-4503 (Carey E. Andrzejewski) or (614) 292-0449 (Dr. Heather A. Davis). If I have questions about my rights as a research participant, I can call
the Office of Research Risk Protection at (614) 688-4792. Furthermore, I understand that I am free to withdraw consent at any time and to discontinue participation in the study without prejudice to me.

Finally, I acknowledge that I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: ____________________________  Signed: ____________________________

(Signed)  (Participant)

Signed: ____________________________  Witness: ____________________________

(Principal Investigator or authorized representative)
APPENDIX F

INSTITUTIONAL REVIEW BOARD APPROVAL
TITLE PAGE - APPLICATION FOR EXEMPTION
FROM REVIEW BY THE INSTITUTIONAL REVIEW BOARD
The Ohio State University, Columbus OH 43210

Principal Investigator

Name: Heather A. Davis
Department or College: Educational Policy and Leadership
Campus Address (room, building, street address):
166 A Ramseyer Hall
29 W. Woodruff Ave.
Columbus, OH 43210
Signature: 4/13/07
Email: davis.20@osu.edu
Phone: 614-292-9445
Fax: 614-292-7900

Co-Investigator

Name: Carey E. Andrzejewski
Campus Address (room, building, street address) or Mailing Address:
141 Ramseyer Hall
29 W. Woodruff Ave.
Columbus, OH 43210
Signature: 4/13/07
Email: andrzeje@osu.edu
Phone: 614-746-4583
Fax: 614-292-7900

Co-Investigator

Name: 
Campus Address (room, building, street address) or Mailing Address:
Signature: 
Email: 
Phone: 
Fax: 

Protocol Title

Exploring the Intersections of Expert Secondary Teachers' Identities and Classroom Practices

Source of Funding

I have applied for a research grant through Phi Lambda Theta. See attached proposal. I have also applied for an RGSS and a Presidential Fellowship.

(Research proposal not yet completed.

For office use only

Approved. Research has been determined to be exempt under these categories: E

Disapproved. The proposed research does not fall within the categories of exemption. Submit an application to the appropriate Institutional Review Board for review.

Date of determination: 4/17/07
Signature: Janet A. Schults
Office of Research and Sponsored Programs
APPENDIX G

LETTER / E-MAIL TO SCHOOL ADMINISTRATORS
LETTER / E-MAIL TO SCHOOL ADMINISTRATORS

Exploring the Intersections of Expert Secondary Teachers’ Identities and Classroom Practices

I am a Ph.D. student in the College of Education and Human Ecology at Ohio State University. I am conducting my dissertation research about the classroom experiences and identities of high school teachers and am hoping you will consider allowing me to observe the instruction of one or more teachers in your school.

The purpose of my study is to explore the relationship between expert secondary teachers’ identities and their classroom practices. Rather than having participants fill out a survey or answer a few short questions, I want to learn by observing them in their classrooms and listening to the stories that they tell about their teaching lives.

Each teacher’s involvement will include three audiotaped interviews with me, each lasting from one to two hours, and two classroom observations during what the teachers consider to be typical class periods of instruction.

If you are willing to permit me to observe in your school please e-mail me at andrzejewski.9@osu.edu and I will contact you to confirm the dates and times of the observations. This research is supervised by Dr. Heather A. Davis. You can contact her at davis.2087@osu.edu.

If you have any questions, please e-mail me or call me at 614.746.4503. I am excited about this study and eager to get started. I hope to hear from you soon. Thanks for your time!

Sincerely,

Carey E. Andrzejewski &
Dr. Heather A. Davis (Principal Investigator and Advisor)
School of Educational Policy and Leadership
The Ohio State University
APPENDIX H

EXPERT TEACHER NOMINEES
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* Table H.1. Teachers nominated by school administrators.

Note. All of these teachers had an opportunity to be nominated by college or university faculty.

* Two female, language arts teachers participated in the study. Two additional female, language arts teachers were nominated by both a college or university faculty member and a school administrator.

** One female, math teacher was nominated by both a college or university faculty member and a school administrator.

*** One female, music teacher was nominated by both a college or university faculty member and a school administrator. She declined an invitation to participate.

**** Two female, science teachers participated in the study.
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Table H.2. Teachers nominated by college or university faculty.

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<td>Total</td>
<td>7</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2</td>
<td>2.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Music***</td>
<td>No</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7</td>
<td>12.5</td>
<td>19.5</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>No</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Education</td>
<td>Total</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Science****</td>
<td>No</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2</td>
<td>7.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Social Studies</td>
<td>No</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5</td>
<td>13.5</td>
<td>18.5</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Special Education</td>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>Total</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>32</td>
<td>25</td>
<td>57</td>
</tr>
<tr>
<td>All</td>
<td>No</td>
<td>29</td>
<td>30</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>61</td>
<td>55</td>
<td>116</td>
</tr>
</tbody>
</table>

*Table H.3. Nominated teachers.*
APPENDIX I

EXPLANATION OF DATA SOURCES
<table>
<thead>
<tr>
<th><strong>Ongoing</strong></th>
<th><strong>Phase 1</strong></th>
<th><strong>Phase 2 and 4</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Researcher’s Journal</strong></td>
<td>Written reflection</td>
<td>Unstructured interview</td>
</tr>
<tr>
<td><strong>Format of the Data:</strong></td>
<td>Questions 1 through 4</td>
<td>Questions 1 and 2</td>
</tr>
<tr>
<td><strong>Research Questions Addressed:</strong></td>
<td>Throughout the study</td>
<td>At the beginning of the study</td>
</tr>
<tr>
<td><strong>When Data Were Collected:</strong></td>
<td>None</td>
<td>Not more than 90 minutes</td>
</tr>
<tr>
<td><strong>Time Involved for Participants:</strong></td>
<td>Document researcher’s thoughts and actions</td>
<td>Understand how expert teachers conceive of their teacher identities</td>
</tr>
<tr>
<td><strong>Objective:</strong></td>
<td>Audit trail</td>
<td>Develop emergent identity codes for grounded sort of classroom behaviors</td>
</tr>
<tr>
<td><strong>Connection to Other Data Sources:</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*(continued)*

*Table I.1. Explanation of data sources.*
Table I.1 (continued)

<table>
<thead>
<tr>
<th>Phases 3 and 5</th>
<th>Semi-Structured Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format of the Data:</td>
<td>Grounded Sorts of Classroom Behaviors</td>
</tr>
<tr>
<td></td>
<td>Sorted list of teacher practices</td>
</tr>
<tr>
<td>Research Questions Addressed:</td>
<td>Questions 1, 2, and 3</td>
</tr>
<tr>
<td>When Data Were Collected:</td>
<td>Following both of the classroom observations</td>
</tr>
<tr>
<td>Time Involved for Participants:</td>
<td>Not more than 30 minutes each</td>
</tr>
<tr>
<td>Objective:</td>
<td>Understand teachers’ reasons for practices relative to emergent identity codes</td>
</tr>
<tr>
<td>Connection to Other Data Sources:</td>
<td>Create foundation for follow-up interviews about teacher identity</td>
</tr>
</tbody>
</table>
APPENDIX J

PARTICIPANTS’ SELF-REPORTS OF
MENTORING PRE-SERVICE TEACHERS
<table>
<thead>
<tr>
<th></th>
<th>Number of Mentees</th>
<th>Mentees Still in Contact</th>
<th>Nature of Relationship</th>
<th>Mentees Still Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah</td>
<td>18</td>
<td>5</td>
<td>Good friends; a few of them are colleagues.</td>
<td>As far as Sarah knows they're all still working in education. One has become a guidance counselor.</td>
</tr>
<tr>
<td>Laura</td>
<td>11-16</td>
<td>Several in same district; 2 in other districts</td>
<td>Sharing lesson plans and materials</td>
<td>Most of the ones in the same district; Unsure about the others</td>
</tr>
<tr>
<td>Marnie</td>
<td>50-70</td>
<td>25-35</td>
<td>Ranges from an occasional e-mail or holiday card to very personal – Marnie is the godmother of one of her past student teacher’s children.</td>
<td>As far as Marnie knows all are still teaching. One took one year off. She plans to return. Another may leave to become a principal.</td>
</tr>
<tr>
<td>Sue</td>
<td>8</td>
<td>3</td>
<td>Talk about project ideas; Work on Biology curriculum</td>
<td>As far as Sue knows all eight are still teaching.</td>
</tr>
</tbody>
</table>

*Table J.1. Participants’ self-reports of pre-service teacher mentorship.*
Hallmarks of Expertise: Identity, Knowledge, and Practice

This questionnaire is designed to explore the experiences and understandings of expert high school teachers. The information you share will be kept confidential, and your name will not be associated with the findings. Please complete it and return it in the provided, self-addressed envelope. Thank you for your time, energy, and thoughts.

I. Please complete the following section, by circling the most appropriate response.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Being an effective teacher requires that I take on many roles / identities in my classroom.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>2.</td>
<td>Becoming an expert teacher requires many years of teaching experience.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>3.</td>
<td>Expertise in teaching is specific to a particular content area.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>4.</td>
<td>Expertise in teaching is specific to a particular group of students.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>5.</td>
<td>Developing expertise in teaching is contingent on organizing many roles.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>6.</td>
<td>I make decisions in my classroom based solely on what I know about my content area.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>7.</td>
<td>I make decisions in my classroom based solely on what I know about my students.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>8.</td>
<td>I make decisions in my classroom based solely on what I know about good teaching.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>9.</td>
<td>What I know about my students is connected to what I know about teaching.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>10.</td>
<td>What I know about my content area is connected to what I know about teaching.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>11.</td>
<td>What I know about my content area is connected to what I know about my students.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>12.</td>
<td>My classroom practices are based on what I know about my content area, what I know about my students, and what I know about good teaching.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>13.</td>
<td>I believe I can and do make an impact on the lives of my students.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>14.</td>
<td>I believe I can and do make an impact on the lives of student teachers.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>15.</td>
<td>I believe I can and do make an impact on the lives of my colleagues.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>16.</td>
<td>I am an expert teacher.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>17.</td>
<td>I am an expert teacher in my content area.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>18.</td>
<td>I am an expert teacher with the students I encounter in my school.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>19.</td>
<td>My primary concern is that my students learn the curriculum.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>20.</td>
<td>My primary concern is that my students have a positive experience in my class.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>21.</td>
<td>My classroom decisions are influenced by the contexts in which my students live.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>22.</td>
<td>My classroom decisions are influenced by what I believe is important about my content area.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>23.</td>
<td>I believe I can and do make an impact on teaching as a profession.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>24.</td>
<td>I believe I can and do make an impact on the community in which I teach.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>25.</td>
<td>It is important for me to make a positive difference in the community in which I teach.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>26.</td>
<td>It is important for me to make a positive difference in the lives of my students.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>27.</td>
<td>It is important for me to make a positive difference in the lives of student teachers.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>28.</td>
<td>It is important for me to make a positive difference in the lives of the other teachers who work in my school.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>29.</td>
<td>It is important for me to make a positive difference in the profession of teaching.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>30.</td>
<td>I love my work.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
</tr>
</tbody>
</table>
II. What follows is a list of identities teachers might have. Complete this section by considering how much of your time in your classroom you spend in these roles. Circle the most appropriate response.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Advocate for My Content Area</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>2.</td>
<td>Advocate for My School</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>3.</td>
<td>Advocate for Students</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>4.</td>
<td>Advocate for Teachers</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>5.</td>
<td>Autonomy Supporter</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>6.</td>
<td>Book Pusher</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>7.</td>
<td>Challenger / Demander</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>8.</td>
<td>Classroom Manager</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>9.</td>
<td>Collaborator with Community Experts</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>10.</td>
<td>Constructivist / Inquiry Facilitator</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>11.</td>
<td>Counselor</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>12.</td>
<td>Learner</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>13.</td>
<td>Life Skills Developer</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>14.</td>
<td>Mother</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>15.</td>
<td>Optimist</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>16.</td>
<td>Performer / Storyteller</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>17.</td>
<td>Person of Faith</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>18.</td>
<td>Preparer for High Stakes Tests</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>19.</td>
<td>Reflective Practitioner</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>20.</td>
<td>Relevance-Maker / Open Book</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>21.</td>
<td>Risk-Taker</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>22.</td>
<td>Sage on the Stage</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>23.</td>
<td>Teacher Leader / Teacher Educator / Mentor</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>24.</td>
<td>Teacher of My Content Area</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>25.</td>
<td>Technology User</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>26.</td>
<td>Urban Educator / Classroom Activist</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>27.</td>
<td>Community Member / Team Player / Volunteer</td>
<td>N</td>
<td>L</td>
<td>H</td>
<td>M</td>
</tr>
</tbody>
</table>
III. What follows is a list of identities teachers might have. Complete this section by considering how important it is for you to be these things in your classroom. Circle the most appropriate response.

<table>
<thead>
<tr>
<th>Identity</th>
<th>Not at All</th>
<th>A Little</th>
<th>Somewhat</th>
<th>Important</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Advocate for My Content Area</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>2. Advocate for My School</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>3. Advocate for Students</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>4. Advocate for Teachers</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>5. Autonomy Supporter</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>6. Book Pusher</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>7. Challenger / Demander</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>8. Classroom Manager</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>9. Collaborator with Community Experts</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>10. Constructivist / Inquiry Facilitator</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>11. Counselor</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>12. Learner</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>13. Life Skills Developer</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>14. Mother</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>15. Optimist</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>16. Performer / Storyteller</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>17. Person of Faith</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>18. Preparer for High Stakes Tests</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>19. Reflective Practitioner</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>20. Relevance-Maker / Open Book</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>21. Risk-Taker</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>22. Sage on the Stage</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>23. Teacher Leader / Teacher Educator / Mentor</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>24. Teacher of My Content Area</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>25. Technology User</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>26. Urban Educator / Classroom Activist</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
<tr>
<td>27. Community Member / Team Player / Volunteer</td>
<td>N</td>
<td>L</td>
<td>S</td>
<td>I</td>
<td>V</td>
</tr>
</tbody>
</table>
IV. Are there other identities you have as a teacher? If so, please list them here.

V. In your view, what does it mean to be an expert high school teacher? (Please use the back of the paper.)
APPENDIX L

SUMMARY OF GROUNDED QUESTIONNAIRE MINI-STUDY
Purpose: The purpose of this survey mini-study was to explore the experiences and understandings of expert high school teachers. Specifically, the questionnaire was administered to the four participants of an interview and observation-based study. The questionnaire was given to these four expert high school teachers for two reasons: 1) to serve as a member check, and 2) to gain their feedback for the continued development of the questionnaire.

Methods: The questionnaire was sent to the four participants through the mail. Each of the four participants returned a completed questionnaire in a self-addressed envelope I provided.

The questionnaire is comprised of five sections. The first contains 30 Likert-type items regarding the nature of expertise, beliefs about teaching, and classroom decision-making. The second contains 27 items associated with identities that may be associated with teacher identities. Participants were asked to indicate how much of their time they spend enacting each of the identities in their classrooms. The third section also contains 27 items representing the same identities as those in the second section. Participants were asked to indicate how important it was to enact each of the identities. The fourth and fifth sections contained open-ended questions about the nature of teacher identity and high school teaching expertise, respectively.
Findings: There are three items in the first section with which all four of the participants strongly agreed. They are:

- Being an effective teacher requires that I take on many roles / identities in my classroom.
- My classroom practices are based on what I know about my content area, what I know about my students, and what I know about good teaching.
- I love my work.

There are also 14 items with which all four of the participants either agreed or strongly agreed:

- Developing expertise in teaching is contingent on organizing many roles.
- What I know about my students is connected to what I know about teaching.
- I believe I can and do make an impact on the lives of my students.
- I believe I can and do make an impact on the lives of student teachers.
- I believe I can and do make an impact on the lives of my colleagues.
- My primary concern is that my students have a positive experience in my class.
- My classroom decisions are influenced by what I believe is important about my content area.
- I believe I can and do make an impact on teaching as a profession.
- I believe I can and do make an impact on the community in which I teach.
- It is important for me to make a positive difference in the community in which I teach.
- It is important for me to make a positive difference in the lives of my students.
- It is important for me to make a positive difference in the lives of student teachers.
- It is important for me to make a positive difference in the lives of the other teachers who work in my school.
- It is important for me to make a positive difference in the profession of teaching.

In the second and third sections of the questionnaire, participants were asked about how much time they spent enacting particular identities and how important it was to enact each of the identities. These items were based on five-option scales. In section two, they ranged from ‘none’ (1) to ‘all’ (5) and in section
three, they ranged from ‘not at all’ (1) to ‘very’ (5). Table L.1 displays the alignment between participants’ responses in sections two and three. The first row shows how many items to which the participants assigned the same number regarding time (section II) and importance (section III). For example a participant may have said that all of their time (5) is spent being an advocate for students (item 4) and that this identity is very important (5). In that case, the item is included in the first row. The second row account for all items for which the time rating and the importance rating were only different by one (i.e. a two on the first and a three on the second, or a five on the first and a four on the second). The third row indicates the number of items for which the difference between the ratings was two or greater, and the final row includes the one item left unanswered. There is notable consistency between the ways participating teachers spend their time and the identities they perceive to be important.

<table>
<thead>
<tr>
<th></th>
<th>Total Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aligned</td>
<td>50</td>
<td>12.5</td>
<td>5</td>
</tr>
<tr>
<td>Aligned Within One</td>
<td>50</td>
<td>12.5</td>
<td>4.75</td>
</tr>
<tr>
<td>Misaligned</td>
<td>7</td>
<td>1.75</td>
<td>.75</td>
</tr>
<tr>
<td>Unanswered</td>
<td>1</td>
<td>.25</td>
<td>.75</td>
</tr>
</tbody>
</table>

*Table L.1. Teachers’ alignment between priorities and time spent.*

None of the participants responded to section four, which asked them to list other identities related to their teaching. This suggests the lists provided, at least for these teachers, was exhaustive.
When asked what it means to be an expert teacher, participants mentioned many identities included in sections two and three of the questionnaire: Learner, Advocate, Community Member, Risk-Taker, Classroom Manager, and Optimist. They also reported that expert teachers need to know and listen to their students, meet students’ needs, and work hard. Lastly, expert teachers have likely become experts by learning from mentors.

Conclusion: None of the participating teachers’ responses were misaligned with the findings of the interview and observation-based study. This also suggests that the questionnaire has face validity (Ayers, Jacobs, & Razavieh, 2002), meaning it captures what it was designed to capture and may be useful for future research regarding the experiences and understanding of expert high school teachers.


Lapadat, J. C., & Lindsay, A. C. (1999). Transcription in research and practice: From standardization of technique to interpretive positionings. *Qualitative Inquiry, 5*(1), 64-86.


